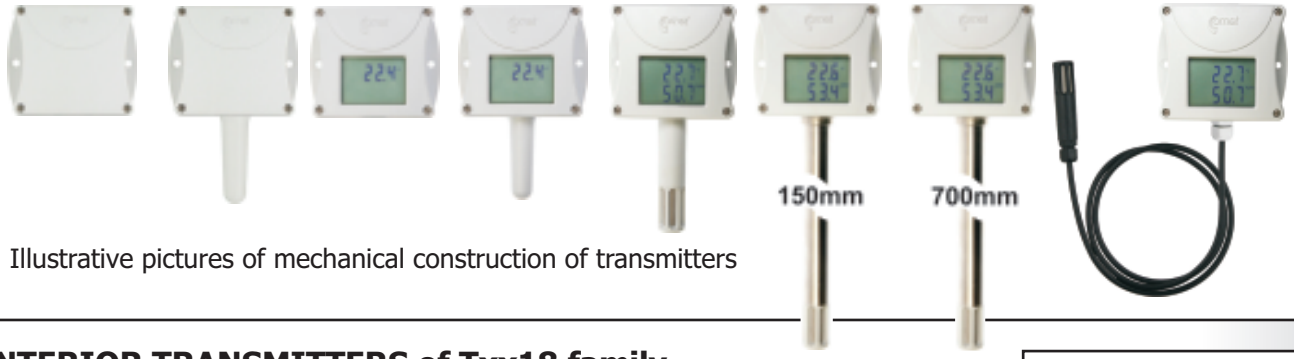
INDUSTRIAL TRANSMITTERS of Txxxx, Pxxxx family:

MEASURED VALUE /OUTPUT	4 to 20mA	0 to 10V	RS485	RS232	Ethernet
temperature	**P0120** figure 2 page 42	**T4211** figure 3 page 47	**T0410** figure 4 page 49	**T0310** figure 4 page 51	**P86xx** figure 2 page 53
	Px1x1 figure 1 page 42		**T4411** figure 3 page 49	**T4311** figure 3 page 51	**P85xx** figure 2 page 55
	T0110 figure 4 page 43				**T0510** figure 4 page 57
	T4111 figure 3 page 43				**T4511** figure 3 page 59
humidity	**T1110** figure 5 page 43				
atmospheric pressure	**T2114** figure 3 page 45	**T2214** figure 3 page 45	**T2414** figure 3 page 49	**T2314** figure 3 page 51	**T2514** figure 3 page 59
temperature+humidity	**T3110** figure 5 page 43	**T0210** figure 5 page 47	**T3411** figure 5 page 49	**T3311** figure 5 page 51	**T3510** figure 5 page 57
	T3113 figure 6 page 43	**T0213** figure 6 page 47	**T3413** figure 6 page 49	**T3313** figure 6 page 51	**T3511** figure 8 page 59
	T3117 figure 7 page 43	**T0211** figure 8 page 47	**T3417** figure 7 page 49	**T3319** figure 8 page 51	
	T3111 figure 8 page 43		**T3419** figure 8 page 49		
temperature+humidity +atmospheric pressure			**T7410** figure 5 page 49	**T7310** figure 5 page 51	**T7510** figure 5 page 57
			T7411 figure 8 page 49	**T7311** figure 8 page 51	**T7511** figure 8 page 59
CO_2	**T5140** figure 3 page 46	**T5240** figure 3 page 47	**T5440** figure 3 page 49	**T5340** figure 3 page 51	**T5540** figure 3 page 57
	T5141 figure 8 page 46	**T5241** figure 8 page 47	**T5441** figure 8 page 49	**T5341** figure 8 page 51	**T5541** figure 8 page 59
temperature+humidity+ CO_2			**T6440** figure 5 page 49	**T6340** figure 5 page 51	**T6540** figure 5 page 57

figure 1 figure 2 figure 3 figure 4 figure 5 figure 6 figure 7 figure 8



Illustrative pictures of mechanical construction of transmitters

INTERIOR TRANSMITTERS of Txx18 family

MEASURED VALUE / OUTPUT	4 to 20mA page 63	0 to 10V page 63	RS485 page 65	RS232 page 65
temperature	T0118	T0218	T0418	T0318
atmospheric pressure	T2118	T2218		
temperature + humidity	T3118	T3218	T3418	T3318
temperature + humidity + atmospheric pressure			T7418	T7318

TEMPERATURE AND HUMIDITY TRANSMITTERS with 0-10V output

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

Transmitter T0213

Transmitter T0210

Transmitter T0211, T0211P

Transmitter T0213D - duct mount

Programmable temperature and humidity transmitters are equipped with temperature and relative humidity sensors. Measured values are also converted to other humidity interpretation - dew point temperature, absolute humidity, specific humidity, mixing ratio or specific enthalpy. Degrees Celsius and Fahrenheit are user selectable. Transmitters are available in wall-mount, duct-mount and bar types. Also types with T+RH probe on a cable are available. Transmitter contains a control circuitry in a durable plastic case with connection terminals and sensors in a stainless steel mesh filter. Humidity transmitters are also available with two 0-10V outputs. Configuration of outputs and output range are user adjustable. Large dual line LCD for simultaneous display of T+RH, or other humidity interpretation is an advantage. Display is possible to switch off. Computerized design ensures temperature compensation of the humidity sensor and fail indication. State-of-the-art capacitive polymer sensor ensures excellent calibration long term stability, inertia against water and condensation. Transmitters are designed for use in non-aggressive environment.

