Environmental EQUIPMENT 2017

acculab
USA

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Welcome to ACCULAB Group

ACCULAB® Group established in January 2014 as a result of merger between two big international companies ACCUMED and NEWLAB , Which had a long 20 years of experience in manufacturing Laboratory and Medical equipment.

ACCULAB® is based in NY, USA and Montreal, Canada and it manufactures wide range of products.

ACCULAB® Canada specializes in the fields of: Medical, Dental, Histopathology, Molecular biology and Pharmaceutical Equipments.

ACCULAB® USA specializes in the fields of : General Laboratory, Agriculture, Food, Veterinary, Environmental, Industry and Petroleum Equipments.

ACCULAB® Group and its employees are committed to company values in customer service, innovative and entrepreneurial spirit, accuracy, trustworthiness and integrity.

Sold worldwide under the trade name ACCULAB®, Our research and development team has a strong background in fundamental sciences with a focus on continuous improvements in the technology and provision of solutions for the benefit of the Research Community.

Contents

Anemometer
AM16

Power	CR2032 3.0V
LCD size	30.0*25.0mm
Product Color	Dark Gray
Product Net Weight	52.1g
Product Size	105*40*15mm

Specification

Measuring Range	-10℃～45℃
Wind Speed Measuring Range	0.3~30m/s
℃/℉ Selection	√
Accuracy of temperature	±2℃
Accuracy of Wind speed	±5%
Auto /Manual Power Off	√
Low Battery Indication	√
Back ight Display	√
Max/Min wind speed measuring	√
Average And current wind speed measuring	√
Resolution	0.1m/s 0.2℃
Measuring unit	M/s,Ft/min Knots,Km/hr,Mph

PACKING INFORMATION

Standard Quantity Per Carton	80
Standard Carton Size	38.0*38.0*43.8cm
Standard Carton Gross Weight	9.56kg
Standard Quantity Per Carton	80
Standard Carton Size	38.0*38.0*43.8cm
Standard Carton Gross Weight	9.56kg

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Anemometer
AM26

Measuring Range	--
Wind Speed Measuring Range	0.3~45m/s
Air Velocity/Air Flow Selection	--
℃/℉ Selection	--
Accuracy of temperature	--
Accuracy of Wind speed	±3%±1dgts
Auto /ManualPower Off	√
Wind Speed Unit Selection	M/s,Ft/min, Knots,Km/hr,Mph
Back Light Display	√
Max/Min wind speed measuring	√
Average And current wind speed	√
Resolution	0.1m/s
Measuring Range	√
Wind Speed Measuring Range	--
Air Velocity/Air Flow Selection	--

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Anemometer
AM36

Power	9V Alkaline Battery
LCD size	59*51.0mm
Product Color	Dark Gray
Product Net Weight	240g
Product Size	170*160*49mm

PACKING INFORMATION

Standard Quantity Per Carton	20
Standard Carton Size	62.5*45.0*28.5cm
Standard Carton Gross Weight	16.6kg
Standard Quantity Per Carton	40
Standard Carton Size	54*39.5*38.0cm
Standard Carton Gross Weight	12.5kg

Specification

Measuring Range	0℃～45℃
Wind Speed Measuring Range	0.3~45m/s
Air Velocity/Air Flow Selection	--
℃/℉ Selection	√
Accuracy of temperature	±2℃
Accuracy of Wind speed	±3%±1dgts
Auto /ManualPower Off	√
Wind Speed Unit Selection	M/s,Ft/min Knots,Km/hr,Mph
Back Light Display	√
Max/Min wind speed measuring	√
Average And current wind speed	√
Resolution	0.1m/s 0.2℃
Data hold function	√
RS232 PC Interface	--
Air Flow Measuring Function	--

Anemometer
AM46

Power	9V Alkaline Battery
LCD size	59*51.0mm
Product Color	Dark Gray
Product Net Weight	240g
Product Size	170*160*49mm

PACKING INFORMATION

Standard Quantity Per Carton	20
Standard Carton Size	65.0*45.0*28.5cm
Standard Carton Gross Weight	18.1kg
Standard Quantity Per Carton	40
Standard Carton Size	54.0*39.5*38.0cm
Standard Carton Gross Weight	12.5kg

Specification

Measuring Range	0℃～45℃
Wind Speed Measuring Range	0.3~45m/s
Air Velocity/Air Flow Selection	√
℃/°F Selection	√
Accuracy of temperature	±2℃
Accuracy of Wind speed	±3%±1dgts
Auto /ManualPower Off	√
Wind Speed Unit Selection	M/s,Ft/min,Knots Km/hr,Mph
Back Light Display	√
Max/Min wind speed measuring	√
Average And current wind speed	√
Resolution	0.1m/s 0.2℃
Data hold function	√
RS232 PC Interface	√
Air Flow Measuring Function	√

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Barometer (Groove Mercury)
BM2

Barometer
BM1

Features

the instrument type and plains sub-plateau, for weather stations, research, teaching, agriculture, laboratory and other departments measure atmospheric pressure.

Product Introduction

BM2 -type groove at one end by means of mercury barometer is closed, the other end into the mercury in a glass tank to measure the height of mercury atmospheric pressure instruments.

Features

It Is a vacuum diaphragm as the sensing element, for a continuous record of near-surface atmospheric pressure changes over time instruments.
The instrument is suitable for weather stations, research, agriculture, environmental monitoring, teaching, laboratory and other departments

Specification

Measuring range	810 ~ 1070hPa 520 ~ 890hPa
Min.Div 0.1hPa 0.1hPa	
Accuracy	± 0.4hPa ± 0.4hPa
Temperature	-15 ~ +45 ℃ -15 ~ +45 ℃
Outside dimensions mm	≤ Φ64 * 1070 ≤ Φ64 * 1070
Weight	≤ 5Kg

Specification

Range:	680 ~ 1030hPa
Minimum scale value	0.05hPa
Accuracy	± 0.2hPa
Temperature:	-15 ~ +45 ℃
Instrument size:	Φ64 × (1101 ~ 1145) mm
Weight:	≤ 5kg

Barometer (Sylphon)
SB-2

Sylphon Barometer

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Barometer (Plain Type Aneroid)
BM4

Barometer (Sylphon Tableland type)
BM3

Features

BM3 type aneroid barometer is a deformation of a sensing device for atmospheric pressure measurement instruments. It easy to carry, accurate measurement, pressure measurement range, use the easy maintenance, no mercury, etc., widely used in meteorology, military, aviation, marine, agriculture, surveying, geological, industrial and mining enterprises and scientific research in areas such as measurement atmospheric pressure of conventional instruments.

How it works

Aneroid barometer is made of thin-film flexible metal air box as a sensing element, which the atmospheric pressure converted to an empty box of flexible shift lever and the transmission mechanism driven by a pointer. When the clockwise deflection, the pointer changes to indicate the amount of outlet pressure, and vice versa, when the pointer counterclockwise deflection, indicating a change in air pressure to reduce the amount. When the empty box of elastic stress and atmospheric pressure equilibrium, the pointer to stop moving, then the pressure value indicated by the pointer is at atmospheric pressure.

Features

BM4 type aneroid barometer is a device for sensing the deformation of a barometric pressure measuring instruments. It easy to carry, accurate measurement, pressure measurement range, use the easy maintenance, no mercury, etc., widely used in meteorology, military, aviation, marine, agriculture, surveying, geological, industrial and mining enterprises and scientific research in areas such as measurement atmospheric pressure of conventional instruments

Second, the principle

Aneroid barometer by atmospheric pressure changes with the axial movement of the air induction box as the original group, which led through the rod and the transmission pointer, indicating the prevailing atmospheric pressure.
Third, the technical performance and specifications

Specification

measuring pressure range	500 ~ 1020hPa; error: ± 3hPa
temperature range	-10 ℃ ~ +40 ℃ minimum scale value of the instrument thermometer 1 ℃
minimum graduation value of dial 1hPa	
Weight	,less than 1.5kg
the instrument size	156mm × 156mm × 115mm
after the indication, temperature, add the amendment, the measurement error is less than 2.0hPa	

Specification

Range	800-1064hpa
Operating Temperature Range	-10 - +40 ℃
Instrument Size	156mm × 156mm × 115mm
Shows Dial Min. Div	1hpa
With Temperature Table Minimum Division Value	1 ℃
Weight	Less Than 1.5kg
After The Temperature, Showing The Degree And Added A Revised Version Of The Measurement Error Is Not Greater Than 2.0hp	

Barometer (Clock – Barometer)
BM5

Specification

Hour	Clock automatically radio-controlled by the Frankfurt antenna (DCF-77) DCF-77 disactivation function Manual setting function Display 12 or 24 hours Time zone : +/- 12 hours Calendar with day / date / month display Alarm setting
Indoor temperature	Measure units: °C or °F Range: from – 9.9 °C to + 59.9 °C Resolution : 0.1 °C Recording of Min / Max with time and date of readings Reading every 15 seconds
Indoor humidity	Measure unit : % RH Swiss high definition sensor Range : from 1 % to 99 % Resolution : 1% Accuracy : +/- 3 % when temperature > - 10 °C and < + 40 °C and +/-5 % outside these ranges Recording of Min / Max of time and date of readings Reading every 30 seconds
Outdoor temperature	•Measure units : °C or °F Range : from – 29.9 °C to + 69.9 °C Resolution : 0.1 °C Recording of Min / Max with time and date of readings

Outdoor humidity	Measure unit : % RH Swiss high definition sensor Range : from 1 % to 99 %Resolution : 1% Accuracy : +/- 3 % when temperature > - 10 °C and < + 40 °C and +/- 5 % outside these ranges Recording of Min / Max with time and date of readings
Dew point	Dew point display Recording of Min / Max with time and date of readings
Windchill	Windchill display Recording of Min / Max with time and date of readings Forecast Barometer with icon display Trend display
Atmospheric pressure	Measure units : hPa or inHg Range for absolute pressure : from 300 hPa to 1099 hPa Air pressure history bargraph Choice of user display of relative pression (from 920 hPa to 1080 hPa) Pressure sensitivity level setting Recording of Min / Max with time and date of readings
Hour	Clock automatically radio-controlled by the Frankfurt antenna (DCF-77) DCF-77 disactivation function Manual setting function Display 12 or 24 hours Time zone : +/- 12 hours Calendar with day / date / month display Alarm setting
Indoor temperature	Measure units: °C or °F Range: from – 9.9 °C to + 59.9 °C Resolution : 0.1 °C Recording of Min / Max with time and date of readings Reading every 15 seconds
Indoor humidity	Measure unit : % RH Swiss high definition sensor Range : from 1 % to 99 % Resolution : 1% Accuracy : +/- 3 % when temperature > - 10 °C and < + 40 °C and +/-5 % outside these ranges Recording of Min / Max of time and date of readings Reading every 30 seconds
Outdoor temperature	•Measure units : °C or °F Range : from – 29.9 °C to + 69.9 °C Resolution : 0.1 °C Recording of Min / Max with time and date of readings

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Outdoor humidity	Measure unit : % RH Swiss high definition sensor Range : from 1 % to 99 %Resolution : 1% Accuracy : +/- 3 % when temperature > - 10 °C and < + 40 °C and +/- 5 % outside these ranges Recording of Min / Max with time and date of readings
Dew point	Dew point display Recording of Min / Max with time and date of readings
Windchill	Windchill display Recording of Min / Max with time and date of readings Forecast Barometer with icon display Trend display
Atmospheric pressure	Measure units : hPa or inHg Range for absolute pressure : from 300 hPa to 1099 hPa Air pressure history bargraph Choice of user display of relative pression (from 920 hPa to 1080 hPa) Pressure sensitivity level setting Recording of Min / Max with time and date of readings
Wind speed and wind direction	Measure units : km/h, m/s, knots, mph or Beaufort Range : from 0 to 180 km/h (or from 1 to 49.9 m/s) Wind direction displayed on a 360° compass Recording of Min / Max with time and date of recordings Recording of gusts
Rain	Choice of precipitation display: over 1 hour, 24 hours, 1 week, 1 month or the tota lvolume Measure units : mm or inch Range : from 0 to 999.9 mm (over 1 or 24 hours) And from 0 to 2499 mm (on the total rain volume) Resolution : 0.1 mm Rainfall per impuls : 0.518 mm Recording of Min / Max with time and date of readings

Alarms	21 alarm setting (high and lows) : hour alarm storm alarm (sound alarm possible) indoor temperature alarm (high and low) outdoor temperature alarm (high and low) indoor humidity alarm (high and low) outdoor humidity alarm (high and low) wind chill alarm (high and low) dew point alarm (high and low) precipitation alarm over 1 hour, 24 hours, 1 week, 1 month and the total volume relative pressure alarm (high and low) wind speed alarm (high and low) wind direction alarm
Outdoor transmitter	Data transmitted at 433 MHz or by cable link with base Transmission at 433 MHz : 100 metres (in open field) Transmission distance by cable : 10 metres (with the possibility of an extra 10 metremaximum cable)
Delivered with	Base receiver station Tree outdoor sensors : thermo/hygro transmitter, wind sensor, rain sensor Optional wired connection for data transfer to base receiver station Wireless Weather Station software in CD Rom format for transfer of data to PC (available on www.heavyweather.info). Heavy Weather Software Suite : PC RS 232 serial port cable AC/DC power adapter
Frequencies	If the transmission is at 433 MHz, the recording is every 32 seconds (if the wind is more than 10 m/s) or every 128 seconds (if the wind is less than 10 m/s) or 10 minutes if the station fails to receive any data after 5 attempts in a row (all outdoor data readings willdisplay "---" except for the rain value) If the transmission is by cable, then the recording is every 8 seconds
LCD Contrast	LCD contrast variable from +1 to +8 LED backlight Screen with 21 touch area Interactive display with 32 character of text message for instant weather information

Combustible gas detection
OCG-1000

Features

- sensor
- 2+2 digits display
- Small size & loud sound of 100dB
- Practical new-type patent - over-concentration protection

Characteristics:

•100dB alarm, high bright LED display screen, clearly seen outside 10meters.
•Sensor with original packaging.
•double windows and 2+2 digits display.
- material of aluminum magnesium alloy.
- sensor exchanged needless calibration.
- specialized technique can make the sensor life doubled

Type of sensor	Catalytic combustion sensor
Working voltage	DC24V±5V
electric signal output	4-20mA
display	2+2 digits LEDdisplay; 3-colors LED light
Relay output	24V/1A
kinds of Gas detection	Combustible,Oxygen and toxic gas
Detection range	0-100% LEL
Response time	<15S
Detection precision	3%
Zero drift	2% per year
Lifetime	>3 years
Enable application areas	1&2 hazardous zones of explosive gas
sound & light alarm	100dB red color alarm
Relative humidity	10~95%RH (no condensation)
Atmospheric pressure	86~106Kpa
Operating temperature	-40ºC~ +70ºC
Transmission cable	3 core shielding line with 1~1. 5mm^2 diameter
Electricalequipment connector	M20*1.5 (cast Al); G3/4"(stainless steel)
Explosion-proof grade	Exd II CT6
Weight	2.5kg(cast Al); 4kg(stainless steel)

Detection systems in public places
GD80A

Power	4.8v(Nicd Rechargeable Batteries
Product Color	Red
Product Net Weight	613.5g
Product Size	234.5*86*46mm

PACKING INFORMATION

Standard Quantity Carton	20
Standard Carton Size	65.0*43.0*47.0cm
Standard Carton Gross Weight	24.5Kg

Specification

Adjustable Sensitivity	√
Constant Power Indication	√
LED indicate Leak Size	√
Rapid Warm-up	√
Ultimate Sensitivity	5ppm
Low Battery Indication	√
Hight Efficiency Response and clearing Times	√
Instantaneous Response	√
Adjustable Detection Control	√
Long Flexible Stainless Prove handle	√
Reset button on the probe handle	____

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Detection systems in public places
Film/Coating Thickness
FM30

Detection systems in public places
Film/Coating Thickness
FM31

Specification

Power	9V Alkaline Battery(6F22)
LCD size	35*23.5mm
Product Color	Dark Gray
Product Net Weight	150g
Product Size	180*53*39

Specification

Measuring Range	0-1999μm
Accuracy	±(3%H+1)
Resolution	0.1 / 1μm
System Accuracy Adjustment, Zero Point & Two Point Calibration	√
Single & Continuous Measuring Mode Option	√
Single & Group Data Store and Delete	√
Max/min Data Recording	√
Average/Standard Deviation Recording	√
Measure In Imperial/Metric	√
Auto Shut Off	√
Power	9V Battery

Detection systems in public places
Refrigerant Leak Detector
LD50A

Power	3v(2*"C"-cell batteries)
Product Color	Black
Product Net Weight	622.0g
Product Size	234.5*93*46mm

PACKING INFORMATION

Standard Quantity Carton	20
Standard Carton Size	65.0*43.0*47.0cm
Standard Carton Gross Weight	25.2Kg

Specification

Detect Items	Halogenated refrigerants
Adjustable Sensitivity	√
Constant Power Indication	√
LED indicate Leak Size	√
Rapid Warm-up	√
Ultimate Sensitivity	SAEJ1627stamd level;0.5ounce/year
Low Battery Indication	√
Height Efficiency Response and clearing Times	√
Instantaneous Response	√
Adjustable Detection Contronl	√
Long Flexible Stainless Prove handle	√
Reset button on the probe handle	√

