

INTELLIGENT HUMIDITY AND TEMPERATURE TRANSMITTERS WITH RS485, RS232 SERIAL OUTPUT

temperature
relative humidity
dew point temperature
absolute humidity
specific humidity
mixing ratio
specific enthalpy

Transmitter T3311



- Applications:
- server rooms
- telecommunication devices
- warehouses
- glasshouses
- manufacturers
- museums, archives, galleries
- air-conditioned rooms
- weather stations

Measured temperature, relative humidity, dew point temperature, absolute humidity, specific humidity, mixing ratio or specific enthalpy is converted to digital serial output with the RS485 or RS232 link parameters. Large dual line LCD for simultaneous display of temperature and relative humidity, or other calculated humidity interpretation is an advantage. Computerized design ensures maximum long term stability and fail indication. The transmitter works with ModBus communication protocol or with Advantech ADAM compatible protocol. Protocol is user selectable in special configuration mode by means of the PC. Other communication protocols are available. Serial link enables to read actual readings and modify transmitter configuration. Instrument works always in slave mode, i.e. responds only to master device query. Transmitters have the address space available from 0 to 255. The T3311 RS232 transmitter can be powered directly from the PC port or from external ac/dc adapter. State-of-the-art capacitive polymer sensor excels in mechanical stress, temperature shock, dew resistance as well as in large linearity range and low hysteresis. Air humidity transmitters are designed for use in non-aggressive environment.

TECHNICAL PARAMETERS

Temperature sensor:	RTD Pt1000-3850ppm/°C
Operating temperature range of the case:	-30 to +70 °C, with switched OFF LCD display up to +80 °C
Accuracy of temperature measurement:	±0.4 °C
Measuring air relative humidity range:	0 to 100%
Accuracy:	±2.5%RH from 5 to 95% at 23 °C
Accuracy and range of dew point temperature output:	±1.5 °C at ambient temperature < 25 °C and RH>30%, range -60 to +80 °C
Accuracy and range of absolute humidity output:	±3g/m ³ at ambient temperature T < 40 °C, range 0 to 400 g/m ³
Accuracy and range of specific humidity output:	±2g/kg at ambient temperature T < 35 °C, range 0 to 550 g/kg
Accuracy and range of mixing ratio output:	±2g/kg at ambient temperature T < 35 °C, range 0 to 995 g/kg
Accuracy and range of specific enthalpy output:	± 3kJ/kg at ambient temperature T < 25 °C, range: 0 to 995 kJ/kg
Range of temperature compensation of RH sensor:	-30 to +125 °C
Power:	9 to 30 V DC, power consumption approximately 0.5W
Protection of the case with electronics and terminals:	IP65, IP40 sensors
Filtering ability of sintered bronze sensor cover:	0.025mm
Communication protocol:	ModBus and Advantech ADAM compatible protocol
Communication speed:	110 to 115200 Bd
Dimensions of T3411, T3311:	88 x 165 x 37
Warranty:	2 years

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TRANSMITTERS ARE AVAILABLE IN FOLLOWING MODELS:

TYPE	MEASUR. VALUE	MAXIMUM RANGE OF TEMPERATURE MEASUREMENT	STEM LENGTH	GALVANIC ISOLATION OF COMMUNICATION CIRCUITRY FROM POWER CIRCUITRY	NOTE
TRANSMITTERS WITH RS485 SERIAL OUTPUT					
T3411	RH+T	-30 to +80°C	75mm	yes	outdoor and indoor
T3413	RH+T	-30 to +125°C ¹⁾	150mm	yes	duct mount
T3417	RH+T	-30 to +125°C ¹⁾	700mm	yes	bar type
T3419	RH+T	-30 to +105°C ¹⁾ probe, cable+ 80°C	probe cable 1,2,4m	yes	T+RH probe with 1m cable. Cable lengths 2m or 4m available
TRANSMITTERS WITH RS232 SERIAL OUTPUT					
T3311	RH+T	-30 to +80°C	75mm	no	outdoor and indoor use

1) Maximum temperature only at the measuring end with sensors. Relative humidity at temperature over +85°C is limited in accordance with the graph at page 24. Near plastic case with electronics maximum temperature is +80°C.



Transmitter T3411



Transmitter T3419



Transmitter T3413

Included accessory:

Included is a calibration certificate from the manufacturer and instruction manual with the complete communication protocol description.

Transmitter T3311 with the RS232 output have included 1.6 meter cable for communication with RS232 computer port.

Free configuration program for transmitter adjustment is ready to download anytime from www.cometsystem.cz

Optional accessory - see further

Humidity transmitters T341x configured to ADAM protocol are directly compatible with sixteen channel Comet monitoring system MS2+, MS3+, MS4+.