

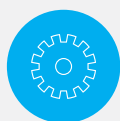
Clima Sensor US

The Clima Sensor US [Ultrasonic] is the economic alternative for compact acquisition of meteorological values. The sensor works absolutely maintenance-free without movable parts such as ventilator or bearing.



It measures wind velocity, wind direction, brightness, and precipitation. The wind velocity and wind direction are measured by an ultrasonic sensor in high-precision. The precipitation and its intensity are acquired via Doppler radar. A brightness sensor is included.

An integrated GPS receiver receives automatically the current information of date and time. The measuring values are available serially RS-422 / 485 (ASCII/ MODBUS-RTU) and as analogue signals at a plug connector.



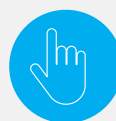
Maintenance free



No moving parts



Combined
precipitation and wind
sensor



Universal use



Serial output

Wind speed

Measuring range	0 to 60 m/s
Resolution	0.1 m/s (standard)
Accuracy	±0.3 m/s rms (< 5 m/s) ±3 % rms (5 m/s to 60 m/s)

Wind direction

Measuring range	0 - 360°
Resolution	1° 0.1° in special telegrams
Accuracy	±2° WS > 2 m/s

Virtual temperature

Measuring range	-40 to +80 °C
Resolution	0.1 K
Accuracy	± 0.5 K

Data output digital

Interface	RS-485 / RS-422
Baud rate	1200 to 921600 Baud
Data values	div. meas. data, date, time, check sum etc.
Output range	1 per 10 msec up to 1 per 60 sec
Status signals	heating, Meas section error, Temperature of meas section
Protocol	ASCII (preselected)

Data output analog

Type	max. 8 x 0 to 10 V
Wind speed	0 to 10 V
Wind direction	0 to 10 V
Output parameters	wind speed, wind direction, brightness, precipitation, relative humidity, air temperature, air pressure, etc.

Operating voltage

Electronic	6 to 60 V DC or 10 to 42 V AC / 1.2 W
Heating	24 V AC / DC, typ 25 W

General

Bus operation	up to 98 sensors
Electr. connection	19 pole connector
Mounting	on a mast tube 1,5"
Housing	plastic LEXAN (polycarbonate, UV-stabilised)
Protection	IP 67