INTEGRATED WEATHER STATION Equinox™
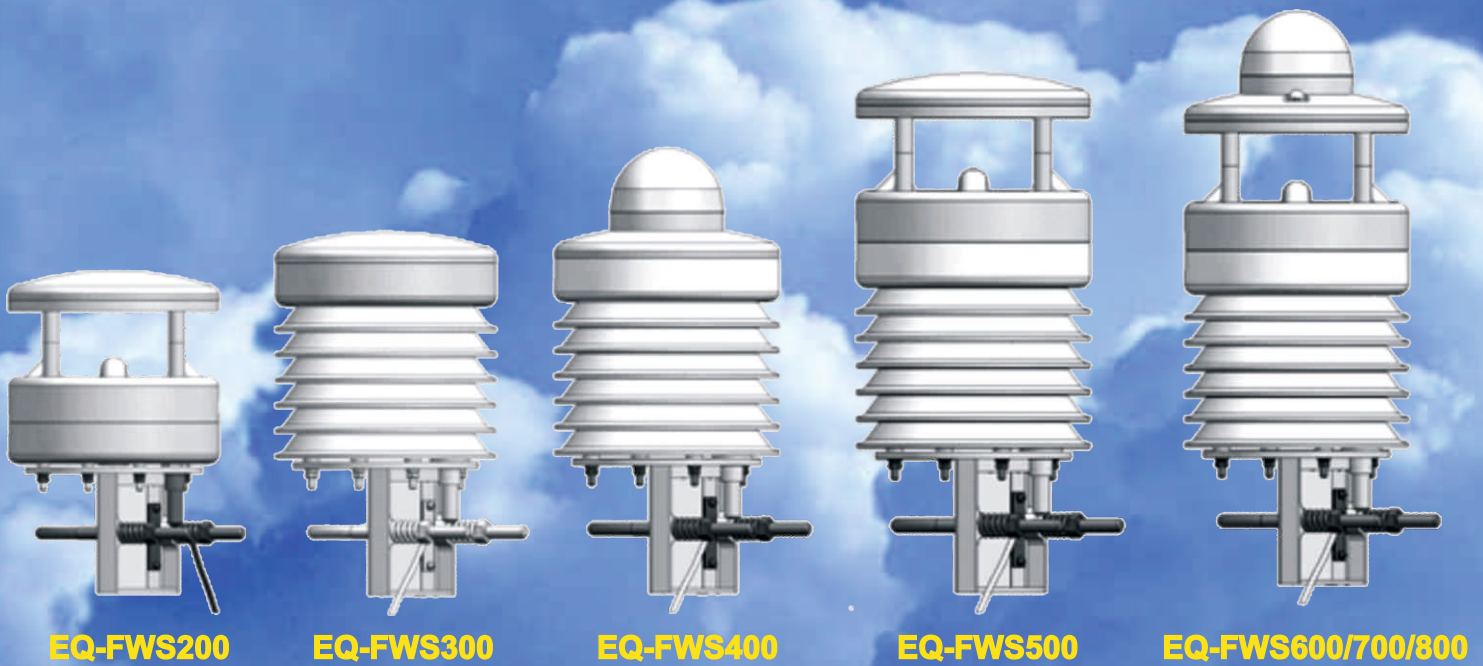

Equinox FWS Meteorological sensor is a multi-factor measurements of meteorological elements of the Professional-grade sensor, which can Measure a variety of Meteorological Elements Air Temperature, Air Humidity, Wind Speed, Wind Direction, Barometric Pressure, Rainfall and so on. It Features High Accuracy, Fast Response Time, Serial Output, User-friendly PC or Directly measured by External Instrument.

FWS Meteorological Sensors

EQ-FWS200 EQ-FWS300 EQ-FWS400 EQ-FWS500 EQ-FWS600/700/800

SPECIFICATION

	EQ-FWS200	EQ-FWS300	EQ-FWS400	EQ-FWS500	EQ-FWS600	EQ-FWS700	EQ-FWS800
Air Temperature		*	*	*	*	*	*
Relative Humidity		*	*	*	*	*	*
Air Pressure		*	*	*	*	*	*
Precipitation			*		*	*	*
Wind Direction	*			*	*	*	*
Wind Speed	*			*	*	*	*
Global Radiation						*	*
The Uv Index							*

INTEGRATED WEATHER STATION

EQ - FWS500 5 in 1 Weather Station

With the world becoming increasingly sensitive to weather and climate,it is important to measure the weather accurately. The EQ Weather Transmitter EQ - FWS500 offers the solution to Measure Barometric Pressure, Humidity ,Temperature, and wind speed and direction - all with one instrument.