Detection systems in public places
Ultrasonic thickness
UT50

Detection systems in public places
Vibration Meter
VB3A

Specification

Acceleration	0.1-199.9m/S2 peak(rms*v2)
Velosity	0.1-1999.9mm/s rms
Displacement	0.001-1.999mm p-p(rms*2v2)
Accuracy	±5%±2digits

Frequency Response

Acceleration	10Hz-1KHz(LO) 1KHz-15KHz(HI)
Velosity/Displacement	10Hz-1KHz
Data Output	AC Output 2V Peak,Load
Test Mode	Acceleration/Velocity/Displacement
Sampling Rate	1S
Low Battery Indication	√
Auto Power Shut Off	√
Power	9V Battery(6F22)
Battery Life	Continue Using for 25 hours

Specification

Measuring Range	1.2-225.0mm(Steel)
Accuracy	±(1%±0.1)mm
Pipe Measuring Lower Limit	φ20*3mm(Steel)
Sound Velocity Range	1000-9999m/s
Working Frequency	5MHz
Working Temperature Range	0-45℃
Automatic Zero Adjustment	√
Data Store Function	√
Auto Power Shut Off	√
Low Battery Indication	3V±0.2V
Power	3*AAA Ni-Cd or Ni-Hm Battery

Detection systems in public places
Vibration Meter
VB3B

Frequency Response

Acceleration	10Hz-1KHz(LO) 1KHz-15KHz(HI)
Velosity/Displacement	10Hz-1KHz
Data Output	AC Output 2V Peak,Load
Test Mode	Acceleration/Velocity/Displacement
Sampling Rate	1S
Low Battery Indication	√
Auto Shut Off	√
Power	9V Battery(6F22)
Battery Life	25 hours Continuous Operation

Specification

Acceleration	0.1-199.m/S2 peak(rms*v2)
Velosity	0.1-1999.9mms rms
Displacement	0.001-1.999mm p-p(rms*2v2)
Accuracy	±5%±2digits

Electrical Power
Digital Earth Resistance Tester
ER10

Specification

Resistance	0Ω-1999Ω
Voltage	0-199.9V
Resistance	±2%rdg±0.1(20Ω) ±2%rdg±3dgt(200Ω/2000Ω)
Voltage	±1%rdg±4dgt
Resistance	280V AC/DC for 10sec
Voltage	300V AC/DC for 1Min
Measuring Method	Voltage/Resistance
Withstand Voltage	3700V AC Per Minute
Safety Standard	IEC61010-1CAT.III 300V Pollution Level II IEC61557

ENERAL CHARACTERISTICS

Power	9V DC R6P(SUM-3)*6
Standard Accessory	7095Line*1pcs、7094line*1pcs、8032Iron Stick 1 Pair、R6P(AA)*6pcs、
Users	Manual*1pcs

Electrical Power
Digital Earth Resistance Tester
VI15

Specification

Rating Voltage	500V /1000V /2500V
Accuracy	±5%rdg ± 5%dgt
DC/AC Voltage Test	30-600V
Resolution	1.0V
Overload Protect	AC 1200V /10 sec
Voltage Tolerance	AC 8320V /5 sec
Insulated Impedance	1000MΩ /DC1000V
High Voltage Exploring Rod	-
USB Interface	-
Max. Short Circuit Current	1.4mA
Polarization Exponent	√
Absorptance	-

Electrical Power
Digital RCD(ELCB) Tester
NDRT5406

Working Voltage	230V±15%Hz
Creepage Level Selection	10/20/30/200/300/500mA
Fault Action Time	Max.1000mS
Accuracy	Electric Current : ±8% Voltage : 0.6% ±4dgt
Working Temperature	0℃～40℃
Working Humidity	30～90%RH
Testing Button	√
Low Voltage Indication	√

PACKING INFORMATION

Product Net Weight	2000G
Product Size	7095Line*1pcs、7094line*1pcs、8032Iron Stick 1 Pair、R6P(AA)*6pcs、
Packing	Gift Box
Standard Quantity Per Carton	5
Standard Carton Size	61.0 * 58.5 * 313cm
Standard Carton Gross Weight	16.0kg

Electrical Power
high voltage insulation
VI26

Specification

Working Voltage	500V /1000V /2500V
Accuracy	±5%rdg ± 5%dgt
DC/AC Voltage Test	30-600V
Resolution	1.0V
Overload Protect	AC 1200V /10 sec
Voltage Tolerance	AC 8320V /5 sec
Insulated Impedance	1000MΩ /DC1000V
High Voltage Exploring Rod	√
USB Interface	√
Max. Short Circuit Current	1.4mA
Polarization Exponent	√
Absorptance	√

Electrical Power
Ultrasonic Cable Height
UH60E

Product Net Weight	205G
Product Size	75*72*200mm
Packing	Gift Box
Standard Quantity Per Carton	12
Standard Carton Size	52.5*45.5*34cm
Standard Carton Gross Weight	9.24kg

Specification

Height Measuring Range	3～23m
Plane Measuring Range	3～18m
Resolution	5mm (<10m) 10mm (>10m)
Min. Distance Between Two Cables	150mm
Working Temperature Range	-10℃～40℃
BOT Mode: Distance Measuring Of The Lowest 6 Cables Sequent	√
TOP Mode: Distance Measuring Of The Highest 6 Cables Squinty	√
Auto Shut Off	√
LCD Display	√

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Gas Analyzer
GA-5

Measuring range	HC:0~10000×10-6(ppm)vol CO:0~10×10-2(%)vol CO2:0~20×10-2(%)vol O2: 0~25×10-2(%)vol NOx:0~5000×10-6(ppm)volλ:0.50~3.00 COcor:0~10×10-2(%)vol R.M.P:0-9999r.m.p OIL TEMP:0-150°C HC±12 ×10-6(ppm)vol(absolute error)or±5%(relative error) CO±0.06×10-2(%)vol (absolute error)or±5%
Indication error	CO2 ±0.5×10-2(%)vol (absolute error)or±5%(relative error) O2 ±0.1 ×10-2(%)vol (absolute error)or±5%(relative error) NOx ±25 ×10-6(ppm)vol(absolute error)or±4%(relative error)
Repeatability Repetition error	≤+/- 2%
Stability Automatic zero, moment drift less than	≤±3%
Resolution	HC:1×10-6(ppm)vol CO: 0.01×10-2(%)vol CO2: 0.1×10-2(%)vol O2: 0.01×10-2(%)vol NOx:1×10-6(ppm)vol λ:0.01
R.M.P	10rpm
OIL TEMP	0.1°C
Consumption Power	40VA
Dimensions(including bracket):	420mm (L) x 310mm (W) x 170mm (H)
Weight about	9kg
Response time	95% repose time no more than 10 seconds

Warm up: time 8min (Emergency detection can be preheated 3 min) Output Mode :Can display, print gas concentration maximum value, average value, the minimum value of the license plate number, test time, date, speed, temperature and COcor value of lambda,, can interface with computer networking

Environmental: conditions Temperature-5 ~ 50 °C, relative humidity ≤90%
Power: AC100-240V 50/60Hz **or DC12V (Choose add power inverter)**

Features

1.The large screen liquid crystal display, Englishmen.
2.The use of German imports of infrared detector, O2and NOX sensor, vibration resistance, good stability, high precision.
3.The measurement of CO, HC, CO2for O2, NOX, Concur, concentration and the lambda value, speed, temperature, flow, pressure.
4.With the single, double idle , general measuring function.
5.It can be measured with gasoline, LPG, CNG and alcohol as a fuel for vehicle.
6.According to the new standard and the United States BAR97standardsdevelopment, in line with the OIMLR99 I level precision.
7.With the automatic zero adjustment, automatic cleaning, automatic temperature   compensation, pressure compensation.
8.With the HC residue measurement, traffic monitoring, gas leak check.
9.The machine has self diagnostic function, fault when prompted, until the troubleshooting can continue measurement.
10.With speed, temperature measurement, built-in printer or digital (Analog)   interface network.
11.The license plate number input and 2000 groups of data storage, reference function, clock display.

Gas Analyzer
GA-7CO2

Measuring range	0-100% (range optional)
Accuracy	≤ ± 1% F.S
Response time	T90 ≤ 45 S
Stability	Zero drift: ± 1.5% F.S/30d Span drift: ± 1.5% F.S/30d
Sample gas flow	500mL/min Sample gas
pressure	0.1Mpa ≤ Inlet pressure ≤ 0.2Mpa
Output signal	4 ~ 20mA or 0 ~ 5VDC optional
Power supply	240VAC, 5A 24VDC, 5A 220VAC ± 10% 50Hz ± 5% Ambient
temperature	-5 ℃ ~ +45 ℃
Humidity	≤ 90% RH
Dimensions	483 (W) × 177 (height) × 360 (depth)
Hole size	451 (W) × 178 (height)
Weight	about 6.5k

Product Introduction

It uses microfluidic optical sensor combined with mechanical cutting technology and advanced digital processing technology, to achieve the CO2, CO, CH4, NOX, SO2, SF6, CHX and other gases continuous automatic fast online detection of sophisticated analytical instruments. Wide viewing angle using 320 * 240 LCD monitor, desktop or panel mounted, easy to install

Features

1- infrared micro-flow sensor, long life, high sensitivity, Fast response
2- comes with precision filter, greatly improving sensor life 3, the upper and lower control points can be set within the range of full scale 4, data backup, data recovery 5, the standard 4-20m A or 0-5V output 6, the standard RS232/RS485 communication 7

Application

Electricity, metallurgy, cement, agriculture, fertilizer, chemical, environmental protection, scientific research and other industries and various mixed gases CO2, CO, CH4, NOX, SO2, SF6, CHX rapid analysis of a variety of gases.

Measurement range:

Detection of gas	Detection minimum range	Detecting the maximum range
CO	0-50ppm	0-100%
CO2	0-20	
pm	0-100%	
CH4	0-100ppm	0-100%
HC	0-100ppm	0-100%
NOX	0-100ppm	0-5000ppm

![acculab USA logo]

Humidity Temperature Meter
HM27

Specification

Temperature Measuring Range	-10℃~50℃
Humidity Measuring Range	10%RH~99%RH
℃/℉ Selection	√
Accuracy of temperature	±1%
Accuracy of humidity	±3%(30~95%) ±5%(10~30%)
Auto /Manual Power Off	√
Low Battery Indication	√
Data Hold	√
Temperature Resolution	0.1℃
Humidity Resolution	0.1%RH
Sampling Rate	2time/sec
Temperature & Humidity Alarm Setup	--
Max/Min Measurement	--
arge LCD Dual Display	--

General Characteristics

Power	9V Alkaline Battery
LCD size	48.3*30mm
Product Color	Ivory
Product Net Weight	194g
Product Size	207*70*29mm

Specification

Temperature Measuring Range	-10℃~50℃
Humidity Measuring Range	5%RH~98%RH
℃/℉ Selection	√
Accuracy of temperature	±1%
Accuracy of humidity	±3%(30~95%) ±5%(10~30%)
Auto /Manual Power Off	√
Low Battery Indication	√
Data Hold	√
Temperature Resolution	0.1℃
Humidity Resolution	0.1%RH
Sampling Rate	2.5time/sec
Temperature & Humidity Alarm Setup	√
Max/Min Measurement	√
arge LCD Dual Display	√

General Characteristics

Power	9V Alkaline Battery
LCD size	48.3*30mm
Product Color	Ivory
Product Net Weight	194g
Product Size	207*70*29mm

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Humidity Temperature Meter
HM47

Humidity Temperature Meter
HT3

Specification

Specification

Temperature Measuring Range	-10℃~50℃ -20℃~1000℃(K-type)
Humidity Measuring Range	5%RH~98%RH
℃/℉ Selection	√
Accuracy of temperature	±1% ±2℃or±3℃(K-type)
Accuracy of humidity	±3%(30~95%) ±5%(10~30%)
Auto /Manual Power Off	√
Low Battery Indication	√
Backlight display	√
Data Hold	√
K-type Thermocouple Temperature Measuring	0.1℃
Temperature Resolution	0.1℃
Humidity Resolution	0.1%RH
Sampling Rate	2.5time/sec
Temperature Max/Min Measuring	√
Humidity Max/Min Measuring	√

Outdoor temperature range	-40℃+70℃(-58 ° ℉+158 ° F)
Humidity	relative humidity 25% - 98%
Base wave	+ / - 1 ℃
Humidity accuracy	+ / - 5% RH environment
Weight	158 grams
Size	122 * 97 * 24 mm
Outdoor sensor wiring	1.5 m

General Characteristics

Power	9V Alkaline Battery
LCD size	59*51mm
Product Color	Dark Gray
Product Net Weight	251g
Product Size	151*83*26.55mm

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Infrared Thermometer
IT28

Specification

Temperature range	-32~280°C(-26~536°F)
Accuracy	±1.5%or±1.5°C(2.7°F)
Measuring the distance ratio	12:1
Emissivity	0.95
Resolution	0.1°Cor0.1°F
Response time and response value	500ms & (8-14)um
Repeatability	±1%or±1°C(1.8°F)
Temperature unit conversion	√
Data Hold and display function	√
Laser target display selection function	√
Backlit display selection function	√
Auto power off function	√
Low battery indication	√
Packaging information	
Power supply	9v
Net weight	150g
Dimensions	146x80x38mm
Standard Carton capacity	60
Standard carton size	56x31.5x46.0cm
Standard carton weight	12kg

Infrared Thermometer
IT30

Specification

Temperature Range	-32~300°C (-26~572°F)
Accuracy	±1.5%or±1.5°C(2.7°F)
Distance Spot Ratio	12：1
Emissivity	0.95 preset
Resolution	0.1°Cor0.1°F
Response Time & Wavelengh	500ms & (8-14)um
Repeatability	±1%or±1°C(1.8°F)
°C/°F Selection	√
Data Hold Function	√
Laser Target Pointer Selection	√
Backlight Display Selection	√
Auto Power Shut Off	√
Low Battery Indication	√

PACKING INFORMATION

Power	±1%or±1°C(1.8°F)
Product Net Weight	9V Battery (6F22 or similar)
Product Size	168g
Packing	146x80x38mm
Standard Quantity Per Carton	Blister Card
Standard Carton Size	60
Standard Carton Gross Weight	44.5x41.5x47.0cm

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Infrared Thermometer
IT35

Specification

Temperature Range	-50~480℃ (-58~896°F)
Accuracy	±1.5%or±1.5℃(2.7°F)
Distance Spot Ratio	12：1
Emissivity	0.95 preset
Resolution	0.1℃or0.1°F
Response Time & Wavelengh	500ms & (8-14)um
Repeatability	±1%or±1℃(1.8°F)
℃/°F Selection	√
Data Hold Function	√
Laser Target Pointer Selection	√
Backlight Display Selection	√
Auto Power Shut Off	√
Low Battery Indication	√

PACKING INFORMATION

Power	9V Battery (6F22 or similar)
Product Net Weight	168g
Product Size	146x80x38mm
Packing Style	Gift box
Standard Quantity Per Carton	40
Standard Carton Size	50.0x42.5x18.8cm
Standard Carton Gross Weight	9.12kg

Infrared Thermometer
IT42A

Features

1. Temp. range: -50 to 350℃ (-58 to 662°F)
2. Optical resolution: D:S=13:1
3. Built-in laser pointer
4. Overrange indication
5. Backlit LCD display
6. Fixed at 0.95 emissivity
7. Data Hold
8. Auto power off

IR Temp Range	-50 ℃ ~ 550 ℃/ -58 °F ~ 1022 °F
Basic Accuracy(IR)	-50 ℃ ~ 0 ℃: ±4 ℃ 0 ℃ ~ 550 ℃: ±2% ±2 ℃
Response Time	≤500ms
Emissivity	fixed at 0.95
Optical Resolution	D:S=13:1
Resolution	0.1 ℃/ °F
Spectral Response	8 ~ 14um
Diode Laser	Output<1mW, 630 ~ 670nm, class 2(II)
Auto Power Off	Auto shut off after 20 seconds of inactivity
Operating Temp.	0 ℃ ~ 50 ℃ / 32 °F ~ 122 °F
Storage Temp.	-20 ℃ ~ 60 ℃ / -4 °F ~ 140 °F
Relative Humidity	Operating:10 ~ 95%RH; Storage: <80%RH
Power Supply	9V battery
Dimensions(L*W*H)	155.5*98.8*27.5mm
Weight	166g
Accessories	User's Manual, 9V Battery, carrying pouch with gift box

Infrared Thermometer
IT52B

Features

1. Temp. range: -50 to 330℃ (-58 to 626°F)
2. Optical resolution: D:S=12:1
3. Built-in laser pointer
4. Over range indication
5. Backlit LCD display
6. Fixed at 0.95 emissivity
7. Data Hold
8. Auto power off

Specification

IR Temp Range	-50℃ to 800℃/ -58°F to 1472°F
Basic Accuracy(IR)	-50℃～0℃: ±4℃ 0℃～800℃: ±2% ±2℃
Response Time	≤1s
Emissivity	fixed at 0.95
Optical Resolution	D:S=12:1
Resolution	0.1℃/°F
Spectral Response	8～14um
Diode Laser	Output＜1mW, 630～670nm, class 2(Ⅱ)
Auto Power Off	Auto shut off after 20 seconds of inactivity
Operating Temp.	0℃ to 50℃ / 32°F to 122°F
Storage Temp.	-20℃ to 60℃ / -4°F to 140°F
Relative Humidity	Operating:10～95%RH; Storage: <80%RH
Power Supply	9V battery
Dimensions(L*W*H)	134*88.5*36mm
Weight	105g
Accessories	User's Manual, 9V Battery, Blister Card and Clamshell

