COMPACT WEATHER STATION WS600-UMB

Item-No.: 423.306

DESCRIPTION OF FUNCTIONS

The WS600-UMB compact weather station is used to measure air temperature, intensity of precipitation, type of precipitation, quantity of precipitation, air pressure, wind direction and wind speed. Furthermore, it has an RS485 Modbus interface, which guarantees an easy connection to every meteocontrol data logger.

TECHNICAL DATA

Supply voltage for the sensors:	4 … 32 V DC, limitations apply in case of supply voltages lower than 12 V DC, recom-mended is 24 V DC
Power consumption sensors:	3,84 W (without heating)
Supply voltage heating:	12 … 24 V DC, functional restrictions in winter operation on voltages lower than 24 V DC
Power consumption heating:	40,8 W
Interface:	RS485, 2 wire, half-duplex
Operating temperature:	-50 ... 60 °C
Rel. humidity:	0 ... 100 % r. h.
Protection class:	IP 66
Cable length:	10 m
Gewicht:	approx. 1,5 kg
Dimensions:	Ø approx. 150 mm, height approx. 343 mm

TEMPERATURE

Principle:	NTC
Measuring range:	-50 ... 60 °C
Accuracy:	±0,2 °C (-20 ... 50 °C), otherwise ±0,5 °C (> -30 °C)

REL. HUMIDITY

Principle:	capacitive
Measuring range:	0 ... 100 % r. h.
Accuracy:	± 2 % r. h.

AIR PRESSURE

Principle:	MEMS capacitive
Measuring range:	300 ... 1200 hPa
Accuracy:	±0,5 hPa

WIND DIRECTION

Principle: Ultrasound
Measuring range: 0 ... 359.9 °
Accuracy: < 3 ° RMSE, > 1.0 m/s

WIND SPEED

Principle: Ultrasound
Measuring range: 0 ... 75 m/s
Accuracy: ± 0.3 m/s or 3 % (0 ... 35 m/s) RMS (whichever figure is the higher) ± 5 % (> 35 m/s) RMS

QUANTITY OF PRECIPITATION

Resolution: 0.01 mm
Reproducibility: typically > 90 %
Measurement range drop size: 0.3 ... 5 mm
Type of precipitation: Rain / Snow

CONFIGURATION

Interface: RS485
Protocol: Modbus RTU
Baud rate: 19200
Address range: 71 to 80, see identification label
Data format: 8N1

MEASUREMENT VALUES RECORDED

E_AH_REL	Humidity relative
E_AP_REL	Air pressure relative
E_W_D	Wind direction
E_AT	Air temperature
E_W_S	Wind speed
E_RF_ABS	Precipitation absolute
E_RF_I	Precipitation / hour
E_AH_ABS	Humidity absolute
E_AP_ABS	Air pressure absolute

Further information: www.meteocontrol.com