

INTELLIGENT HUMIDITY AND TEMPERATURE TRANSMITTERS WITH ETHERNET INTERFACE

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



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

Ethernet sensor is designed for measurement of temperature, relative humidity, dew point temperature, absolute humidity, specific humidity, mixing ratio or specific enthalpy. Large dual line LCD for simultaneous display of temperature and relative humidity, or other calculated humidity interpretation is an advantage. Display is possible to switch off. Ethernet probe contains control circuitry in a durable plastic case and T+RH sensors on a cable in a filter with stainless steel mesh.

State-of-the-art capacitive polymer sensor ensures excellent calibration long term stability, inertia against water and condensation. Humidity transmitter is designed for use in non-aggressive environment.

Ethernet interface enables to control transmitter from the PC. Following communication features are supported:

MODES OF COMMUNICATION	
ModBus:	ModBus protocol enables to read measured values, set alarm limits, adjust the probe, read firmware version.
Telnet:	Port 9999 enables to set alarm limits (lower and upper limits for T, RH, Tdp, hysteresis and time delay), e-mail addresses, SNMP addresses, probe description, refresh of www pages (10s to 65535s), select type of www pages, set storing interval to history (10s to 65535s), enable each communication channel. Capacity of the history memory is 100 sets of T+RH+another computed value. Password protection of this port is enabled. Automatic IP address assignment from DHCP server is also enabled.
WWW pages:	User selectable design of www pages enabling to display curves of measurement history. User can design the look of www pages and select values to display.
SNMP:	It is possible to read actual values and alarm limits. In case of alarm creation warning message (trap) is sent to addresses defined by the user (maximum three addresses).
E-mail:	In case of alarm creation warning e-mail message is sent to addresses defined by the user (maximum three addresses).

COMMON TECHNICAL PARAMETERS	
Temperature operating range of case with electronics:	-30 to +80 °C
Temperature operating range of LCD display:	readable to operating temperature +70 °C, it is recommended to switch OFF the LCD over +70 °C
Protection:	IP30
LAN connection:	connector RJ-45
Power:	9-30Vdc, maximum consumption 200mA
Power connector:	co-axial, diameter 5 x 2.1 mm
Mechanical dimensions of the case (W x H x D):	88 x 98 x 37 mm
Warranty:	2 years

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TECHNICAL PARAMETERS - temperature, humidity transmitter T3511

Measured value:	relative humidity + temperature
Maximum temperature measuring range:	-30 to +105 °C probe, cable +80 °C max, optionally with cable up to +105 °C
Accuracy of temperature measurement:	±0.4 °C
Air relative humidity range:	0 to 100%
Accuracy of relative humidity measurement:	±2.5% relative humidity 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 +105 °C
Protection of the case with electronics and terminals:	IP40
Filtering ability of sensor cover:	0.025mm
Note:	T+RH probe with 1m cable. Cable lengths 2m or 4m available optionally.

TECHNICAL PARAMETERS - temperature transducer T4511

Measured value:	temperature
Maximum temperature measuring range:	-200 to +600 °C, accuracy ±0.2 °C
Note:	temperature transducer for Pt1000/3850ppm probes

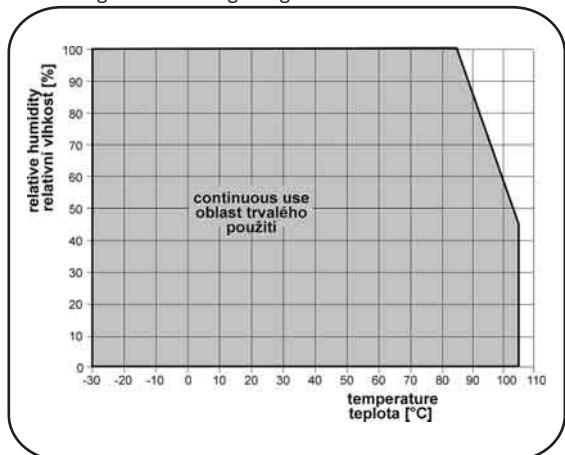
Model T3511



Model T4511



Figure: Working range of Ethernet sensor



Included accessory:

Calibration certificate from the manufacturer, instruction manual.
Free configuration program for transmitter adjustment is ready to download anytime from www.cometsystem.cz

Optional accessory: see further

* Relative humidity at temperature over +85 °C is limited in accordance with the graph. Near plastic case with electronics maximum temperature is +80 °C.