Infrared Thermometer
IT62A

Features

1. Temp. range: -50 to 350℃ (-58 to 662°F)
2. Optical resolution: D:S=13:1
3. Built-in laser pointer
4. Overage indication
5. Backlit LCD display
6. Fixed at 0.95 emissivity
7. Data Hold
8. Auto power off

Specification

IR Temp Range6	-50 ℃ ~ 850 ℃/ -58 °F ~ 1562 °F
Basic Accuracy(IR)	-50 ℃ ~ 0 ℃: ±4 ℃ 0 ℃ ~ 850 ℃: ±2% ±2 ℃
Response Time	≤500ms
Emissivity	fixed at 0.95
Optical Resolution	D:S=13:1
Resolution	0.1 ℃/ °F
Spectral Response	8 ~ 14um
Diode Laser	Output<1mW, 630 ~ 670nm, class 2(Ⅱ)
Auto Power Off	Auto shut off after 20 seconds of inactivity
Operating Temp.	0 ℃ ~ 50 ℃ / 32 °F ~ 122 °F
Storage Temp.	-20 ℃ ~ 60 ℃ / -4 °F ~ 140 °F
Relative Humidity	Operating:10 ~ 95%RH; Storage: <80%RH
Power Supply	9V battery
Dimensions(L*W*H)	155.5*98.8*27.5mm
Weight	166g
Accessories	User's Manual, 9V Battery, carrying pouch with gift box

Infrared Thermometer
IT52B

Specification

Temperature Range	-50~1250℃ (-58~2282°F)
Accuracy	±2%or±2℃
Distance Spot Ratio	30：1
Emissivity	0.10~1.00 adjustable
Resolution	0.1℃or0.1°F
Response Time & Wavelengh	500ms & (8-14)um
Repeatability	±1%or±1℃(1.8°F)
Avg/Dif Temperature Measurement	√
Max/Min Temperature Measurement	√
High/Low Temperature Alarm Setup	√
12 Data Store/Recall Function	√
℃/°F Selection	√
Data Hold Function	√
Laser Target Pointer Selection	√
Backlight Display Selection	√
Auto Power Shut Off	√
Low Battery Indication	√

PACKING INFORMATION

Power	9V Alkaline Battery
Product Net Weight	480g
Product Size	200x155x59mm
Packing Style	Gift box
Standard Quantity Per Carton	12
Standard Carton Size	52.5x45.5x34.0cm

Specification

Temperature Range	-18~1450℃ (0~2642°F)
Accuracy	±2%or±2℃(2.7°F)
Distance Spot Ratio	50：1
Emissivity	0.10~1.00 adjustable
Resolution	0.1℃or0.1°F
Response Time & Wavelength	500ms & (8-14)um
Repeatability	±1%or±0.1℃
Avg/Dif Temperature Measurement	√
Max/Min Temperature Measurement	√
High/Low Temperature Alarm Setup	√
100 Data Store/Recall Function	√
RS232 Interface	√
Analyzing Software	√
℃/°F Selection	√
Data Hold Function	√
Laser Target Pointer Selection	√
Backlight Display Selection	√
Auto Power Shut Off	√
Low Battery Indication	√

PACKING INFORMATION

Power	9V Alkaline Battery
Product Net Weight	480g
Product Size	200x155x59mm
Packing Style	Gift box
Standard Quantity Per Carton	12
Standard Carton Size	52.5x45.5x34.0cm
Standard Carton Gross Weight	15.1kg

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Infrared Thermometer
IT72D

Features

1. Temp. range: -50℃ to 650℃ (-58°F to 1202°F)
2. Optical resolution: D:S=30:1
3. Adjustable emissivity 0.1~1.0
4. MAX/MIN record
5. Fast response time <250ms
6. Over range indication
7. Data Hold
8. Auto power off

IR Temp Range	-50 ℃ ~1050 ℃/ -58 °F ~ 1922 °F
Basic Accuracy(IR)	-50 ℃ ~ 0 ℃: ±4 ℃ 0 ℃ ~ 1050 ℃: ±2% ±2 ℃
Response Time	≤250ms
Emissivity	Adjustable: 0.1~1.0
Optical Resolution	D:S=30:1
Resolution	0.1 ℃/ °F
Spectral Response	8 ~ 14um
Diode Laser	Output<1mW, 630 ~ 670nm, class 2(Ⅱ)
Auto Power Off	Auto shut off after 20 seconds of inactivity
Operating Temp.	0 ℃ ~ 50 ℃ / 32 °F ~ 122 °F
Storage Temp.	-20 ℃ ~ 60 ℃ / -4 °F ~ 140 °F
Relative Humidity	Operating:10 ~ 95%RH; Storage: <80%RH
Power Supply	9V battery
Dimensions(L*W*H)	155.5*98.8*27.5mm
Weight	172g
Accessories	User's Manual, 9V Battery, carrying case with gift box

Lux Meter
LM13

Features

1. Auto revise parameters for nonstandard illumination
2. Silicon photo-diode with spectral response filter
3. User selectable Lux/Fc
4. MAX/MIN record
5. Low battery indication
6. Auto power off

Specification

Resolution	0.1
Reading Display Update	2times/second
Operation conditions	-20 °C ~ 60 °C, 10％RH ~ 90％RH
Storage conditions	-20 °C ~ 60 °C, 10％RH ~ 75％RH
Measurement Range	0 Lux ~ 100K Lux, 0Fc ~ 10KFc
Accuracy	±3% rdg±0.5%f.s.(<10,000Lux); ±4% rdg±10dgts.(>10,000Lux)
Discrete Cosine Respond	f2' ≤ 2%
Spectrum Accuracy	Vλ function f1'≤ 6%
Spectrum Response	CIE(Coherent Infrared Energy)
Size(L*W*H)	172* 55*38mm
Weight	162g
Accessories	User's Manual, Tripod, Battery, Carrying case, Gift box

Lux Meter
LM23

Specification

Measuring Range	1～100,000lux
Accuracy	<3%rgd±0.5%f.s
Unit Selection	Lux/Fc
Measure Level Selection	Auto/Manual
Data Hold Function	√
Auto Power Shut Off	√
Low Battery Indication	√
LCD Back Light Selection	√
Repeatability	±2%
The Change As Temperature Change	0.1%/°C
Sampling Frequency	1.5times/sec
Resolution	1Lux
Response Time	1s
Over level Indication	√
Max And Mindreading Hold Function	√

GENERAL CHARACTERISTICS

Power	9v Battery
LCD size	59.0*51.0mm
Product Color	Dark gray
Product Net Weight	209.0g
Product Size	151*83*26.5mm

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Meteorological Instrument
Astronomical Telescope
AT5

Meteorological Instrument
High-Powered High-Definition Version Of The
Telescope Conventional Military
TM20c

Features: A very distinctive telescope in his hand the very texture, also very good.

Specification

Factory configuration	Diameter: 50mm, focal length: 600mm, four photography desktop tripod• 2 eyepieces: SR25, H6• An increase in magnification: 3X multiplier mirror• Finder, sunglasses, camera mount and one each in GW ah: about 3 kg• 24,72,100,300 which are multiples of 600 / 6 * 3 = 300, i.e., the maximum 300 times
Main features	as direct viewing telescope, bird watching, remote monitoring connect all kinds of camera lens as a telephoto camera stars, birds, photo, remote forensics directly connected to the computer through the CCD camera star gazing, bird photo bird, remote forensics guided through the guide star eyepiece or CCD guide star shooting star of deep sky objects four photographic desktop tripod. 24,72,100,300 which are multiples of 600 / 6 * 3 = 300, i.e., the maximum 300 times. shoot sunspots can be observed•
Quality and accuracy from the details	Full Metal Mirror all parts of the body concentricity tolerance <0.02mm • thread connection precision helical focusing with special friction material concentricity • tolerance <0.05mm
Factory configuration	Diameter: 50mm, focal length: 600mm, four photography desktop tripod• 2 eyepieces: SR25, H6• An increase in magnification: 3X multiplier mirror• Finder, sunglasses, camera mount and one each in GW ah: about 3 kg• 24,72,100,300 which are multiples of 600 / 6 * 3 = 300, i.e., the maximum 300 times

Specification

Viewing angle	**5 ° 20**
1000M horizon	150 meters
Material mirror	50 mm
Eyepiece	22 mm
Logo size	20x50
Actual size	20x50 (20 times magnification, objective lens diameter 50 mm)
Magnification:	20 times
Eye relief	22.2 mm
Exit pupil diameter	4.3 mm
Color	Black / army green
Weight	0.85kg
Volume	190 mm x 170 mm x 60 mm
Lens	Optical glass, BAK4 prism
Focus type	Central high-precision focusing system
Operating temperature	-40 --- +50 degrees celsius
Save	Dry preservation
Accessories	Nylon bag, strap (lanyard), lens cleaning cloth, manual, color box, eyepiece, objective lens cover
Coating: Multi-layer HD generosity of the green film	

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Handheld weather station
AWS-10

Item	Range	Resolution	Accuracy
Temperature	-20-+60℃	0.1℃	±1℃
Humidity	0-100%RH	0.1%RH	±5%RH
Wind chill	-40-+10℃	0.1℃	±2℃
Dew point	-40-+60℃	0.1℃	±2℃
Wind speed	0.7-30m/s	0.1m/s	±0.3m/s
Barometric pressure	300-1100hpa	0.1hpa	±1hpa
Altitude	-500-+9000m	1m	
Illumination	0-55000lux	1lux	±3%
Response time		1s	
Size		48*22*122mm	

Features

AWS-10 Handheld weather station is a portable device, and it is suitable for measuring temperature, humidity, wind chill, dew point, wind speed, barometric pressure, altitude and illumination.

The measurement of altitude is influenced by barometric pressure and temperature, so the altitude values measured in different seasons and different climates are different; but in the same day and condition that, barometric pressure and temperature slightly vary, the altitude reading is stable, so it can be used for measuring the altitude difference.

FUNCTIONS

* With 8 measurement parameters
* Data can be manual or automatic storage
* Unit switching function
* LCD display with back-light
* Battery level display

Digital Anemometer
DAM-20

Item	Technical Specification		
	Wind speed	Windtemperature	Air flow
Range	0-45m/s	0-45ºC	0-999900m^3/min
Resolution	0.1m/s	0.2ºC	0.1m^3 /min
Accuracy	±3%	≤±2ºC	0.1m^3 /min
Unit	m/s, Ft/min, Knots, Km/hr, Mph	ºC,ºF	CMM,CFM
Display	LCD with back-light		
Supply	6VDC (4 *1.5V AAA)		
Dimension	Main body: 164*77*32mm, vane: 172*65*29mm		
Weight (unpacked)	330g		
other	Max/ Min wind speed measurement		
	Average / real-time wind speed,air temperature & air flow measurement		
	Data logger(record 500 groups of data)		
	The unit can be switched		
	Low voltage alarm display		
	Manual / Auto power-off (it will auto power-off in 14 min if there is no operation)		
	Connect with computer by USB connector, use the support software for data analysis.		

features:

DAM-20 Digital Anemometer is a rotary cup type anemometer. It is light, compact and portable. It adopts
High accuracy low friction ball bearing and light-weight vane design. It can provide precise measurement in low wind speed. DAM-20   can test and real-time display wind speed ,ambient temperature and air flow at the same time. It is powered by replaceable battery, and features low power consumption and auto power-off function.

Portable Weather Station
AWS-50

Emergency meteorological monitoring

* Individual meteorological support
* Agricultural weather monitoring
* Research and teaching
* Micro-meteorological research

AWS-50 Portable Weather Station is a mini weather station that features highly integrated, micro-power consumption, lightweight and elevator tripod for rapid set up. It is ideal for varions of short-term meteorological observations, long-term continuous monitoring of small weather station and requirements of mobile real-time weather data capture; Designed with integration of five often used sensors,including wind direction, wind speed, barometric pressure, temperature, humidity, (additional sensors can be customized). The test data can be sent to a fixed meteorological data center or vehicle mobile center system via RS232, RS485, USB or GPRS wireless communications.

Features

* High accuracy
* Strong resistance to harsh environment
* Low power consumption
* Aluminum alloy frame, one-hand carry, rapid set up in 10s
* Additional sensors can be customized
* Being equipped with lithium battery and various power supply interfaces
* Variety of communication mode for option

Specification

Measure item	Measure range	Resolution	Accuracy
Wind speed	0-45m/s	0.1m/s	±（0.3±0.03V）m/s
Wind direction	0-360º	1°	±3°
Atmospheric temperature	-50-+100℃	0.1℃	±0.5℃
Atmospheric humidity	0-100%RH	0.1%RH	±3%
Atmospheric pressure	10-1100hPa	0.1hpa	±0.3hPa
Item	Details		
Storage capacity	Store a consecutive month of record data		
Meteorological monitoring software(for free)	Use to real-time display, analysis and storage data on the PC		
Communication mode	Default R232,RS485 & GPRS is optional		
Supply	Removable 4.8 AH lithium battery, ac adapter, external expanding power box		
Electronic compass(optional)	With electronic compass when installation does not need to manually to the north		
Portable aluminum alloy instrument box(optional)	600*200*500mm		
Installation	The AWS can complete the installation within 10 s		
Ingress protection	IP63		
Operating temperature	-40℃-+70℃		
Dimension	1375 mm(Shrinkage at 1135 mm,Height can be customized.)		
Weight(unpacked)	5kg		

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Automatic Weather Station
AWS-100

Parts	Details	Note
Data logger	Meteorological data collection, display, storage and communications	
Sensors & cable	Wind speed sensor, wind direction sensor, atmospherictemperature, atmospheric humidity, atmospheric pressure, rainfall, solar radiation, soil temperature, soil moisture,etc. (Optional according to user's requirements)	
Meteorological monitoring software	Use to real-time display, analysis and storage data on the PC	Attached
Multi-plate radiation shield	Used to install the atmospheric temperature, atmospheric humidity and atmospheric pressure sensors	
Tripod & accessories	2.5m typ.,other height is optional, stainless steel or steel with coating	
Data logger protectiveM box	Used to install data logger, stainless steel or steel with coating	
110VAC/220VAC adapter	Optional when using AC power supply	
RS232 cable	2m typ.,other length is optional	
RS485 cable	2m typ.,other length is optional	
USB to RS232 converter	Used to connect PC without RS232 serial port	
U disk	Used for data storage	optional
GPRS module	Used for wireless data transmission, need to match with the local mobile communication network	optional
WIFI module	Used for wireless data transmission, need for wireless networking	optional
Ethernet module	Used for wireless data transmission, need for cable network	optional
LED screen	Size and display content can be customized	optional
Solar power supply system	Include photovoltaic panels(30W), controller, dual power supply controller, battery(25AH)	optional
Lightning protection device(optional)	Contain the lightning rod, connecting wires and grounding angle steel	optional

Features

- High accuracy
- Strong resistance to harsh environment
- Strong corrosion resistant ability
- Automatic storage and backup
- Convenient data download
- All-metal construction of bracket
- Solar power supply optional

APPLICATIONS

- Agriculture
- Forestry
- Highways and railways
- Solar or wind power generation
- Greenhouse, breeding
- Scenic region
- Meteorological science research

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TYPICAL APPLICATION & TECHNICAL SPECIFICATION

General weather station

Measure item	Measure range	Resolution	Accuracy
Wind speed	0-45m/s	0.1m/s	±（0.3±0.03V）m/s
Wind direction	0-360º	1°	±3°
Atmospheric temperature	-50-+100℃	0.1℃	±0.5℃
Atmospheric humidity	0-100%RH	0.1%RH	±5%
Atmospheric pressure	10-1100hPa	0.1hpa	±0.3hPa
Rainfall	0-4mm/min	0.2mm	±4%
Solar radiation	0-2000W/m2	1W/m2	±5%

Photovoltaic power generation weather station

Measure item	Measure range	Resolution	Accuracy
Wind speed	0-45m/s	0.1m/s	±（0.3±0.03V）m/s
Wid direction	0-360º	1°	±3°
Atmospheric temperature	-50-+100℃	0.1℃	±0.5℃
Atmospheric humidity	0-100%RH	0.1%RH	±5%
Atmospheric pressure	10-1100hPa	0.1hpa	±0.3hPa
Photovoltaic panels temperature sensor	-50-+100℃	0.1℃	±0.5℃
Total solar radiation	0-2000W/2	1W/m2	±3%
Rainfall(optional)	0-4mm/min	0.2mm	±4%
Hall current sensor(optional)	0-500V	1V	±0.5%
Hall voltage sensor(optional)	0-150A	0.1A	±0.5%

Agricultural weather station

Measure item	Measure range	Resolution	Accuracy
Wind speed	0-45m/s	0.1m/s	±（0.3±0.03V）m/s
Wind direction	0-360º	1°	±3°
Atmospheric temperature	-50-+100℃	0.1℃	±0.5℃
Atmospheric humidity	0-100%RH	0.1%RH	±5%
Atmospheric pressure	10-1100hPa	0.1hpa	±0.3hPa
Solar radiation	0-2000W/m2	1W/m2	±5%
PAR sensor	0-4000μ*mol*m2*s	1μ*mol*m2*s	±1%
Rainfall	0-4mm/min	0.2mm	±4%
Soil temperature	-50-+80℃	0.1℃	±0.5℃
Soil moisture	0-100%	1%	±3%
CO2(optional)	0-5000ppm	1ppm	±3%
Soil PH(optional)	0-14PH	0.1PH	±0.02PH
Soil salinity(optional)	0-15000mg/L	1mg/L	±5%
Soil EC(optional)	0-15mS/cm	0.0mS/cm	±5%

Greenhouse comprehensive monitoring station

Measure item	Measure range	Resolution	Accuracy
Atmospheric temperature	-50-+100℃	0.1℃	±0.5℃
Atmospheric humidity	0-100%RH	0.1%RH	±5%
Atmospheric pressure	10-1100hPa	0.1hpa	±0.3hPa
CO2	0-5000ppm	ppm	±3%
Illuminance	0-200000lux	1lux	±7%
Soil temperature	-50-+80℃	0.1℃	±0.5℃
Soil moisture	0-100%	1%	±3%
Solar radiation(optional)	0-2000W/m2	1W/m2	±5%
PAR sensor(optional)	0-4000μ*mol*m2*s	1μ*mol*m2*s	±1%
Soil PH(optional)	0-14PH	0.1PH	±0.02PH
Soil salinity(optional)	0-15000mg/L	1mg/L	±5%
Soil EC(optional)	0-15mS/cm	0.01mS/cm	±5%

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Scenic area weather station

Measure item	Measure range	Resolution	Accuracy
Wind speed	0-45m/s	0.1m/s	± （0.3±0.03V） m/s
Wind direction	0-360º	1°	±3°
Atmospheric temperture	-50-+100℃	0.1℃	±0.5℃
Atmospheric humidity	0-100%RH	0.1%RH	±5%
Atmospheric pressure	10-1100hPa	0.1hpa	±0.3hPa
Rainfall	0-4mm/min	0.2mm	±4%
Uv radiation	0-200W/m2	1W/m2	±5%
Ground temperature	-50-+80℃	0.1℃	±0.5℃

Notice:

1.The measurement items can be increased or deleted in the table;
2.Measured data is automatically recorded and stored for download analysis;
3.If there are other functional requirements, you can contact us, we can provide professional solutions.

