# TEMPERATURE, HUMIDITY, BAROMETRIC PRESSURE TRANSMITTERS
## with Ethernet interface

**temperature * barometric pressure * relative humidity * dew point temperature * absolute humidity * specific humidity * mixing ratio * specific enthalpy**


Transmitter
T3511, T7511


Barometer T2514


Transducer T4511

### APPLICATIONS

- server rooms
- telecommunication devices
- warehouses
- glasshouses
- manufacturers
- museums, archives, galleries
- air-conditioned rooms

Ethernet sensor is designed for measurement of temperature, barometric pressure, relative humidity, dew point temperature, absolute humidity, specific humidity, mixing ratio or specific enthalpy. Large dual line LCD for simultaneous display of temperature, pressure or relative humidity or other calculated humidity interpretation is an advantage. Display is possible to switch off. State-of-the-art capacitive polymer sensor ensures excellent calibration long term stability, inertia against water and condensation. Transmitter is designed for use in non-aggressive environment.

Transmitter can be controlled by means of the PC. The following communication modes 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+Tdp values. 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). |

| TECHNICAL PARAMETERS | |
|---|---|
| Accuracy of temperature measurement: | ±0.4˚C |
| Supported temperature units: | degrees Celsius, degrees Fahrenheit |
| Measuring range of relative humidity: | 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: | ±1,5 ˚C at ambient temperature T < 25˚C and RH>30%, range -60 to +80 ˚C |
| Accuracy of absolute humidity measurement: | ±3g/m3 at ambient temperature T < 40˚C, range 0 to 400 g/m3 |
| Accuracy of specific humidity measurement: | ±2g/kg at ambient temperature T < 35˚C, range 0 to 550 g/kg |
| Accuracy of mixing ratio measurement: | ±2g/kg at ambient temperature T < 35˚C, range 0 to 995 g/kg |
| Accuracy of specific enthalpy measurement: | ± 3kJ/kg at ambient temperature T < 25˚C, range: 0 to 995 kJ/kg |

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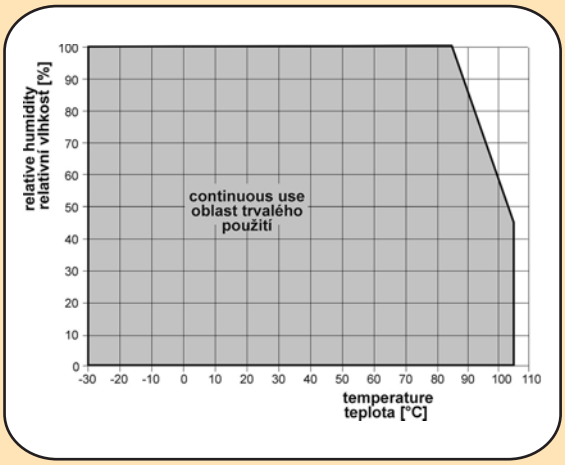
| TECHNICAL PARAMETERS - continuance | |
|---|---|
| Accuracy and range of barometric pressure: | ±1.3hPa at 23˚C, range 600 to 1100hPa |
| Supported pressure units: | hPa, kPa, mbar, mmHg, inHg, $inH_2O$, PSI, $oz/in^2$ |
| Operating temperature range of the case: | -30 to +80˚C |
| Operating temperature range of LCD display: | readable to +70˚C, it is recommended to switch OFF the LCD over +70˚C |
| Range of temper. compensation of RH sensor: | -30 to +105˚C |
| Filtering ability of sensor cover: | 0.025mm |
| Protection: | case with electronics IP30, T+RH probe IP40 |
| LAN connector: | RJ-45 connector |
| Power: | 9-30Vdc, maximimun consumption 200mA |
| Power connector: | co-axial, diameter 5.5 x 2.1 mm |
| Mechanical dimensions of the case (W x H x D): | 88 x 98 x 37 mm |
| Warranty: | two years |

## AVAILABLE MODELS OF TRANSMITTERS:

| TYPE | MEASURED VALUE | MAXIMUM MEASURING RANGE OF TEMP.,PRESSURE | DESCRIPTION |
|---|---|---|---|
| **T4511** | temperature | -200 to +600˚C | **Temperature transducer** for Pt1000/3850ppm, accuracy ±0.2˚C |
| **T2514** | barometric pressure | 600 to 1100hPa<br>accuracy: ±1,3hPa at 23˚C | **Barometer** - Reading and pressure output in these units:<br>hPa, kPa, mbar, mmHg, inHg, $inH_2O$, PSI, $oz/in^2$ |
| **T3511** | temperature humidity | -30 to +105˚C* probe, cable + 80˚C max, optionally with cable up to +105˚C | **Thermometer-hygrometer.**<br>T+RH probe with 1m cable. Cable lengths 2m or 4m available optionally.<br>Measured values are also converted to other humidity interpretation - dew point temperature, absolute humidity, specific humidity, mixing ratio or specific enthalpy. |
| **T7511** | temperature humidity barometric pressure | -30 to +105˚C* probe, cable + 80˚C max, optionally with cable up to +105˚C<br><br>Pressure: 600 to 1100hPa<br>accuracy: ±1,3hPa at 23˚C | **Thermometer-hygrometer-barometer.**<br>T+RH probe with 1m cable. Cable lengths 2m or 4m available optionally.<br><br>Measured values are also converted to other humidity interpretation - dew point temperature, absolute humidity, specific humidity, mixing ratio or specific enthalpy.<br><br>Reading and pressure output in these units:<br>hPa, kPa, mbar, mmHg, inHg, $inH_2O$, PSI, $oz/in^2$ |

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




**Included accessory:**
**Calibration certificate** from the manufacturer, instruction manual.
Free configuration program for transmitter adjustment is ready to download anytime.

**Optional accessory:**
- see further