FEATURES

• Ultrasonic sensor technology is used to take wind measurements

• Maintenance-free Ease To Install

• Measurement data are available for further processing in the

  form of a public protocol

• Mass Storage and Rich instruction

SPECIFICATION

	Measuring Range	Resolution	Accuracy
Temperature	-40 ~ 60 ºC	0.1°C	±0.2°C
Relative Humidity	0 ~ 100 %	0.1%	± 2%
Air Pressure	300～1200 hPa	0.1 hPa	0.3 hPa
Wind Direction Principle Ultrasonic	0 ~ 360 º	0.1°	± 2°
Wind Speed Principle Ultrasonic	0 ~ 75 m/s	0.1m/s	± 0.3 m/s or ±3% (0...35m/s)
Dimensions	Ø ca. 140mm, Height ca. 311mm,Weightt approx. 1,5kg		
General information	Interface RS485/RS232		
	Operating power consumption 12V <20ma		
	Operating Humidity Range 0 ~ 100 %		
	Operating Temperature Range -40 ~ 60 º C		

RADIATION

EQ - TBQ-2-B Pyranometers

EQ- TBQ-2-B pyranometers :Radiation from the sun is mainly in the range from 0.3 to 3 μm. Can also be used to measure the solar radiation incident to the inclined plane, such as shielding tape measures the diffuse solar radiation

APPLICATION

EQ - TBQ-2-B radiation table can be widely applied in meteorology, solar energy utilization, agroforestry, and atmospheric environmental monitoring department.

FEATURES

- Comply with the WMO specification（CIMO Guide）

- Applicable to various harsh environments

- An ISO First Class pyranometer.

- Passive accurate measurement

- High sensitivity

- Easy-to-use, maintenance-free

SPECIFICATION

Spectral Range	0.3 ~ 3 μ m
Temperature Coefficient	< ±2% (-10 ~ 40 ºC)
Sensitivity	7~14 μ v•w-1•m2
Response time	< 35S (99%)
Stability/year	< ± 2%
Cosine response	< ± 7% (Sun elevation angle of 10 °)
Position	< ± 5 % (Sun elevation angle of 10 °)
Nonlinear	< ± 2 %

EQ - VRE Visibility Sensor

EQ- VRE visibility sensor is be composed of the light emitter, light receiver and microprocessor controllers and other components. Emitter emits pulses of infrared light, the receiver simultaneously detect Pulses of light intensity from atmospheric particles scattering. All information collected by measuring micro-controller and through specialized mathematical model algorithm into a meteorological visibility distance

FEATURES

- Integrated design, compact, lightweight, easy to install.
- Inclination structure designed to prevent dust, rain, snow, sun po
- Anti-dust, anti-fungal coating treatment. IP65 degree of protectio
- Low consumption, in the winter heating state, less than 5W.
- Built-in watchdog circuit, the instrument is stable and reliable.
- Light extinction process, prevent secondary stray light interferen
- 15KV ESD protection ,Lightning-protection design

SPECIFICATION

Measuring Range	5m~10km / 5m-30Km / 5m-50Km
Accuracy	≤2km Residual ±2% ; 2Km~10km Residual ±5% 10Km~50Km, Residual +10%
Consistency	≤± 4 %
Data update interval	15s、60s Option
Optical Parameters	
Scattering Angle cover	39°~51 º Forward scatter
Peak wavelength	870nm
Bandwidth	100nm
Power	
Input	DC12V
Power consumption	<5W, typical value 4W
Dimension（L*W*H）	610mm x 230mm x 300mm
Weight	<10Kg
Material	Hard aluminum anodized, outer surface spray paint protection
Environment	
Operating Temperature	-40 ºC to +85ºC
Operating Humidity	0~100%RH

DATA LOGGER

EQ - DT60 data logger is a multi-functional integrated data taker; interior design program for multiple sensor parameters; reserved for a variety of industrial interface, easy to expand; industrial-grade standard, stable and reliable performance.

FEATURES

EQ - DT60(E-G)Data Logger

- 16-bit (24 optional) high-precision A/D converter.

- High-precision real-time clock; 5s/per month.

- Dual signal path protection.

- 128M industrial grade flash memory, support power-down protection.

- Support 2G to 8G industrial grade SD memory card.

- 2 RS232 interface, 1 RS485 interface, 8-channel analog channels, 12 digital channels.

- Monitoring: the motherboard temperature measurements, the working voltage monitoring, communication port monitoring, SD card status monitoring.

- Note:(E) with the LCD display (G) wireless transmitter module configuration

SPECIFICATION

Analog Channels	8 differential channels, the acquisition voltage or current signal
PT100 Channels	Can be collected 4 channels of platinum resistance signal for temperature measurement
Digital input & output channels	12 TTL / CMOS digital input channels, can be used as a level, pulse input or low-speed counters; 4 digital output channels
Relay Output	1 Relay Output
Communication interface	2 RS232 ports, 1 RS485 port
Storage	128M industrial grade flash memory, scalable 2G-8G SD memory card
Real-time clock	Industrial-grade high-precision real-time calendar clock
Supply voltage	DC 6V-35V input
Power consumption	<0.2W
Work Environment	Temp：-40 ~ +60 ºC, Humidity：0 ~ 100 % RH