Item	Details
Internal storage	12M (If set to store every 4 hours can store data for more than 6 years)
External storage	Use (U disk or SD card) to store data (optional function)
Communication mode	RS232, RS485, USB, GPRS （wireless）
Supply	12-36VDC, AC220V, solar power supply system optional
Inter-record interval	1min-240min adjustable
Power consumption	2W
Operating temperature	-40-+75℃
Sensor connection	16 sensor interface

KEY INSTRUCTION

KEY	Function	KEY	Function
▲	Up	+	Value increases
▼	Down	—	Value decreases
◄	Left / Shift to the previous interface	OK	Enter the menu
►	Right Shift to the after interface	Esc	Exit menu

PARAMETER SETTINGS

Item	Function
Version	View data logger software version number
Time settings	Set data logger system clock
Other settings	Set electronic compass (optional function)
Communication settings	Set data logger address(0-255,RS232/RS485 communication）
Reset	After reset all parameters must be reset and clear the history data
Time interval	Set the data storage time interval(1-240min)
Language settings	English
External storage	External storage type(SD card/U disk/No,If no external storage, set to no)

COMMUNICATION MODE

The AWS can communicate with the center workstation by RS232 or RS485. If the communication distance is less than 20m, RS232 communication is recommended; if communication distance is within 20 to 800m, RS485 communication is recommended. The center workstation can network with several AWS-100
 GPRS wireless communication, when cable routing is inconvenient, data can be transferred by GPRS wireless communication, the center workstation can network with several AWS-100.
 LAN access, AWS-100 is worked as a LAN node communication in the local network by transferring the RS232 with a LAN module. This mode can work under the network interface, the AWS can connect with the computer host directly.

Model	Description	
100-02	ABS Wind Speed Sensor Material: carbon fiber Test range: 0-45m/s Signal output : pulse /4-20mA/0-5VDC、 RS485 Supply: 5V/12V/24VDC Accuracy: ±3%FS Cable length: 1.5m	
110-02	ABS Wind Direction Sensor Material : carbon fiber Test range: 0-360° Signal output : 4-20mA Supply: 5V/12V/24VDC Accuracy: ±3%FS Resolution: 1° Cable length: 1.5m	
330-01	Atmospheric Temperature & Humidity & Pressure sensor(with solar radiation shield and mouting parts) Temperature Range: -40~60°C, resolution: 0.01°C, Accuracy: ±0.4°C Humidity Range: 0-100%RH, Resolution: 0.05%RH, Accuracy: ±3%RH ； Supply: 12-24VDC / Output: RS485 IP65	
210-01	Illuminance Sensor Range 0-100lux,0-2000lux,0-20klux,0-200klux optional Spectral range 380-730nm Supply 12-24VDC Output 4-20mA,0-5V,0-10V,RS485 Repeatability <1%FS / Accuracy <5%FS Display LED/LCD optional Operating temperature -40°C-+75°C Shell material ABS Dimension 117*86*56mm	

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Model	Description
200-04	Solar Radiation Sensor (economical type) Housing: Aluminium alloy Measure Spectral Range: 300-3000nm Range: 0-1500w/m2 Sensitivity:7-14uV/W/M-2 Output: 0~5VDC/4-20mA Supply:12V Measuring angle: 2TT Solid angle
400-06	Evaporation Sensor Range：0~200mm Accuracy：±1% Response time：＜1s Inner diameter of barrel ：φ200mm Outer diameter of barrel：φ300mm Operating ambient temperature：-30~80℃ Operating ambient humidity：0-100% IP：IP65
400-04	Economical Tipping bucket rain gauge Collector diameter :φ200mm, height: 271mm Material: ABS Measuring range ：≤ 4mm/min Range: ≤4mm/min Resolution: 0.2mm Accuracy: ±2% Supply: 5-24V Output: 5Pulses/mm
300-03	CO2 Sensor Range(concentration):0-2000ppm,0-5000ppm,0-10000ppm Accuracy:±3%FS@25℃, Supply:12-24VDC Output:4-20mA,0-5V,RS485 Power Consumption: Max:200mA, Avg.:85mA Warm Up Time:3min, Response Time: <90s Temperature Drift: ≤0.2%FS/℃,Stability: <±2%FS Repeatability/p>: <±1%FS, Storage: -40-70℃ @20%-90%RH Operating Temperature: -20℃-+60℃@15-80%RH1111

300-04	Leaf Wetness Sensor Range 0-100% Accuracy ±5% Repeatability <±3%FS Temperature Drift ≤0.2%FS/℃ Supply 5VDC,12VDC,24VDC Output 4-20mA,0-5V,RS485 IP65
400-03	Automatic Rainfall Station: 1* stainless steel rain gauge with 1.5m cable 1* data logger with USB/ RS232/ RS385 connector, 4Mbit storage capacity, 220V power supply
500-01	Soil Temperature Sensor Material: 304SS Range: -50~60℃ Accuracy: ±0.2℃ Sensitivity:0.39Ω/℃ Output: PT100
500-02	Soil PH Sensor. range: 0-14PH output: 4-20mA, 0-5V supply: 12-24V accuracy: ±0.02PH cable length: 1.5m IP65
500-03	Soil EC Sensor EC range:0-20mS/cm salinity range: 0-0.15mol/L Supply 12-24V Accuracy ±2% Response time <1s Output Signal 4-20mA,0-5V,RS485 Housing material ABS

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500-05	Laser remote non-contact road condiditon Sensor	
510-01	Soil Moisture Sensor Material: 304SS Range: -500-100%(m3/m3) Accuracy: ±2% Output: 4-20mA Supply: 7-15V IP65	
520-01	Combined soil moisture & temperature sensor Range 0-100%（m3/m3） -30℃-+70℃ Accuracy ±3% ±0.5℃ Output Signal 0-5V,4-20mA ,RS485 optional Response Time <1s Supply 12-24VDC Housing ABS	
600-02B	Data logger with free software LCD: 192 * 64mm Internal storage:12M External storage Use special (U disk or SD card) to store data (optional function) Data interface RS232, RS485, USB Communication mode Ethernet(add RS232 to ethernet converter); GPRS(add RS232 to GPRS converter),data flow consumption: <100MB/month WIFI(add RS232 to WIFI converter) Supply 12VDC, AC110V, AC220V, solar power supply system optional Record interval 1min-240min adjustable Power consumption 2W Sensor connection Max.:16 sensor interface	

Power source	30W Solar pannel, charge controller	
Module	GPRS module for wireless transmission （or WIFI module）	
Tripod	Tripod for weather station 2.5m	

Meteorological Instrument
Digital Rain Gauge
RG10

Meteorological Instrument
Barometer Of Temperature And Humidity
BM31

This instrument meets People's Republic of water conservancy and hydropower industry standard SL21-1990 "precipitation observing practices," "long-term self-recording type rain gauge"
Sense of rain this instrument sensitivity, accuracy, scope of rainfall intensity gauges are better than other forms, suitable equipment, northern environmental conditions of various types of dust rainfall stations.

Specification

● sense of rain with high sensitivity (0.07mm).
● high accuracy.
● equipment installation, adjustment, calibration method is simple,
● high intelligence, easy maintenance.
● There Pulse (per 0.1mm rainfall) output and RS-485 real-time rainfall total output can be directly with data acquisition, RTU, computer or other host devices, high precision automatic data acquisition and transmission.
Use of 3
Technical performance of this instrument is much higher than the international and domestic current rain sensor, suitable for equipment parts, under different climatic conditions, the state's basic rainfall stations, encryption automatic weather (rainfall stations) and telemetry stations, auto-complete the precipitation process measurement and data collection, especially for an alternative to traditional paper record siphon rain gauge, make existing siphon rainfall station unattended and automated data integration, automatic transmission.
4 The main technical parameters
4.1 Order of rain Diameter: Φ200 +0.60 mm, edge acute angle 40 ~ 45 °;
4.2 Resolution: 0.1mm;
4.3 Rainfall intensity measurement range: 0.01 ~ 8mm/min (mm / min)
4.4 Measurement accuracy (at 0.01 ~ 8mm/min rainfall intensity range): precipitation <10mm, measurement error: ± 0.2mm; precipitation ≥ 10mm, measurement error: ± (0.2mm +1% FS);
4.5 Output signal: 1) RS-485 interface, the output real-time cumulative rainfall, rainfall encoder true value, the related alarm signal (see Appendix JFZ-01 digital rain sensor RS-485 interface communication protocol);
2) pulse interface, 0.1mm rainfall each connected to a relay output contacts, on-time of 100ms, the minimum interval of 400ms, contact capacity ≤ 24VDC/0.2A;
4.6 Record rainfall storage capacity (optional): greater than 3000mm or more than 1.5 years.
4.7 Power Supply Voltage: 12VDC ± 15%
4.8 Operating temperature: 0 ~ +50 ℃;
4.9 Humidity: ≤ 95% RH (40 ℃);
4.10 volumes (diameter × height): Φ220 × 560mm;
4.11 Weight: 4Kg.

Features

BM31a barometer of temperature and humidity temperature is an insturmentthat has humidity observations; weather foresee, fire indicate and other functions. It applies not only in the family but all sectors of society, such as agriculture, forestry, hydrology, meteorology, factories, offices, schools, shops, warehouses, textile, tobacco, transportation, room, laboratory, medical, health and epidemic prevention, hotels, file management and many other industries. The product is small, easy to carry and install.

Specification

measurement range - Temperature	-20 ℃ ~ +40 ℃, relative humidity: 10 ~ 100% RH
2, the smallest sub-grid - Temperature: 1 ℃, humidity: 1% RH	
Accuracy - Temperature	-20 ℃ ~ 0 ℃ (+ / -1.5 ℃) / 0 ℃ ~ +40 ℃ (+ / -1 ℃), humidity: <5% RH
size	106 × 38mm
Weight:	0.3kg

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Meteorological Instrument
Digital Thermometer
TM2

Description

Measuring inside and outside the dual temperature (internal sensor placed in the machine). with a clock display, large screen display thin shell. The digital thermometer stylish, compact, especially suitable for car, room, refrigerator, air-conditioning vent temperature, etc., the results intuitive, fast response, high accuracy.

Each digital thermometer has a 1 meter long temperature probe cable (for connecting an external temperature probe). Use the probe on the window, the host displays on the interior, to observe the outdoor temperature, you do not have to open the window,

open the door, and in the summer, winter, when indoor air conditioning, but also according to outdoor temperature changes

in a timely manner, to properly adjust air temperature.

Features

Measuring the inside and outside the dual temperature, with a clock display, ultra-thin shell. Key internal and external temperature

and time required to switch, can not be displayed.

Specification

Temperature range	-50 ℃ ～ +70 ℃;
Debate points rate	> -20 ℃ to 0.1 ℃ ≤ -20 ℃ to 1.0 ℃
ower supply	1.5V button battery (LR44)
Accuracy	± 1 ℃
Overall size	56.5 × 37.8 × 11.3mm
Display size	46.7 × 21.2mm

Instructions for use::
Power: Press and hold (FSW) both turn key
Shutdown: Hold (FSW) key only about 4 seconds off, but the clock continues to timing
Clock Set:
Press and hold (FSW) key will switch to the LCD clock display
Press (HR) keys to adjust, hold down 2 seconds after the rapid increment
Press (MIN) button to adjust minutes, press 2 seconds after the rapid increment
Internal and external temperature measurements conversion:
After turning on, it will enter temperature measurement within 2 seconds, LCD also shows IN
Press and hold (FSW) key, measure the outside temperature, LCD display simultaneously OUT

Specification

Length 100mm, width 70mm, height 30mm, weight 69g
Using the German advanced electronic technology, precision 0.5 degrees, well designed and is an ideal home decorations.
A display time, indoor maximum temperature, maximum outdoor temperature, indoor minimum temperature, minimum temperature and real-time indoor/outdoor temperature and other functions. Sent to the battery and expansion nail, temperature line is 2 meters.

Meteorological Instrument
Digital Thermometer
TM30A

Measurement range	Temperature : -20℃~70℃
	Humidity : 30%~90%RH
Dimensions	9.5×10.5cm

Basic Function

Temperature / humidity display	√
℃ / oF temperature switch display	√
Daily Alarm	√
12/24 hour clock	√

Meteorological Instrument
Food center thermometer
FT11

Specification

Temperature range (built-in temperature sensor)	-58 ℉ -392 ℉ (-50 ℃ -200 ℃)
Accuracy	± 0.5 ℃ (-10 ℃ -150 ℃) ± 1 ℃ (other range)
Temperature probe	Stainless steelΦ3.5mm L105mm
Display refresh rate	1 seconds
Display window size	19.5mm x9.5mm
Humidity accuracy	44.5mm x19.5mm x162mm (including probe protection cover)
Waterproof	IP6
Dimensions	150mm × 32mm × 16mm
Weight	40g
Battery	1.5V button cell batteries
battery life	5000 hours continuous use
Certificate	CE
approval	Approved for self-approval
LED indicator	flashes red when an alarm 12 seconds, green for open
Battery type.	CR2450 3V lithium battery, user replaceable, one-year time
Dimensions.	8.3 X 5.7 X 1.9cm
Waterproof.	Can penetrate the depth of the water to 6 inches
Certificate	CE TUV

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Meteorological Instrument
Electronic Indoor Hygrometer
HG11

- Temperature / humidity display
- ℃ / oF temperature switch display
- Maximum / minimum temperature and humidity memory function
- 12/24 hour clock
- The whole point timekeeping function
- Daily alarm
- Calendar display function

Specification

Methods of operation

1, according to the direction of the rear battery door open, remove the battery every other piece, then replace the battery
 door, the machine can be used.
2, key features: (MODE) switch and the alarm clock display mode / set the current time, alarm, 12 or 24 hour clock, date
 (ADJ) is set to adjust the value of the item; (MEMORY) display memory in the highest / lowest temperature humidity / clear memory of the maximum / minimum temperature and humidity values; (℃ / oF) to switch the temperature unit ℃ (degrees Celsius) or oF (degrees Fahrenheit) display; (RESET) to clear all settings / memory values, return to the initial state.
3, in the initial state, press and hold (MODE) 1 sec, the current time the number of minutes start flashing, press (ADJ) can adjust the number of minutes, a continuous press (MODE) can be set separately, "Clock", "12/24 "," month (M) "," Day (D) "
4, in the current clock mode (clock and minute flashes once per second between two points) to switch the display mode for the alarm (clock and minutes between two non-flashing), then by (ADJ) to switch "Alarm" (Alarm) function / "The whole point of time" () function on and off, and then press (MODE) 2 seconds, you can set the alarm time, and start "when the whole point
of a very" function () symbol appear.
5, the alarm mode, without any operation after a minute then returns the current clock, then press (ADJ) switch to
 the calendar display, 3 seconds automatically returns the current clock by MAX / MIN button to display the temperature / humidity last times clear (CLEAR) since the maximum value.
6, according to (MEMORY) to display the memory temperature / humidity maximum (MAX) and minimum (MIN), press
(MEMORY) more than 2 seconds to clear the memory of max / min.

Temperature range	**-50 ℃ ~ 70 ℃**
Temperature measurement accuracy: approximately	± 1.0 ℃ (1.8 ℉)
Temperature Resolution	0.1 ℃ (0.2 ℉)
Humidity measuring range	10% RH ~ 90% RH.
Humidity accuracy	± 5% (30% -70%) ± 7% (other)
Battery	AAA1.5V 1

Note

1, the initial use / replace the battery, press time (RESET) (behind the machine);
2, if there is any bad machine, please press the (RESET)
3, the battery is exhausted back into the government-designated locations, please

Meteorological Instrument
Four in one electronic soil Analyzer
SA3

Four in one electronic soil Analyzer is the latest soil-speed measuring devices,
main for testing soil pH, moisture, humidity, temperature and plants light intensity, using a 9V
Carbon battery, simple operation, the probe is 200mm. The parameters is displayed by LCD. This
instrument also has a battery low indicator and auto power off. It saves time and
energy, efficiency. This instrument applies to flowers and grass planting, landscaping.

