MP SERIES COMPACT WEATHER STATION

The MP Series Compact Weather Sensors are designed for robust and maintenance-free measurements in hydrology, meteorology and weather-critical applications where durability, precision and operations in different climatic conditions are expected.

BENEFITS/FEATURES

- Compact design
- Aluminum alloy with Teflon coating
- All-in-one weather measurements
- Choice of parameters to suit required applications
- Rainfall measurements by photoelectric or piezoelectric technique
- Built-in data pre-processing capability
- Universal interface and selectable output protocols
- Ease of use, install and integrate into 3rd party systems
- Low power consumption
- Options for analog outputs and heating

TYPICAL APPLICATIONS

- Road and traffic control systems
- Bridges & tunnels
- Photovoltaic farms
- Chemical industrial area
- Smart Cities
- Building automation
- Railway
- Airport
- Container terminals

MP SERIES

MP-500

MEASURES:
wind speed
wind direction
temperature
relative humidity
air pressure

Dimensions: H308xΦ160mm
Weight: 1.4kg
Power: 13mA @12V DC

MP-600

MEASURES:
wind speed
wind direction
temperature
relative humidity
air pressure
rainfall (piezoelectricity)

Dimensions: H318xΦ160mm
Weight: 1.4kg
Power: 16mA @12V DC

MP-601

MEASURES:
wind speed
wind direction
temperature
relative humidity
air pressure
rainfall (photoelectricity)

Dimensions: H350xΦ160mm
Weight: 1.5kg
Power: 55mA @12V DC

MP-650

MEASURES:
wind speed
wind direction
temperature
relative humidity
air pressure
solar radiation

Dimensions: H333xΦ160mm
Weight: 1.4kg
Power: 18mA @12V DC

General Conditions

IP Class	IP65
Analog outputs(Option)	4 … 20 mA or 1 … 5V
Interface-Default	RS-485
-Configurable at Factory on Order	RS232/SDI-12/RS422
Protocol-Default	THETA ASCII
-Configurable at Factory on Order	Modbus-rtu/SDI-12/NMEA-0183
Operating voltage	12 … 30VDC
Operating temperature	-40 … +70°C
Operating humidity	5% … 100%RH
Connector	4 Pin
Cable	PUR 5m

Wind Speed

Principle	Ultrasonic
Measurement range	0 … 60m/s
Accuracy	±0.3 m/s or 3% of reading, whichever is greater
Resolution	0.1m/s

Wind Direction

Principle	Ultrasonic
Measurement range	0 … 359.9°
Accuracy	±3°
Resolution	0.1°

Temperature

Principle	Diode voltage
Measurement Range	-40 ... +80 °C
Accuracy	±0.5°C
Resolution	0.1 °C

Relative Humidity

Principle	Capacitive
Measutement range	0 ... 100 %RH
Accuracy	±3%RH
Resolution	0.1 %RH

Air Pressure

Principle	Piezoresistor
Measurement range	10 ... 1100 hPa
Accuracy	±0.5 hPa
Resolution	0.1 hPa

Rainfall

Principle	Piezoelectricity
Measurement range	0 ... 200 mm/h
Accuracy	±5%
Resolution	0.1 mm/h

Rainfall

Principle	Photoelectricity
Measurement range	0 ... 400 mm/h
Accuracy	±5%
Resolution	0.1 mm/h

Solar Radiation

Principle	Photoelectric
Spectral range	300 ... 2100 nm
Measurement range	0 ... 2000 W/m²
Non-linear error	≤3%
Accuracy	±5%
Resolution	1 W/m²

MP-700

The MP700 sensor is designed to meet customer's requirement with a combined measurement of solar radiation and rainfall in addition to measurements for wind speed and direction, temperature, relative humidity and air pressure.