TECHNICAL PARAMETERS

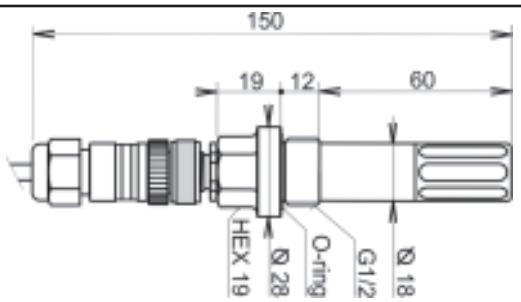
Relative humidity operating range:	0 to 100%
Accuracy of relative humidity output:	±2.5% relative humidity from 5 to 95% at 23°C
Accuracy of temperature output:	±0.4°C from -30 to +100°C, ±0.4% from reading over +100°C
Accuracy of temperature output of T4111:	±0.15°C + 0.1% from adjusted output span (without temperat. probe)
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
Temperature operating range of the case:	-30 to +80°C
Temperature operating range of the LCD display:	readable to +70°C,recommended to switch off LCD over +70°C
Range of temperature compensation of RH sensor:	-30 to +125°C
Voltage outputs:	0-10V, dual-output models have common ground, galvanically unisolated
Configuration of outputs and output range:	user adjustable from the PC
Filtering ability of the humidity sensor cover:	0.025mm
Power:	15-30Vdc, maximum consumption 20mA
Dimensions of the case with electronics (W x H x D):	89 x 73 x 39.5 mm
Protection of the case with electronics:	IP65 electronics, IP40 sensors

TRANSMITTERS ARE AVAILABLE IN THE FOLLOWING MODELS:

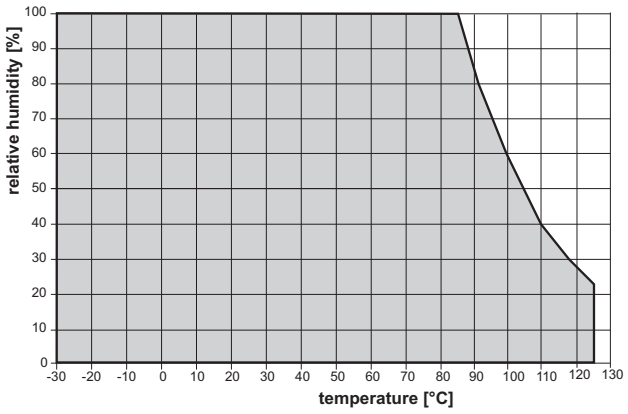
MODEL	MEASUR. VALUE	MAXIMUM RANGE OF TEMPERATURE MEASUREMENT	STEM LENGTH	OUTPUT 1 [2]	OUTPUT 2 [2]	NOTE
T4211	T	-200 to +600°C	-	-200to+600°C	-	Pt1000 trandsducer, adjustable range
T0210	RH+T	-30 to +80°C	75mm	0-100%RH [2]	-30 to +80°C [2]	outdoor and indoor use
T0213	RH+T	-30 to +125°C [1]	150mm	0-100%RH [2]	-30 to+125°C [2]	duct mount
T0211	RH+T	-30 to +105°C [1] probe including cable	probe cable 1,2,4m	0-100%RH [2]	-30 to+105°C [2]	T+RH probe with 1m cable. Diameter 18mm, length 90mm. Cable lengths 2m or 4m available.
T0211P	RH+T up to 25bars	-30 to +105°C [1] probe including cable	probe cable 1,2,4m	0-100%RH [2]	-30 to+105°C [2]	Compressed air up to 25bars. T+RH metal probe with 1m cable. Cable lengths 2m or 4m available. Diameter 18mm, length 110mm, thread G1/2.

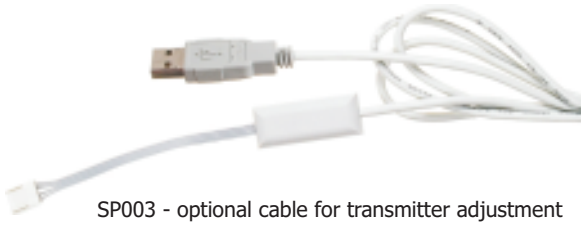
1) Maximum temperature only at the measuring end with sensors. Maximum temperature +105°C for T0211 with cable probe is allowed also for the cable. Relative humidity at temperature over +85°C is limited in accordance with the graph. Near plastic case with electronics maximum temperature is +80°C.