Features:

1, measuring the light intensity the current environment
LOW-, LOW, LOW +, NOR-, NOR, NOR +, HGH-, HGH, HGH +
2, measuring soil moisture content
DRY +, DRY, NOR, WET, WET +
3, measuring soil temperature, range: -9 ~ +50 ℃ (16 ~ 122 °F), (accuracy: 1 ℃ / 1 °F)
4, measuring soil pH, range 3.5-9.0
Operating temperature: +5 ℃ ~ +40 ℃
Size: 122mm * 63mm * 36mm
Weight: 0.23KG
Large LCD User Interface
Auxiliary lighting, LED backlight for easy reading
Temperature metric conversion
Power shortage prompts
Automatic power off: automatic power off if no operation in 5 minutes.
Simple operation, easy to carry

Instruction:

Please install the batteries before using, remove the probe protector
1, light measurement
A. Press the ON button to turn on the instrument
B. Align the highest point of the light source sensor window.
C. The current intensity of the light will be displayed on the LCD monitor.

Tips; Please do not block the light or shadow to the light sensor manufacturing

2, PH measurement range

A. Press [PH / TEMP] button on the back to the PH value.
B. Insert the probe vertically into the soil, test as soon as possible. Do not insert too
deep, in case damage plant's roots.
C. Press [ON] button to start the measurement.
D. PH value of the test will be displayed on the LCD screen
E. Test many times to get the exact measurement value.

Tips; 1 probe vertically inserted, in the middle of the edge of the plant stems.

 2 Gently push the soil survey in order to avoid damage to the probe.

   3 If the measure is too dry or fertile soil can not be measured accurately PH value,
the user can sprinkle a little water, after half an hour measured again.
3, moisture measurement
A Press the [PH / TEMP TEMP] button on the back
B vertically insert into the soil as much as possible. Do not insert too deep, in
case damage plant's roots.
C Press the ON key to start the measurement

D test soil moisture values will be displayed on the LCD screen.
E Test many times to get the exact measurement value.
4 Temperature measurement;
A When test the humidity, soil moisture value will be displayed on the LCD.
B Press [℃ / °F OFF] button to set the humidity display is ℃ or °F.
Tips: If the user does not put the probe deep into the

![acculab USA]

Meteorological Instrument
Large Screen Hygrometer
HG2

Meteorological Instrument
Recording Rain Gauge
RG16

Features

On the back with hanging hole, can be hung on the wall stand table
There are four ports on the back of the air flow, flow smoothly in order to more accurately reflect the temperature and humidity
Battery box (2 AAA batteries)
Removable base
Temperature display: 0 ,.50 ,(32 , -122 ,)
Temperature display: 20% -99%
Date display: 2001-2099
Memory the maximum and minimum humidity values
12 \ 24-hour clock system
Alarm
Weather display
Resolution: 1 ,
Product Dimensions: 13.6 * 8 * 2cm
Screen size: 6.5 * 4.5cm
Instructions for use:
Short press MODE, see the alarm clock; press MODE, see the calendar
Time setting: Press and hold MODE 3 seconds to enter the time setting, when the hour digits flashing, press UP or DOWN to set the hour, press the MODE button when the minute is flashing, press UP or DOWN to set the minutes.
Alarm clock settings: short press MODE button to view the alarm time, press MODE button for 3 seconds to enter alarm setting mode, when hours are blinking, press the UP or DOWN to set the hour, press the MODE button when the minute is flashing, press UP or DOWN to set the minutes.
Calendar settings: short press MODE button twice to view the calendar, press the MODE button for 3 seconds to enter the calendar setting, when the year number is flashing, press UP or DOWN to set the year, press the MODE button when the month is flashing, press UP or DOWN to set the month, then once a day the number is flashing, press UP or DOWN to set the date.
On / Off Alarm: press the UP button to on / off alarm clock
Max / Min: Short press MAX / MIN button to see the highest temperature and humidity, and then again to view the lowest recorded temperature and humidity.
12/24 hour format: press UP button for 3 seconds to convert a 12/24 hour clock
Temperature display format: Press DOWN key to convert , display

Features

Recording rain gauge is the apparatus designing to measure the atmosphere of continuous precipitation.
This instrument uses intelligent sampling and recording, with the character of accurate measurement, easy use, etc.,
It can record rainfall within one month continuously, And it can be connected with the computer the for observations and records.

Specification

measuring diameter	Φ200mm
measuring rate	10mm/min
measurement accuracy	0.1mm
recording time	30 days
the maximum storage capacity	PREFIX = ST13.5L
Weight	15kg
measuring range	0-999mm
Power	DC13.5V 950mA
Large LCD display, record and display continuously and automatically, include rain sensor + 100 m cable + logger host, connecting with computer for printing, supporting software.	

Meteorological Instrument
Multi-Function Automatic Weather Stations
AWS3B

Low-power design, the use of battery power when a replacement battery can be used for three months to one year.

USA Display LCD segment, with standby and sleep mode. Auto-refresh, etc. with regular store.

Aluminum frame, the total 2 m high (height adjustable); direct retractable, easy to transport or carry.

Flexible and efficient power management, with hardware, reverse, and internal short circuit protection functions.

Professional data processing, with low power erase protection, storage, fault detection, power data recovery functions.

Complimentary PC software, you can easily view or export data in charts, tables to support EXCEL storage.

Hundred thousand times the software has the ability to zoom the chart curve display components, see the details

of the curve trends and data capacity well.

Optional

Soil temperature	**-50 ~ 100 ℃**
Soil moisture	0 to 100%
Rainfall	0 ~ 50mm / hour
CO	0 ~ 2000ppm
Total radiation	0.3 ~ 3.2μm (spectral range) 7 ~ 14mv/kw.m-2 (sensitivity
Photosynthetic active radiation	spectral range (plant light): 400 ~ 700nm

Standard parameters

Air temperature	range (-30 ~ 70 ℃) Accuracy (± 0.2 ℃) Resolution (0.01 ℃)
Air humidity	range (0 to 100%) accuracy (± 3%) resolution (0.1%)
Atmospheric pressure	range 0 ~ 110Kpa accuracy ± 0.5 Kpa Resolution 0.1 Kpa
Wind speed	Range (0 ~ 60m / s) Accuracy (1m / s) resolution (0.1m / s)
Wind	16 position (360 °) Start up wind speed (0.2 ~ 1m / s)
Average power consumption	<0.5mA (storage interval of 60 seconds)
Recording capacity	524,280
Number of channel	5 channels (expandable to 8 channels)
Recording interval	1 minute to 100 days of any adjustable
Data Interface	USB2.0, complimentary PC software
Power supply	battery 9V, USB5.0V (default configuration)

Meteorological Instrument
Night Use Either Portable Mini Binocular
MP30

Size	30 * 60 Real Multiples: 10 Times
Field	126m/1000m
Field	7.2 Degrees
Built-In Wide-Angle Mirrors	
Focus Type	Central System + Right Eyepiece Focus Fine-Tuning : Advanced Multi-Layer Optical Red Film, Excellent
Lens Coating	Eye Protection And Credit To The Role Of
Multiples	30 Times
Lens	23mm
Size	92mm X 63mm (Folded)
Weight	About 250G
Focus	Inner Focus (On The Right Eyepiece Can Be Fine-Tuned For Different Left And Right Visual Acuity To Use)
Material	High-Strength Plastic Frame, Outsourcing Rubber, Comfortable Feel; Eyepiece Soft Bag With Goggles
Accessories	With a Soft Black Bag, Lens Cleaning Cloth
Film	Red Multi-Coated UV Antireflection Coatings, But Also Do Blue Film, Excellent Eye Protection And Credit To The Role, Wider Field Of Vision. With Night Vision Function, Even In The Case Of Low Visibility Can Be Observed Easily
Eyepiece Coating	Film Study By Light, Clear And Comfortable Vision Super Light Permeability Rate For The Night With All-Weather Binoculars Palm-Sized Fine Shape, The Effect Is Better Than "Big" Telescope, Length 9CM, Width 6CM.Fashion Design, Comfortable, Easy To Carry, Functional Excellence

Meteorological Instrument
Reflector Telescope
RT27

Specification

observation Range	The Moon sea, mountains ring, Saturn, Jupiter, Andromeda galaxy and other astronomical landscapes
Technical parameters	
Fold Magnification	50-750-
Eyepieces	20mm, 4mm
Diameter	127mm
Optics	Reflection
Base	German Equatorial Mount
Tripod	Aluminum
Focus	Handwheel
Weight	1270g
Observation functions	
Observing the Moon	The 20mm eyepiece can observe complete lunar surface, with the 4mm eyepiece, you can observe small details such ashills and valleys;
Planetary observation	The 4mm eyepiece can be observed in the outermost ring of Saturn, Jupiter's cloud bands and changes in surface detail, highlighting the edge of Venus, white point, and the unique tone can be seen, profits and losses can be seen Mercury, Mars's polar ice sheets and other attractions.

Meteorological Instrument
Rain Gauge
RG82

Meteorological Instrument
Siphon Rain Gauge
RG45

It is used for continuous recording of liquid precipitation, the starting and ending time and precipitation intensity. It is used in meteorological station, hydrological, agricultural, forestry and other relevant units.

Specification

Measuring range	0 ~ 10mm
Cheng outlet diameter	φ200mm
Rainfall intensity	0 ~ 4mm/min
Bell tube one revolution	26h
Travel time error	± 5min (24h)
Record error	± 0.05mm
Size	φ350mm × 1182mm
Weight	17kg

Features

Rain gauge is used for Meteorological station and agriculture, forestry, etc. It is used for measure precipitation and snow in atmospheric.

Specification

Measuring area	20mm, 4mm
Dimension	127mm
Weight	Reflection

Note: using the siphon principle, discharge within the float plug precipitation. The biggest advantage: energy savings, precipitation records, no people waiting, high precision, but must replace the recording paper at the scene by man timely

Meteorological Instrument
Temperature Recorder
TR2

Size	
Panel Size	144 × 144 (mm)
Mounting size	131.5 × 131.5 (mm)
Product size	144 × 144 × 83 (mm)
Technical parameters:	
Temperature range	-40 ℃ ~ 110 ℃
Temperature Accuracy	-10 ℃ ~ 85 ℃, within an accuracy of ± 0.5 ℃; the rest of ± 1 ℃
Resolution	0.1
alarm temperature difference	0 ~ 20 ℃ (adjustable)
Alarm output	Buzzer + alarm relay
Recording cycle	1 minute - 24 hours adjustable
Record measurement approach	1 channel
print output	RS232 interface to access the printer output
Power supply	12VAC or 12VDC or 24VDC
start delay	Adjustable from 0 to 6 hours
Alarm Delay	0-90 minutes adjustable
Record capacity	4500 points (MAX)
Alarm relay contact capacity	8A/220VAC

Features

TR2 Temperature Recorder widely used in food, medicines and fresh goods storage and transportation, and industry
compliance with the HACCP system certification, laboratories need to also be used for temperature monitoring sites
Instrument has a stable performance, recording large amount of information, high precision, easy operation, password
 protection; power failure data is not lost and so on. Widely used in commercial refrigeration equipment operation, HVAC
and other industries.

A, probe failure, over-range limit or over-range limit: ERROR indicator light, fault code flashes EE, buzzer alarm, the alarm relay
 normally open contact closure alarm sound can not be eliminated.
B, over-temperature alarm: ≥ measuring temperature or set temperature + temperature difference between the measured
 temperature
 ≤ alarm set temperature - temperature difference when the alarm, ALARM indicator light, display flashing, alarm delay, alarm
 buzzer, alarm relay normally open contacts are closed, press ▼ or alarm temperature is set to 0 2AXX consumer alarm.

Meteorological Instrument
Weather Vane, Windsock
WW1

Meteorological Instrument
Written Thermometer
TM3

Features

WW1 luminous with light metal vane is placed outdoors to indicate wind direction. It is metal structure and it realizes the production of standardization, specialization, standardization.
The service life of 5-10 years as its outer surface of hot-dip has taken galvanizing and spray anti-corrosion treatment, The front wing and tail vane surface coat with a
luminous and reflective capabilities of high-tech materials, during the day, itautomatically absorb and store the visible light, at night it light; the reflector function reflectors light, when the light shines directly vane, it can send
eye-catching reflective. two lights are placed symmetrically on the pole for lighting at night.
 It is widely used in meteorology, chemistry, environmental protection, agriculture, oil exploration and other industries.

Features

Digital thermometers, packaged, multi-function, low power consumption, stability, high accuracy.
Temperature Hold function;
Celsius, Fahrenheit conversion;
It measure temperature for cooling, heating, food processing and household kitchen, and other occasions.

Product parameters

- Overall high: 350mm
- beacon Length: 1500mm
- Weight: 4.5kg
- Description: support rod is configured by the customer

Packing List:

① 　metal vane (red)
② 　support rod machining CAD drawings
③ 　Product Manual
④ 　warranty
⑤ 　Certificate
⑥ 　invoice
⑦ 　Box (1025 X 565 X 135)

Specification

Temperature range	-50 ℃ - +300 ℃ (-58 ° F-+572 ° F)
Temperature Resolution	:0.1 ℃ (0.1 ° F)
Battery	DC1.5V AG13
Product size	Φ21 × 228mm
Probe rod length	150mm
Display size	21.3 × 8.5mm
Temperature measurement accuracy	Temperature measurement accuracy: ± 1 ℃ or 2 ° F (0 ℃ ~ +80 ℃) ± 5 ℃ (other range)

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Moisture Meter
DDM-40

Range	digital LCD display
Working temperature	1%
Woking humidity	5%-40%
Low battery indication	0 °C ~ 40 °C / 32 °F ~ 104 °F
Data Hold	0 ~70%RH
Power	
Meter size	
Weight	9V battery

This meter is designed for measuring the moisture in lumber, bamboo, paper, medicine, and other wood fiber materials

Nuclear Radiation Detector
Atmospheric Tritium Sampler
AT90

Specification

sampling flow	0-20 L/min
efficiency	≥80%
capacity of working chamber	2L
temperature range	20℃～10℃
mode of heat dissipation	self-circulation, water-cooling
Cycle medium of heat dissipation	purified water distilled water deionized water

Nuclear Radiation Detector
Channel-Style Radiation Monitoring System
RM15

Specification

measuring radiation:g （neutron measurement is optional）
detector: 69L large area plastic scintillator
detecting limit :40 kBq(static state background 100 nGy/hmeasurement time 1s, confidence coefficient 97.5%，Co-60）
Multi-level password control, easy to set alarm configuration menu
rate of false alarm:< 1/1500
Video surveillance record, can identify the vehicle type and license plate
Vehicle infrared sensor

Nuclear Radiation Detector
Contamination Monitor for Surface of Hand and Feet
DM-12

Specification

	Dose Rate Meter	Multi-Probe Radiation Meter (Built-In Double Gm Tubes)	Multi-Probe Radiation Meter (Without Built-In Double Gm Tubes)
Model	DM01	RM30	RM40
type of radiation	x γ		
detector	double GM tubes		
measurement range	1 μSv/h ~ 10 Sv/h	0.1μSv/h-10Sv/h	dose rate 0.1μSv/h-10Sv/h accumulated dose 0.01μSv-10Sv
displaying range	0.00 μSv/h~ 1Sv/h	0.01μSv-10Sv	
inherent error		±15%(137Cs,0.1μSv/h-100μSv/h) ±10%(137Cs,100μSv/h-100μSv/h)	:±15%(137Cs,0.1μSv/h-100μSv/h) ±10%(137Cs,100μSv/h-100μSv/h)
measurement accuracy	± 15%（1 mSv/h, 137Cs）		
Power-supply mode	3.7V/5.2Ah, Rechargeable lithium battery		
response time	<3s		
energy response	±40%（60keV-1.3MeV）		

Specification

type of detector	6 proportional counting tubes which are flat and flow gas type
type of monitoring rays	α、β
displaying unit	Bq/cm2 adn cps
sensitive area of the detector	hand 300 cm2, foot 450 cm2；total area is about 2000 cm2
the efficiency(toα、β)≥30%	

Nuclear Radiation Detector
Electronic Personal Dosimeter
DM-10

Nuclear Radiation Detector
Environmental γ Probe
RP-6

1type of detector	PD detector
type of radiation	X、γrays
Energy response	50keV ~ 3MeV, the response change＜25%
measurement accuracy	±30%（40 keV ~ 1.3 MeV）
measurable physical quantity	• Cumulative personal dose equivalent Hp (10) • Instantaneous personal dose equivalent rate Hp (10) • working time
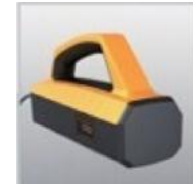
Features

type of radiation	X，γ
detector	Æ55 × 60 mm，NaI（Tl）crystalloid
measurement range	0.01 ~ 200 μSv/h
measurement accuracy	±30%（40 keV ~ 1.3 MeV）
Protection grade	IP65

Nuclear Radiation Detector
Four Ways Low-BackgroundαβMeter
FM10B

Specification

type of measured rays	α βrays
detector	ZnS、plastic scintillator
displaying unit	total counting、cps
background:	≤0.005min-1cm-2, βbackground ≤0.15min-1cm-2
efficiency	αdetecting efficiency:≥80 % (239Pu 2π)
βdetecting efficiency	≥50 % (90Sr-90Y 2π)
stability	detecting efficiency ofα<10 %, detecting efficiency of β<3 %

Specification

（1）timing:3~255 background measurement and target ground measurement are optional separately.
（2）set threshold value:0~9999 cps.

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![acculab USA logo]

Nuclear Radiation Detector
Large Area γ-βDetector
DM402

Nuclear Radiation Detector
Monitor for Region(Without Probe)
DM16

Application and characteristic:

DM402 large area γ-βdetector is a portable instrument for checking radiation protection. For the operating floor and probe are integrated in it,it has small volume, light weight and easy to carry.It also has these functions of stable performance, easy operation, digital displaying measuringresult,can detect γ-ray and β-ray,suitable for safety supervision and inspection in the lab of hospitals or that institutions engaging in radioactive element work.

Specification

Timing	1s、10s、60s
Measuring range	β：0～10^5cpmin^{-1} γ：0～10^{-1}μGys^{-1}
effective detecting area	120cm^2
detecting efficient	η≥10%（^{90}Sr+^{90}Y βradioactive source）
Inherent background	≤350cpmin^{-1}(β)
Γmeasurment error	≤±20%(^{137}Cs demarcating)
temperature:	0℃～40℃
relative humidity	≤90%（30±2℃
Power supply	6 5# batteries
Dimensions	220mm×120mm×60mm
Weigh	2kg

Specification

type of ray measured	γray
detector	GMcounter tube
displaying unit:	cps、Gy/h
measurement range	0.1 μGy/h ~ 10 Gy/h
energy response	50 keV~3 MeV
referential energy	661.6 keV (137Cs)

Nuclear Radiation Detector
mospheric Tritium Sampler
AT90

Nuclear Radiation Detector
Multifunctional Radiation Protection Survey Monitor
RM10

Specification

sampling flow	0-20 L/min
efficiency	≥80%
capacity of working chamber	2L
temperature range	20℃～10℃
mode of heat dissipation	self-circulation, water-cooling
Cycle medium of heat dissipation	purified water distilled water deionized water

Features

1, with a rugged metal housing, waterproof, shockproof, easy to damage.
2, ergonomic design, users even wear protective clothing, masks and gloves, still easy to operate.
3, display panel and control keys are the face of the user, through masks can look directly at the instrument's measurement
 and indicators.
4, with strap, allows users to empty out his hands to deal with other things.
5, all of the scale and tested at the Austrian Research Center Radiation Testing Laboratory (IAEA designated laboratories) performed.

External probe type:

- Pollution probe:γ/β/α1、NRPSM-1-02 GM tube, depth of the window 1.5 mg/cm2
- probe:γ2、NRPSM-1-03 circumscribed Sv/h～5 Sv/h 0.5
- probe:γ3、NRPSM-1-07 environment Sv/h～1 Sv/h～0.05

Nuclear Radiation Detector
Pavement Radiation Monitor
DM15

μSv/h)	1500 Bq（60Co） battery truck
dimensions	3600 mm × 1130 mm × 1900 mm
speed	0.25 m/s、 0.5 m/s、 1.0 m/s
weigh	1.1 t
host machine	
displaying unit	cps、 Bq
number of detectoring channel	2
Alarm threshold value	continuously adjustable measurement range
dimensions of the shell	270 mm × 380 mm × 115 mm
weight	weight: 15 kg
Vehicle-Mounted probe of γradiation	Vehicle-Mounted probe of γradiation
detector	arge area plastic scintillator
energy response	50 keV ~ 2 MeV
Surface efficiency of the detector（60Co）	＞40 %
Minimum detecting activity (2 sigma 1s, environmental background< 0.2 muon Sv/h) : 1500 Bq (60Co)	

Nuclear Radiation Detector
Personal Dosimeter
DM30

Features

DM30 personal dosimeter an intelligent instrument adopting new type single chip is mainly used for monitoring dose equivalent rate and dose equivalent of X ray and γray on human body. It can set threshold and super threshold alarm. The main technical parameter meets the national standard and international standard, is widely used in these areas of radiation station, custom
, industrial nondestructive inspection, nuclear power station, nuclear submarine, isotope application and medical cobalt treat.

Specification

Detecting radiation	γ-ray and X-ray
Measuring range	
dose equivalent	00.01usv～99.99 msv
dose equivalent rate	00.01usv/h～01.00 msv/h
relative error	＜±20%（00.01usv/h～01.00 msv/h）
energy response	＜±30%（50KeV～1.3MeV）
dimensions	118mm×65mm×25mm
weight	＜100g
alarm threshold value: adjustable	

Nuclear Radiation Detector
Personal Dosimeter
DM21

detector	GM counter tube (energy balance).
display	1.8" LCD color screen full screening personal dose rate, the cumulative dose, real-time clock, measuring time and alarm threshold
measurement range	cumulative dose equivalent：Hp（10）0.1μSv～9999mSv dose equivalent rate：Hp（10）0.1μSv/h～99.99mSv/h
measurement time	automatically transform or set between 3600seconds and 1 second
Dose equivalent rate response	≤±20%（1μSv/h～99.99 mSv/h）
energy response	≤±30%（50KeV～1.3MeV）
relative error	≤±20%（137Cs）
alarm	can set alarm threshold of dose rate and accumulated dose in the measurement range　type of alarm： a：dose equivalent rate：the trumpet pealing when it is more than the setting value。 b：accumulated dose the trumpet pealing and the display flickering when it is more than the setting threshold value
battery	real-time electric quantity displaying
power dissipation	600mAh rechargeable li-ion battery，no need to change batteriesfrequently, environmental protection, practical,generalUSBconnecting line charge,can continously works for above 30 hours
temperature	0℃～+50℃
weight	≤50g

Features

dosimeter an pocket intelligent multifunctional instrument adopting new type single chip is mainly used for monitoring X ray and γray. 1.8"LCD color screen full screening personal dose rate, the cumulative dose, real-time clock, measuring time and alarm threshold and automatic sound-light alarm. The power supply is environmental lithium battery continuously providing power. The main technical parameter meets the national standard and international standard, is widely used in these areas of radiation station, custom, industrial nondestructive inspection, accelerator, nuclear power station, nuclear submarine, radioactive medical treatment, isotope application, medical cobalt treat and monitoring environment around nuclear facilities.

● high sensitivity, response to environment background
● continuously adjustable alert threshold
●All measurement information is displayed one time on the color screen
●Low power dissipation, small volume, easy to carry
● Intelligently check choke
● with USB interface can be used as USB flash disk
● Additional MP3 / 4 playing and photo browsing

Nuclear Radiation Detector
Portable n-γRadiometer
DM37

Nuclear Radiation Detector
Tools Pollution Monitor
DM15

Specification

- physical property
- detector: plastic scintillator
- type of radiation:γ
- Detection limit:140 Bq（environmental background< 0.2 μGy/h，60Co, measurement time10 confidence coefficient95 %）

Nuclear Radiation Detector
Single Way Low-BackgroundαβMeter
SM10B

Features

DM37 portable radiometer is used in dose protection for measuring neutron fluency rate and γdose rate of nuclear reactor,
 nuclear power station and other places of isotopes application.It is easy to use, no need to change probe when you measure n、γrays.Low low power consumption circuit(≤400mW). Rechargeable batteries provide power can continuously work for above 24h.Digital dissimplified circuit design,easy to operate, stable performance and easy to carry

Specification

1 type of measured rays:α βrays
2 detector:ZnS、plastic scintillator
3 displaying unit:total counting、cps
4 background:αbackground ≤0.005min-1cm-2， βbackground ≤0.15min-1cm-2
5 efficiency:αdetecting efficiency:≥80 % (239Pu 2π)
βdetecting efficiency:≥50 % (90Sr-90Y 2π)

Nuclear Radiation Detector
Vehicle-Mounted Radioactive Detection System
RM20

Nuclear Radiation Detector
x γ Radiation Detector
RD10

Features

can meet the requirements of the The United States National Appliances Manufacturers Association

- 34.5L plastic scintillation detector
- double-deck protective layer for temperature （-20℃to 50℃, Relative humidity 95%）
- detectivity:50 nSv/h(speed 10 km/h,　1 m away from the detector)
- Dc power supply:24V@1.5 A

Specification

detector	metal GM counter tube
type of radiation	X、 γ
measurement type	total counting cnt、 counting rate cps 、 activity Bq
measurement range	1~104 cps、 1~105 Bq
energy response	60 keV – 1.3MeV
sensitivity	137Cs ≥1000 cps/MBq
background counting rate	< 5 cps

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Nuclear Radiation Detector
αRadiation Probe
PR1

Nuclear Radiation Detector
x γ Radiation Detector
RP3

Features

measurement range	0.01 cps ~ 99999 cps 0.01 Bq ~ 999.99 kBq 0.001 Bq/cm2 ~ 999.99 kBq/cm2
effective sensitive area	15 cm2
background counting	≤0.5cpm(0.1μSv/h)
minimum detection limit	0.4Bq(239Pu,10s,confidence coefficient95%) the detector, keep out rate30%30%）

Specification

Detector	double scintillators
measurement range	0.01 cps ~ 99999 cps 0.01 Bq ~ 999.99 kBq 0.001 Bq/cm2 ~ 999.99 kBq/cm2
effective sensitive area	15 cm2
background counting	≤ 0.5 cpm
β,	≤ 1
β,	≤ 1 cps

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Nuclear Radiation Detector
αβγRadiation Probe
RP4

Nuclear Radiation Detector
αβγRadiation Probe
RP5

Specification

detector	GM tube
measurement range	0.01cps-99999cps 0.01Bq-999.99kBq 0.001Bq/cm2-999.99kBq/cm2
effective sensitive area	2*15cm2
background counting	≤2cps(0.1μSv/h)

Specification

detector: GM tube	detector:GM tube
measurement range	0.01cps-99999cps 0.01Bq-999.99kBq 0.001Bq/cm2-999.99kBq/cm2
effective sensitive area	5*15cm2
background counting	≤5cps(0.1μSv/h)
minimum detection limit	5.8Bq(90Sr-90Y,10s, confidence coefficient 95%)

Nuclear Radiation Detector
αβγSurface Contamination Meter
DM10

Bq、 0.1-103 Bq/cm2	
sensitive area	45cm2 (15 cm2×3)
radiation type	α、 β、 γ
measurement type	total counting、 cps、 activityBq、 Bq/cm2
measurement range	0.1-105 cps、 0.1-104 Bq、 0.1-103 Bq/cm2

Nuclear Radiation Detector
αβ Contamination Monitor for the Surface of the Whole Body
DM13

Specification

proportional counting tubes which are flat and flow gas type total sensitive area of the probe	12000 cm2
For the point source 90Sr-90Y (β source	≥ 40% of the monitoring channel
for 239Pu (α source)	≥ 30% of the hand and foot monitoring channel

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USA

Nuclear Radiation Detector
γ Contamination Monitor for the Whole body
DM14

Nuclear Radiation Detector
βRadiation Probe
RP2

Specification

Specification

dimensions of the detector	500 mm×300 mm×50 mm （length×height×depth）
energy range	80 ~ 3000 keV
sensitivity	10 cps/kBq（137Cs，at 30cm away from the center of the detector）

Detector	plastic scintillator
measurement range	0.01 cps ~ 99999 cps 0.01 Bq ~ 999.99 kBq 0.001 Bq/cm2 ~ 999.99 kBq/cm2
effective sensitive area	15 cm2
background counting	≤1cpm(0.1μSv/h)
minimum detection limit	1.8Bq(99Sr-90Y,10s,confidence coefficient 95%)
detecting efficiency	≥40%（90Sr-90Y,2π，10mm away from the detector, keep out rate 30%30%）

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Portable multi-function radiation alarm
MRA-100

Widely used in environmental monitoring, radiological monitoring and homeland security monitoring (the entry and exit, customs), public security monitoring, power plant, laboratory and nuclear technology application situation, and nuclear emergency response story X-ray room, hospital, customs inspection, in-situ test, the environmental assessment of a variety of places at the same time can also be applied to radioactive detection of scrap metal in renewable resources industry and family decorate building materials.

Specification

Items	Parameters
Detector	Geige counter tube
Detect area	33cm2,effective diameter 65mm
Detect range	Radiation dose rate ：0.01μSv/h-1mSv/h（be expanded t to150mSv/h） 0.01mR/h-100mR/h（be expanded to 15000mR/hr）
Cumulative dose rate	0.001uSv-999Sv ；
Unite	Unit μSv/h、 mSv/h、 mR/h、 cps、 cpm、 mSv
Accuracy	±15%（at CS）
Sensitivity	5800cpm/mR/h(60Co)
Alarm	Out of threshold Detector Fault Low power Out of energy range
Alarm Way	Sound and light
Power	Standard C battery, 2pcs
Working temperature	-40℃～75℃

Features

The MRA-100   portable multi-function radiation alarm uses 3-inch flat spiral sensor with high sensitivity , which can quickly detect the strength of alpha, beta, gamma and X rays. With the function of correction factor, the customer can adjust the correction parameters. The average time setting function greatly improves the response sensitivity. The detector isergonomic, and the anti-saturated circuit can avoid the interference of electromagnetic waves, and has the function of safety calibration, which can avoid the radiation contact of the calibration personnel.

1. Multi-Rays could be measured: alpha, beta, gamma and X-ray
2. large end window mica geiger tube detector
3. With Calibration function, adjust the calibration parameters by oneself; Provide the average time setting function and greatly improve the response sensitivity
4. Storage function: can store 2000 data, manual or automatic storage is optional.
5. Color screen, all the data display, large digital LCD screen.
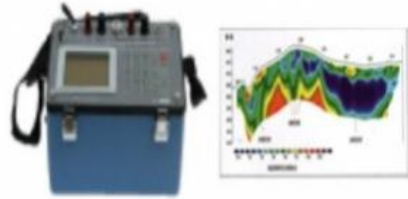6.Built-in high-capacity SD card, can store large amounts of data.

Seismograph system
DC Resistivity & IP Instruments
SG6A Multi-Function

Measuring Voltage Range	-6000mV~+6000mV
Measuring Current Range	0~5000mA
Measuring Voltage Accuracy	±1% ±1digital
SP Compensation Range	±1000mV
Input impedance	≥50MΩ
Interference Suppression on	50Hz
PowerFrequency)	
Better than	80dB
Maximum Power Supply Voltage	900V
Maximum Power Supply Current	5A
Power Pulse Width	1-59 seconds, Duty Cycle 1:1
Working Temperature	-10℃ to +50℃, 95%Rh
Volume	305×200×202 mm
Weight	8 kg

Main Application

By utilizing relevant parameters of apparent resistivity and induced polarization method, the instrument is widely used in many aspects including metal and non-metal mineral resources exploration, energy exploration, city geophysical exploration, railway and bridge engineering exploration, etc.

Features

l Multiple functions in one Machine: not only can be used alone, but also
support various functional extensions;
l High Density Measurement System: connect SG2A multichannel electrode converter
(60 channels or 120 channels);
l In-hole IP Measurement: connect JD-3 in-hole IP probe
l Medium power DC IP Measurement system connect SGA9 direct current IP receiver

Seismograph system
Electronic Auto-Compensation
SG8

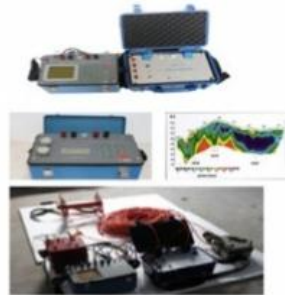|	
Maximum Power Supply Voltage	700V
Maximum Power Supply Current	4A
Voltage Measuring Range	±4V
Voltage Measurement Accuracy	±1%±1 digit
Current Measuring Range	0~4A
Current Measurement Accuracy	±1%±1 digit
SP Compensation Range	-1000mV ~ +1000mV
Instrument Input Impedance	＞8MΩ
Working Temperature	-10℃~50℃
Volume	300×200×120mm

Main Application

By utilizing the apparent resistivity parameters, it is widely used in hydrology, environmental protection, engineering
geophysical exploration, metal and non-metal mineral resources exploration

Features

Microcomputer controlled, direct-reading resistivity, various electrode arranging mode, data protection against power-failure

Seismograph system
Resistivity Survey System
SG2A Multi-Electrode

Metal and non-metallic mineral resources exploration and geothermal exploration, geological
disaster exploration

Features

Multiple function in one machine: The instrument has four functions including long lead
IP instrument, 2D high density resistivity meter, 2D high-density IP instrument, and
medium-power short lead transmitter.

· Easy for Operation: The instrument adopts all-digital automatic measurement, thus can
execute automatic compensation for spontaneous potential, drift and electrode
polarization. By adopting large screen LCD display in USA characters, more than
fourteen types of wiring working mode can be directly displayed in high-density
measurement mode; in SG6A stand-alone mode, nine types of electrode arranging
methods can be directly displayed; meanwhile, real-time curve display can be realized
during working.

· Extra-large Storage: In high-density mode, the instrument can store the measured data at
120,000 measuring points; in SG6A stand-alone mode, the instrument can store the
measured data at 4,800 measuring points; there are 22 digits at each measuring points,
provided with RS-232 serial interface, and the stored data can be directly transferred to
the computer by means of appropriate software to carry out digital interpretation for
various methods.