2) Any measured value - temperature, relative humidity, dew point temperature, absolute humidity, specific humidity, mixing ratio or specific enthalpy can be assigned to each output of dual output transmitters. Also identical value can be assigned to both outputs.
Outputs are adjusted to maximum range from the manufacturer. Output range is user adjustable from the PC by means of the optional cable SP003 - see photo. Free configuration program TSensor for transmitter adjustment is ready to download anytime from www.cometsystem.cz.
If different adjustment of outputs and output ranges are required, please specify required output values (RH, T, Tdp, ..) and required ranges.
Ordering example: Transmitter T0210, output 1: RH 10 to 90%, output 2: temperature 0 to 35°C

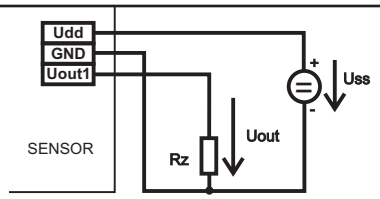


T0211P transmitter T+RH, dewpoint metal probe for compressed air up to 25 bars

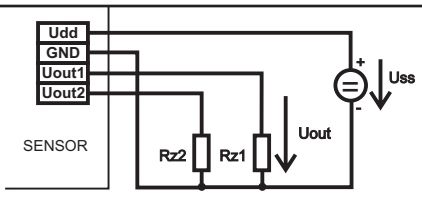




SP003 - optional cable for transmitter adjustment



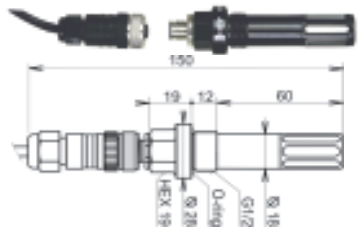
Application wiring of transmitter with one 0-10V output



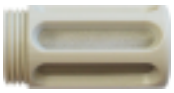
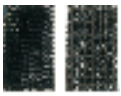
Application wiring of transmitter with two 0-10V outputs

Included accessory:
Traceable calibration certificate from the manufacturer, instruction manual. Calibration certificate with declared metrological traceability of etalons is based on requirements of EN ISO/IEC 17025 standard.
Free program TSensor for configuring of the transmitter is ready to be downloaded from www.cometsystem.cz.
Other optional accessory: see further

OPTIONAL ACCESSORIES FOR HUMIDITY TRANSMITTERS

New - probe for compressed air	Order code	
	**TxxxxP** **Hxxx1P**	Optional temperature, humidity, dew-point probe designed for compressed air measurement up to 25 bars. Cable lengths 1, 2 or 4m available. Length 110mm, diameter 18mm, G1/2 thread. Available with TxxxxP, HxxxxP transmitters.
	**SH-PP**	Flow chamber for compressed air measurement up to 25 bars - stainless steel DIN 1.430. Inlet and outlet connection - G1/8 thread. Humidity probe connection - G1/2 thread. Screw-coupling not included.
	**TxxxxL** **HxxxxL**	Transmitter version with watertight male connector IP67 Lumberg RSFM4 instead of cable gland for easy connection/disconnection of the output. Specify please your order with letter L behind model code - e.g. T3110L or H3020L
	**K1427**	Female connector ELKA 4012PG7 for TxxxxL, HxxxxL transmitters with male connector Lumberg for easy connection/disconnection of the output. Cable is easily connected to screw terminals of the connector. IP67 protection.
	**without LCD**	Transmitter version with blind lid without LCD. Specify please the requirement in your order.
 	**OEM**	Transmitters are also available without Comet logo as OEM products. Specify please the requirement in your order. Minimum order of OEM transmitters without Comet logo is 100 pcs.
	**F8000**	Solar radiation shield for transmitters with T+RH probe on a cable.

OPTIONAL ACCESSORIES FOR HUMIDITY TRANSMITTERS

	Order code	
	F5200	grey sensor cover with filter from stainless steel mesh, filtering ability 0,025mm
	F5200B	black sensor cover with filter from stainless steel mesh, filtering ability 0,025mm
	SP003	Cable for transmitter adjustment via USB port - for models Tx1xx, Tx2xx with analog outputs and models Hx0xx.
	PP4	flat plastic circular flange for duct mounting
	PP90	right-angled stain-less steel flange for wall mounting
	SP004	plastic gland for direct mounting of the humidity probe to a 29 mm diameter hole
	SP005	tool for easy wire connection to WAGO terminals Wago - for transmitters with current and voltage output
	SP006	tool for easy wire connection to WAGO terminals Wago - for Txxxx transmitters with serial output RS485 and RS232 and Hxxxx transmitters
	MD036	self adhesive Dual Lock for easy installation
	A1515	ac/dc adapter 230V-50Hz/12Vdc for Ethernet transmitters Tx5xx, Hx5xx - with co-axial connector
	A1510	ac/dc adapter 230V-50Hz/12Vdc for serial output Txxxx transmitters and Hxxxx transmitters - for connection to terminals
		**ACCESSORIES FOR EASY RELATIVE HUMIDITY CALIBRATION AND ADJUSTMENT**
	MD046	anodized duraluminum vessel for relative humidity calibration and adjustment
	HM023	set of 5 humidity standards 10% RH with 5 application pads
	HM024	set of 5 humidity standards 80% RH with 5 application pads