Main Application

· Widely used for high-resolution research, tomography and monitoring applications.
· Coal mining gobs, caves of Custer area, geological disasters survey like landslides other
geological disasters.
· High resolution engineering geological exploration like factory foundations, highways,
bridges, railways, civil engineering, hydrology, engineering, environmental.
· For landslides and other geological disaster exploration.
· Metal and non-metallic mineral resources exploration and geothermal exploration.
System Components
· One **SG6A** multi-functional DC resistivity instrument as the survey and control unit in
the system
· **SG2A** type 60-channel or 120-channel multiplex electrode switch manufactured by our
factory cables, electrodes and other related accessories

Seismograph system
2A Multi-Electrode
SG2A

SG2 **Digital Resistivity Instrument**

Features

Resistivity Instrument
1.Small volume, light weight
2.High precision measurement
3.Wide application
The instrument is a new generation of DC resistivity instrument based on the series of advanced electrical instrument adopts 32 bit singlechip technology and 24 A/D technical development. Widely used in metal and non-metallic mineral resources exploration, geophysical exploration, city railway bridge etc, also used to looking for groundwater, determination of reservoir dam foundation and flood control dyke hidden location of hydrological, engineering geological exploration, can also be used in geothermal exploration.

Specification

Receiver	
Voltage channel	±24V,±0.5%
Highest voltage sampling resolution	0.01μV
Input impedance	≥50MΩ
SP the scope of compensation	±10V
Current channel	3.5A,±0.5%
Highest current sampling resolution	0.02μA
Transmitter	
Maximum transmit power	3500W
Maximum supply voltage	±1000V
Maximum supply current	±3.5A
Other	
Monitor	160 * 160 dot matrix LCD
Storage capacity	≥1GB
Weight	≤4.2kg(WDDS-2) ≤5.5kg (WDDS-2B)
Working temperature	-10°C~+50°C,95%RH

SG2A Multiplex Electrode Converter

Conversion Electrodes: 60 channels or 120 channels
· Sopported manual configuration: Wenner, Schlumberger 1, Schlumberger 2, Dipole-Dipole, Combined Profiles, Differential, Pole-Pole, Triple-Pole Rolling,
· Operating Mode: 16-key keypad with 90 character LCD display combines to form man-machine dialogue operation.
· Maximum Allowable Current: 2A
· Maximum Withstand Voltage: 500V DC
· Insulating Property: 500MΩ
· Electroshock Break-over Resistance: smaller than 0.1Ω
· Power Consumption: 50 mA (Standby)
· Power Supply: 1# Dry Cell (or rechargeable battery with the same specification) 8 pcs.
· Working Temperature: -10°C~ +50°C, 95%Rh
· Weight: 7 kg (60 channels), 8.5kg (120 channels)
· Volume: 365×269.5×169mm (60 channels), 342×211×258

Sound level meter
Ambient vibration analyzer(with printer)
VA56

Features

ambient vibration analyzer is a high intelligent pocket measuring instrument.
It can measure W.B.z(also named environmental
 vibration level),
W.B.x-
y and Lin.It can meet the requirements of human response vibration meter and GB/10071
128×64 dot matrix LCD display, with background light,USA menu,
abundant content,USA tips function, easy to operate.
The measuring result can be stored in the analyzer for a long time,
and can be print through the RS-
232 interface by the micro printer or be send to a computer to be conducted.

Accelerometer	Sensitivity：27.9mv/m.s-2,frequency range:1Hz-160Hz, ratio of transverse sensitivity:＜5%
Measuring Range	60dB～140Db(10-6/s2 as a reference,the same as the following)
Frequency Range	1HZ～80Hz
Frequency weighted	W.B.z, W.B.x-y and Lin
Time-weighted	1S(F),8S(S)
Feature of geophone	true RMS value， crest factor＞3
Sound level range is divided into high and low levels,every level≥60dB	high range H 80dB-140Db low range L 60dB-120Dblow range as a reference
Type of the analyzer	2 grade
Time of measuring integral	Man,10s,1min,5min,10min,15min,20min, 30min, 1h,8h,24h, measuring at every hour of one day
Clock Set	year,month,day,hour,minute,second all can be set.It can keep on working even shutdown or power failure
Automatical measuring Function	VLp,VLeq,VLAE,SD.VLmax.VLmin,VLN(VL5,VL10,VL50,VL90,VL95),VLd,VLn,VLdn,etc
Data Storage	3000 groups,80 groups data at every hour,1 group data collected
Output Interface	1) AC signal,0V-1.5V can be connected with filter 2) Data output：RS232 interface， treaty：9600.N.8.1
Power Supply	Battery:4×LR6(5#),or 6V DC external power supply
Dimmensions	230mm×72mm×30mm
Weight	400g(covers battery)
Displayer	128×64 dot matrix LCD display, with the functions of background lightanalog display, measuring method,measuring time and clock

Sound level meter condenser microphone
4 Series

Product Code	410	433	421	423
Outside Diameter	φ12.7mm(1/2'')			
Sensitivity(Mv/Pa)	12.5	10		50
Frequency Range(Hz)	20Hz-20000Hz	20Hz-12500Hz		20Hz-20000Hz
Polarization voltage	200V	28V		0V
Frequency Feature:	free field			

Features

- Frequency Range(Hz):20Hz-12500Hz
  Polarization voltage:28V
  Frequency Feature: free field

Condenser Microphone

Introduction: be used with various acoustic measuring instruments

Characteristics

Broad frequency range,good frequency feature
·Wide dynamic range
·Good stability

Sound level meter
Dedicated spectrum analyzer
SA20

Model	SA20
Measuring Range	25dB～130Db(A)
Frequency Range	20Hz—20KHz
Frequency Range of filter	1/31.5Hz-16KHz totally 10 levels 1/320Hz-20KHz totally 31 levels 1/6 20Hz-20KHz totally 62 levels
Frequency weighted	A,C (weighting),L(linearity)
Time-weighted	Fast(F) Slow(S)
Display	54×42 large LCD, with mechanical simulation ammeter and backlight
Measuring Model	LP
Power supply	220V AC external power supply
Dimensions	230mm×112mm×200mm
Weight	2.0kg

Application

be used for industrial noise measurement of various machines, vehicle, shipping and electrical. Suitable for the areas of industrial enterprises, mathematics and scientific research

Features

Instead of some traditional sound level meters, its stability and reliability was greatly increased by using digital detector technology,
integrate the 1 / 1 and 1 / 3 octave filters
·Built-in the 1 / 1, 1 / 3 and 1/6 octave filter, can manually select the center frequency of the filter
·Large LCD display, clear and visual read.
·can be connected with computer

Sound level meter
Integrating sound level meter
NSLM-5628 –SM28A- SM28B

Model	NSLM-5628 Integrating Sound Level Meter	SM28A Integrating Sound Level Meter	SM28B Personal Sound Exposure Meter
Standard	GB/T3785 2,IEC61672 2		GB/T15952 2
Frequency Range	20HZ～12.5KHz		20HZ～10KHz
Measuring Range	30dB～130dB(A) 35dB～130dB(C)		35dB～130dB
Type of the microphone	Φ127mm Electret condenser microphone		
Frequency weighted	A,C		
Time-weighted	Fast(F),Slow(S)		
Range conversion	Manual（high,middle,low）		
Measuring function	Lp,Leq,LAE,Lmax,Lmin,E		
Measuring time	10s,1min,5min,10min,15min,20min,30min,1h,8h,24h,Man		
Data storage	500 groups data of 50000 equivalent sound level		
clock	Real-Time Clock，back-up battery in the machine		
output	AC signal		
Data interface	RS232 interface,can be connected with printer and computer		
Power supply	Battery:2×LR6		
Dimensions	200mm×63mm×30mm		
Weight	0.2kg		

be used for measuring noise in on the spot environment and industry,
especially suitable for the department of environmental supervision and healthy and epidemic
prevention.

Features

·Instead of some traditional sound level meters, its stability and reliability was greatly increased by using digital detector technology.
·Direct measurement of equivalent continuous sound level Leq and noise exposure, etc.
·Dot matrix LCD,direct display Leq,clear and intuitive.

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Sound level meter
Microphone Preamplifier
61 Series

- Frequency (Ref:250 Hz, 0.2 dB):20 Hz - 200k Hz
  Power supply:ICCP (2 - 20 mA)
  Length: 71 mm

Introduction: with the microphone, they can convert impedance and enlarge preamp

Features

- Length of Cable:3m,5m,10m
  Frequency Range:10HZ~20KHz
  Measuring Range:20dB~136Db(A)
  Operating Voltage:4-10V

Specification

Specification

Model	610	613
Frequency Range	10HZ~20KHz	
Measuring Range	15dB~146Db(A)	20dB~136Db(A)
Gain	0 Db	
Input impedance	≥2GΩ/1pF	≥5MΩ/5pF
Operating Voltage	50V	4-10V
Polarization voltage	200V,28V,0V	0V
Outside dimmenions	φ12.7mm(1/2inch)	
Length of Cable	3m,5m,10m	

Model	618
Diameter	1/2 inch
Frequency (Ref:250 Hz, 0.2 dB)	20 Hz - 200k Hz
Attenuation (10 Hz - 100 kHz)	< 0.5 dB
Input impedance	> 5 G
Output impedance	< 110
Background noise	AWeighted < 2.0uV 20 Hz - 20kHz<6.0uV
Maximum output voltage	4.5 Vrms
Power supply	ICCP (2 - 20 mA)
Temperature	-20°C- 80°C
Humidity	0 - 98% RH
Length	71 mm
Output interface	BNC
The thread connected with microphone	φ11.7 * 60 UNS

Sound level meter
Multi-channel noise / vibration measurement and analysis system
NA70

1、 Noise measurement channels:

（1）
Measurement microphone: Φ12.7mm polarization condenser microphone, sensitivity: about 30mV/Pa

（2） Frequency range: 20Hz-20kHz

（3） Background noise: direct input short circuit, A weighted less than 5μV

（4） Frequency weighting: A, C, Z (linear), can meet the requirement of IEC61672-1: 1

(5) Anti-mixed filter: built-in, cut-off frequency of 40kHz, 2.5kHz, 630Hz, 200Hz, attenuation -48dB/oct

(6) Range: 20dB、40dB、60dB、80dB

(7) AC output: 7V maximum RMS

(8) Range: 25 ~ 140dB with the 30mV/Pa microphone

2、 Vibration measurement channels:

（1） Sensors: Piezoelectric Accelerometer, Charge Sensitivity: ≈ 10mv / m • s-2

（2） Frequency range: 20Hz-20kHz

（3） Measuring Range: 0.1-5×102m/s2

3、 High-speed and high precise A / D board

（1） Sampling Frequency: Up to 200kHz

（2） Sample Level: 16 bit

（3） FIFO: 32k byte

（4） Interface:USB

Main Software:1)FFT analysing and testing

(1) You can set the type and sensitivity of the sensor in the setting window

(2) A / D sampling rate can be randomly set

(3) Can separately adjust measuring range of every channel and maximum frequency of anti-aliasing filter

(4) Can automatically generate longitudinal coordinates according to the type and range of sensor

(5) Can store and print the measuring result

(6) Can display both the FFT analytical result and the time domain waveform

(7) The same software can be used to measure both the noise and the vibration, the user can randomly select testing peak or effective value

Features

is a multichannel noise measurement and analytical instrument discretionarily combining noise and vibration measurement It can achieve the real-time measurement of noise and acceleration and other physical quantities. High-speed computing
by PC, high-capacity storage capacity, analyse and calculate the time domain and frequency domain of the collected signal.
It has much advantages such as multiusage,high precision,etc. Can be widely used in environmental noise measurement,
 ambient vibration measurement, the spectrum analysis of 1 / 1, 1 / 3 noise source,
real-time FFT analysis, architectural a coustic measurement.
NA70Multichannel noise / vibration analyzer is composed of computer, package, high speed A / D board, measuring
g amplification board, charge amplification board, accelerometers, preamplifier, measuring microphone

2)OCT analyzing and testing:

(1) Sampling rate: 50kHz / channel

（2） Dynamic range: 80dB

（3） Center frequency：

20Hz,25Hz,31.5Hz,40Hz,50Hz,63Hz, 80Hz,100Hz,125Hz,160Hz,200Hz,250Hz,315Hz,
400Hz,500Hz,630Hz,800Hz,1000Hz,1250Hz1600Hz,20000Hz,2500Hz,3150Hz,4000Hz,5000Hz,63
00Hz,8000Hz,10kHz、12.5kHz、16kHz

（4） Parallel 1/3OCT analysis

(5) Can store and print the measuring result

3) Architectural acoustics measurement

  According to the GBJ7584"The Construction Noise Regulation", it can measure laboratory mea
surement of airborne sound insulation of building components, measure on-the-
spot airborne sound insulation between the two rooms inside the buildings, measure on-the-
spot airborne sound insulation of the outer wall and the outer wall components,
measure airborne sound insulation of impact sound of floors and measure on-the-
spot airborne sound insulation of impact sound of floors,etc.It can automatically transform sound
insulation result to evaluation quantity of single-valued according to the GBJ121-
88"The Evaluation Criteria of Construction Noise ",and can do reverberation time measurement a
ccording to the GBJ76-84"The Reverberation Time Measurement Regulation of Living Room".

4) Sound absorption coefficient measurement

(1)It can do the laboratory measurement of sound absorption coefficient according to the GBJ47-
83" The Sound absorption coefficient measurement Regulation of Reverberation Room"

(2) It can do the reverberation time measurement according to the GBJ76-
84" The Reverberation Time Measurement Regulation of Living Room"

(3)You can select the repetitive measuring time from 1 to 18 times when measure the reverberation ti
me. Measuring with 1 / 3 octave,center frequency are 50Hz、63Hz、80Hz、100Hz、125Hz、160Hz、
200Hz、250Hz、315Hz、400Hz、500Hz、630Hz、800Hz、1000Hz、1250Hz、1600Hz、2000Hz、
2500Hz、3150Hz、4000Hz、5000Hz、6300Hz、8000Hz、10000Hz.

4) Measuring lower limit frequency can be randomly selected by user among 50Hz, 63Hz, 80Hz, 100Hz

5) The maximum frequency can be randomly selected by user among 5000Hz,6300Hz,8000Hz,10000Hz

6)It can automatically print the measuring report according to the request of GBJ47-
83" The Sound absorption coefficient measurement Regulation of Reverberation Room"

7) Measurement range of reverberation time is from 0.2s to 10s

8) Can simultaneously calculate T60, T50, T40, T30, T25,
The user can define slope of decay curve to calculate the T60

9) All measurement results can combine with EXCEL, WORD and other software

10)Can display, store and print the time-domain waveform

11) Can display, store and print the various time-changing graphics as frequency component changes

12) Can display, store and print the frequency characteristic graphics of reverberation time

Sound level meter
Multi-functional Noise Analyzer
NA98 Series

Mainly be used for automatic measurement of environmental noise also can be used for other noise measurements

Instead of some traditional sound level meters, its stability and reliability was greatly increased by using digital detector technology
·128×64 dot matrix LCD,with background light, high capacity,can display both data and chart.
·With data acquisition function, can be used for the noise measurement around airport.
·Large LCD ,with background light
·Can be connected with micro-printer to print measurement results and computer to process and archive.
·Instantaneous sound level output

Specification

Model	NA98 Multi-functional Noise Analyzer	NA98A Multi-functional Noise Analyzer	NA98C Multi-functional Noise Analyzer
Standard	GB/T3785 2,IEC61672 2,JJG188-2002 2		
Frequency Range	20HZ～12.5KHz		
Measuring Range	30dB～130Db(A) 35dB～130Db(C)		35dB～130dB
Type of the microphone	Φ127mm Electret condenser microphone		
Frequency weighted	A,C,Z(no weighting)	A,C	A,C
Time-weighted	Fast(F) Slow(S)		
Range conversion	Manual（high,middle,low）		
Measuring Function	Lp,Leq,LAE,LN,SD.Lmax.Lmin,L5,L10,L50,L90,L95,Ld,Ln,Lch and dynamic bar chart of instantaneous value		Lp,Leq.LAE,LN,SD,Lmax,Lmin,L5,L10,L50,L90,L95
Data acquisition function	the noise calculation around airport	---------	---------
Data Storage	500 groups data or 80 groups data per 24 hours		500 groups data
Display Model	128×64 dot matrix LCD	Special homemade large screen LCD	2×8 LCD character dot matrix
Clock	Real-Time Clock，back-up battery in the machine		
output	AC signal		---------
Interface	RS232 interface		
Power supply	Battery:4×LR6(5#),or 6V DC external power supply		Battery:2×LR6
Dimensions	230mm×72mm×30mm		200mm×63mm×30mm
Weight	0.4kg		0.3kg

Sound level meter
Multi-functional noise display
ND2 Series

Model	ND21	ND23
Display Function	2 bit instantaneous sound level	2 bit instantaneous sound level and equivalent continuous sound level
Microphone	φ12.7mm(1/2 inch) horizontal polarization test condenser microphone	
Measuring Range	40～90Db	
Storage Function	Leq,L10,L50.L90.SD,Lmax,maximum measuring data for ten days	
Data Acquisition	Artificial collection with collector or remote collection through the telephone line	
character scrolling screen	On the request of the user on the order	
Power supply	220V 50Hz	
Dimensions	1.8×1×0.25(each side), 2.4×1.2×0.4(with USA character scrolling screen)	
Weight	About 50kg	

Features

Multifunctional noise display screen is similar to an advertising board equipped in the urban area
It can display environmental or traffic noise of a point real timely monitored.
It can conduct an environmental publicity in the form of text in order to improve people's awareness of environmental protection
.We can make it single, double, three sides or four sides on the request of order. Each side can shows the instantaneous
sound level or simultaneously show the equivalent continuous sound level, also can add a USA character scrolling screen display and remote monitoring functions

Sound level meter
Noise meter
NM Series

Model	NM14	NM24	NM34
Measuring Range	30～130dBA, 35～130dBC		
Accuracy	±1.5dB		
Frequency	31.5HZ-8.5KHZ		
Dynamic Range	50dB		
AC/DC Signal output	√		
Automatic power-off	√		
Low-power display	√		
Overload alarm	√		
Digital bit and resolution	5Digits & 0.1dB		
Selection of Dynamic feature	Fast/Slow		
Microphone	1/2 inch Condenser Microphone		
Frequency weighting characteristics	A & C		
Selectable measuring level	√		
Maximum value lock	√		
RS232 interface	-	-	√
Perpetual calendar	-	-	√
Sampling frequency	2 times/sec		

Sound level meter
Noise Spectrum Analyzer
NA98B

Introduction:

Performance: meet the requirements of GB/T3785-2 and IEC61672-2, filter can meet the requirements of GB/T3241 and IEC61260-2.
Application: be used for industrial noise measurement of various machines, vehicle, shipping and electrical. Suitable for the areas of industrial enterprises environmental protection industrial hygiene teaching and scientific research

Features

Instead of some traditional sound level meters, its stability and reliability was greatly increased by using digital detector technology
·Has the function of integral and statistical measurement, direct measurement of Leq-equivalent continuous sound level and noise exposure level, etc.
·Builtin the 1 / 1 octave filter, can manually or automatically select the center frequency of the filter
·Has the function of high capacity of data acquisition,
can simultaneously store 800 groups data,datas of every hours for 6 days and 12 groups data that is result of filter automatically scanning
·Test function with reverb
·Large LCD,clear and visual read
·Data storage, print function, can be connected with computer

Model	NA98B
Standard	GB/T3785 2,IEC61672 2, filter can meet the requirements of GB/T3241 and IEC61260-2
Frequency Range	1/1 31.5HZ～16KHz
Measuring Range	30dB～130Db(A)
Type of the microphone	Φ127mm Electret condenser microphone
Frequency weighted	A,C(weighting),Z(no weighting) and average linear
Time-weighted	Fast(F) Slow(S)
Range conversion	Manual（high,middle,low）
Measuring Function	Lp,Leq,LAE,LN,SD.Lmax.Lmin,LN(L5,L10,L50,L90,L95),Ld,Ln,Ldn, Tr(reverberation measurement)
Time of measuring integral	Man,10s,1min,5min,10min,15min,20min,1h,8h,24h, measuring at every hour of one day
Display Model	large screen LCD, dynamically display instantaneous sound level
Clock	Real-Time Clock, back-up battery in the machine
output and Interface	AC signal,RS232 interface
Power supply	Battery:4×LR6(5#),or 9V DC external power supply
Dimensions	230mm×72mm×30mm
Weight	0.4kg

Sound level meter
Precision integrating SM71
SM71

Measuring Range	25dB~140Db(A)
Frequency Range	10Hz—20KHz
Frequency weighted	A,C(weighting),L(linearity)
Time-weighted	F(fast),S(slow)
display	128×64 dot matrix LCD display,with background light
Measuring mode	LP,Leq.LAE.Lmax,Lmin,LN(L5,L10,L50.L90,L95),SD,Ld,Ln,Ldn,etc.
Measuring time	Man,10s,1min,5min,10min,15min,20min,1h,8h,24h, measuring at every hour of one day
storage	3000 groups data or 100 groups data measuring at every hour of one day
Output interface	AC and RS232C
Power supply	Battery:4×LR6(5#),or 6V DC external power supply
Dimensions	230mm×72mm×30mm
Weight	0.5kg

Features

Instead of some traditional sound level meters, its stability and reliability was greatly increased by using digital detector technology, integrate the 1 / 1 and 1 / 3 octave filters
·128×64 dot matrix LCD display, display both data and chart.
· Direct measurement of Lea-equivalent continuous sound level and LAE-noise exposure level, etc.
·Data storage, print function, can be connected with computer
·With data acquisition function, can be used to measure the noise at airport
·Instantaneous sound level output

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Sound level meter
Precision Noise Spectrum Analyzer
SM71A

Application: be used for industrial noise measurement of various machines, vehicle, shipping and electrical. Suitable for the areas of industrial enterprises environmental protection industrial hygiene teaching and scientific research

Features

·Instead of some traditional sound level meters, its stability and reliability was greatly increased by using digital detector
 technology,
integrate the 1 / 1 and 1 / 3 octave filters
·SM71A has the function of integral and statistical measurement, direct measurement of Leqequivalent continuous sound level and
LAEnoise exposure level,
·Builtin the 1 / 1 and 1 / 3 octave filter, can manually or automatically select the center frequency of the
 filter
SM71A has the function of high capacity of data acquisition,can simultaneously store 800 groups ata,datas every hours for 6 days and 22 groups data that is result of filter automatically scanning
·Large LCD,clear and visual read.
·Data storage,print function,can be connected with computer

Specification

Model	SM71A
Standard	sound level meter can meet the requirements of GB/T3785 1,IEC 61672 sfilter can meet the requirements of GB/T3241 and IEC61260
Frequency Range	10HZ～20KHz
Frequency Range of Filter	1/131.5Hz—16KHz totally ten levels 1/320Hz—20KHz totally thirty-one levels
Measuring Range	25dB～130Db(A)
Type of the microphone	Φ127mm Electret condenser microphone
Frequency weighted	A,C (weighting),L(linear)
Time-weighted	Fast(F) Slow(S)I(pulse)
Range conversion	Manual （high,middle,low）
Measuring Model	Lp,Leq.LAE,LN,SD,Lmax,Lmin,LN(L5,L10,L50,L90,L95)Ld,Ln,Ldn
Time of measuring integral	Man,10s,1min,5min,10min,15min,20min,1h,8h,24h, measuring a t every hour of one day
Display Model	Special homemade large screen LCD
Clock	Real-Time Clock, back-up battery in the machine
Output, interface	AC signal,RS232 interface
Data Storage	800 groups data or every hour's data for 6 days,12 groups result of filter automatically scanning
Power supply	Battery:4×LR6(5#),or 6V DC external power supply
Dimensions	230mm×72mm×30mm
Weight	0.5kg

Sound level meter
Precision Noise Spectrum Analyzer
SM61C

introduction:

Application: be used for industrial noise measurement of various machines, vehicle, shipping and electrical. Suitable for the areas of industrial enterprises
environmental protection industrial hygiene teaching and scientific research

Features

Instead of some traditional sound level meters, its stability and reliability was greatly increased by using digital detector
 technology,
integrate the 1 / 1 and 1 / 3 octave filters
·Built-
in the 1 / 1 and 1 / 3 octave filter, can manually or automatically select the center frequency of the filter
·Large LCD,clear and visual read.
·Data storage, print function, can be connected with computer

Specification

Model	SM61C
Standard	sound level meter can meet the requirements of GB/T3785 1,IEC 61672 sfilter can meet the requirements of GB/T3241 and IEC61260
Frequency Range	10HZ～20KHz
Frequency Range of Filter	1/131.5Hz—16KHz totally ten levels 1/320Hz—20KHz totally thirty-one levels
Measuring Range	25dB～130Db(A)
Type of the microphone	Φ127mm Electret condenser microphone
Frequency weighted	A,C (weighting),L(linear)
Time-weighted	Fast(F) Slow(S)I(pulse)
Range conversion	Manual（high,middle,low）
Measuring Model	Lp，Lmax
Display Model	Special homemade large screen LCD
Output，interface	AC signal,RS232 interface
Power supply	Battery:4×LR6(5#),or 6V DC external power supply
Dimensions	230mm×72mm×30mm
Weight	0.5kg

Sound level meter
Precision Sound Level Meter
SM61 Series

Model	SM61
Standard	GB/T3785 1,IEC61672 1
Frequency Range	10HZ～20KHz
Measuring Range	25dB～130Db(A)
Type of the microphone	Φ12.7mm Electret condenser microphone
Frequency weighted	A,C
Time-weighted	Fast(F),Slow(S),I(Pulse)
Range conversion	Manualhigh,middle,low）
Measuring Function	Lp,Lmax
Display Mode	Large LCD,background light
output	RS232 interface, instantaneous value data output,AC signal
Power supply	Battery:4×LR6(5#),or 6V DC external power supply

Introduction:

Application: be used for industrial noise measurement of various machines, vehicle, shipping and electrical. Suitable for the areas of industrial enterprises environmental protection industrial hygiene mathematics and scientific research.

Features

·Instead of some traditional sound level meters, its stability and reliability was greatly increased by using digital detector
 technology.
·Large LCD display clear and intuitive
·Instantaneous sound level output, can be connected with computer.

Sound level meter
Precision Spectrum Analyzer
+SM71

Features

Built-in the 1 / 1 octave filter, can manually or automatically select the center frequency of the filter
·Has the function of high capacity of data storage, can measure and store 3000 groups spectral data or 3000 groups equivalent continuous sound level
·128×64 dot matrix LCD display, clear and visual read.
·Data acquisition and storage, print function, can be connected with computer

Model	SM71+ Precision Spectrum Analyzer
Standard	GB/T3785-1,IEC61672-1.The filter can meet the requirements of GB/T3241 and IEC61260
Frequency Range of Filter	1/1 31.5Hz-16kHz totally 10 levels
Measuring Range	25dB~130Db(A)
Type of Microphone	Φ127mm Electret condenser microphone
Frequency weighted	A,C(weighting),Z(no weighting)
Time-weighted	F(fast),S(slow)
Range conversion	Manual(high,middle,low)
Measuring mode	LP,Leq.LAE.Lmax,Lmin,LN(L5,L10,L50.L90,L95),SD, Ld,Ln,Ldn,Tr(.reverberation measurement)
Time of measuring integral	Man,10s,1min,5min,10min,15min,20min,1h,8h,24h, measuring at every hour of one day
display	128×64 dot matrix LCD display,with background light
Display Model	USA menu, dynamically display instantaneous sound level, noise spectrum and list of measurement data
Clock	Real-Time Clock,back-up battery in the machine
Output interface	AC signal,RS232 interface
Power supply	Battery:4×LR6(5#),or 9V DC external power supply
Dimensions	230mm×72mm×30mm
Weight	0.4kg

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Sound level meter
Score octave filter
SF21

Model	SF21
Frequency Range	20Hz—20KHz
Frequency Range of Filter	1/ 31.5Hz-16KHz totally 10 levels 1/ 320Hz-20KHz totally 31 levels 1/ 6 20Hz-20KHz totally 62 levels
Referable attenuation	0 and 20dB
Referable Input level	1VRMS
Maximum Input Level	1.6VRMS
Display of Frequency	16×2 dot matrix large LCD Display
Power supply	220V AC external power supply
Dimensions	230mm×112mm×200mm
Weight	2.0kg

Introduction:

Application: be used for industrial noise measurement of various machines, vehicle, shipping and electrical machine.. Suitable for the areas of industrial enterprises mathematics and scientific research

Features

·Use switched capacitor filter
·Builtin the 1 / 1, 1 / 3 and 1/6 octave filter, can manually select the center frequency of the filter
·16×2 dot matrix Large LCD display, clear and visual read.
·can be connected with computer

Sound level meter
SLM-100

Applied standard	IEC61672-1 CLASS2
Accuracy	±1.4dB
Frequency range	31.5Hz~8kHz
Dynamic range	50dB
Measuring level range	Lo: 30dB~80dB Med: 50dB~100dB Hi: 80dB~130dB Auto: 30dB~130dB
Frequency weighting	A and C
Time weighting	FAST 125ms; SLOW (1s)
Microphone	1/2 inch electret condenser microphone
Resolution	0.1dB
Sampling time	2 times/second
MAX hold	MAX
MIN hold	MIN

Features

- Applied standard ：IEC61672-1 CLASS2
- Frequency weighting：A and C
- Time weighting：FAST and SLOW
- MAX/MIN record
- Data Hold
- Overragne indication
- analog bar-graph indication

Sound level meter
SLM-300 Series

Model	SLM-300	SLM-300DL
Applied Standard	IEC61672-1 CLASS2	
Measuring Level Range	Lo:30~80dB；Med:50~100dB；Hi:80~130dB；Auto:30~130dB	
Operating Conditions	-20~60°C/10%~90%RH(Non-condensation)	
Storage Conditions	-20~60°C/ 10%~75%RH(Non-condensation)	
Accuracy	±1.4dB	
Resolution	0.1dB	
Frequency Range	31.5Hz~8kHz	
Dynamic Range	50dB	
Frequency Weighting	A & C	
Time Weighting	FAST 125ms; SLOW (1s)	
Sampling Time	2 times/second	
Microphone	1/2 inch electret condenser microphone	
Dimension(L*W*H)	252*66 *33 mm	
Weight	262g	
Accessories	User's manual, 9V battery, windscreen, regulator rod, Φ3.5 earphone plug, USB cable, adaptor, software, tripod(optional),gift box, carrying case	
	PC Real-time Monitoring And Recording	
Data logger	-	Data logger Function
Memory Up	-	To 262144 Readings

Features

1. MAX & MIN record
2. Over range/Underrange indication
3. A & C weighting
4. FAST & SLOW response
5. Analog AC/DC outputs
6. PC real-time monitoring and recording
7. Data logger function
8. Memory up to 262144 readings

Sound level meter
SM33 Series

Introduction:

Application:be used for general noise measurement, also used as pre-amplifier of acoustic measurement.

Model	SM33 Integrating Sound Level Meter	SM33A Integrating Sound Level Meter	SM33B Integrating Sound Level Meter
Standard	GB/T3785 2,IEC61672 2		
Frequency Range	20HZ~12500KHz		
Measuring Range	30dB~130dB	30dB~120dB	30dB~130dB
Type of the microphone	Φ127mm Electret condenser microphone		
Frequency weighted	A,C		A,C,Z(no weighting)
Time-weighted	Fast(F)		Fast(F),Slow(S)
Range conversion	Automatic	Manual(high,low)	Manual(high,middle,low)
Display Mode	LCD2×8 dot matrix		
output	AC,DC signal		AC signal
Power supply	Battery:2×LR6		
Dimensions	170mm×52mm×24mm		200mm×63mm×30mm
Weight	0.15kg		0.2kg

Features

Dot matrix LCD,clear and accurate, with background light, can be reading at night.
·Small size, light weight
·Can maintain the maximum value and set sound level.
·AC and DC signal output
 SM33B can analyze spectrum by optional filter.

Sound level meter
SM33T

Measuring Range	30dB～130dB
Frequency Range	20HZ～12.5KHz
Frequency weighted	A(weighting),C(weighting)
Time-weighted	F(fast)
Display	Large LCD, background light
Measuring Mode	Lp
output	AC,DC and RS232C
Power supply	4 Batteries, 6V power supply can be connected
Dimensions	230mm×72mm×30mm
Weight	0.3kg

Features

Performance: meet the requires of GB/T3785-2 and 61672-2
Application:be used for monitoring online environmental noise and automatically measuring the noise of vehicle Inspection

LCD display
·Data output with the instantaneous sound level,1Lp/s
·AC and DC signal output

Sound level meter
Sound Level Calibrator
SC2 Series

Product Code	SC21	SC20
Nominal sound pressure level	94Db and 114dB	94Db
Frequency Range(Hz)	1000Hz±5Hz	1000Hz±20Hz
Accuracy of sound pressure level	1 level±0.2Db(-23°C) ±0.3Db(-10°C-50°C)	2 level±0.3Db(-23°C) ±0.5Db(-10°C-50°C)
Power Supply	EF22×1	
Applicable Scope	φ23.77mm or 126mm microphone	
Weight	About 40kg	
Product Code	SC21	SC20
Nominal sound pressure level	94Db and 114dB	94Db
Frequency Range(Hz)	1000Hz±5Hz	1000Hz±20Hz

Features

introduction: be used for absolute sound pressure calibration of microphone of 1/2 inch and 1 inch, sound level meter and other acoustic measuring instruments

Can meet the requirements of GB/T15173
·Be controlled by single chip micyoco,automatic temperature compensation, good stability

Sound level meter
Tone burst generator
TG58

Working Method	continuous sinusoidal signal or burst tone signal
Frequency of inner sinusoidal signal(Hz)	16,31.5,63,500,1000,2000,4000,8000
Lasting time of burst tone tested by time-weighted	500ms,200ms,50ms,10ms.the period is 10s
Lasting time of burst tone tested by equivalent continuous sound level	500-2500ms,200-1000ms,50-250ms,10-50ms
Lasting time and period of burst tone tested by pulse(ms	Single burst tone：2-3000ms,5-3000ms,20-3000ms Continuous burst tone：5-10ms,5-50ms,5-500ms
Feature of burst tone in the method of figure	Maximum continuous time 99999ms(～100s) Maximum period 99999ms(～100s
Continuous signal and the decay of amplitude of burst tone(Db)	0,-10,-20,-30,-40,-50,-60
Periodic error of burst tone	≤1%
Lasting time error of burst tone	≤1%
Attenuator error	≤±0.4Db
Power supply	220V,50Hz
Dimensions(mm)	398×280×150
Weight: about	2.7kg

Features

·Digital signal, waveform is from zero to zero.

·Greatly stable frequency and amplitude, the biggest ouput is 5Vrms