

DUOS HYGROTEMP TEMPERATURE AND HUMIDITY PROBE

TK-TRH-XX



TECHNICAL SPECIFICATIONS

REFERENCE

PA164520007	DUOS T+RH EXTERNAL PROBE TK-TRH-05
PA164520008	DUOS T+RH EXTERNAL PROBE TK-TRH-20

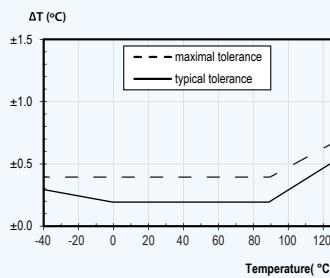
TEMPERATURE

Range -40 °C to 125 °C

Long-term drift <0,03 °C/year

Resolution 0,01°C

Accuracy ¹



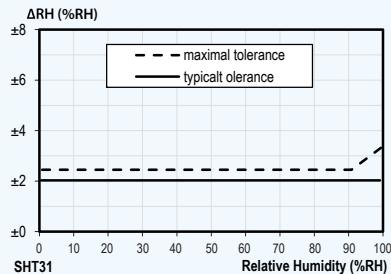
HUMIDITY

Range 0 to 100 %RH

Long-term drift ² <0,25 %RH/year

Resolution 0,01 %RH

Accuracy



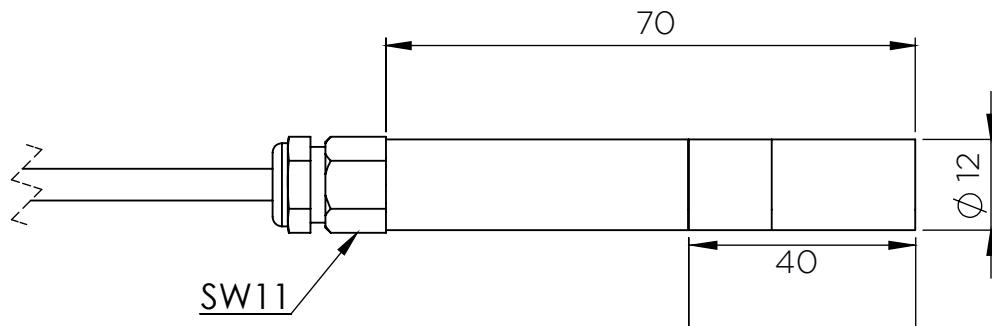
PROBE

Material	Stainless steel
Dimensions	70 x 12 mm
Connector	M8 4-pin male connector
Protection index	IP65
Cable length	0,5 [PA164520007] / 2,0 [PA164520008] meters
Cable material	PUR

OPERATING ENVIRONMENT ³

Ambient temperature range	-40 °C to 80 °C
Relative humidity	0 a 100 %RH

TECHNICAL DRAWINGS



CERTIFICATIONS AND APPROVALS

EN 61326-1:2013

EN 61326-2-3:2013

RELATED PRODUCTS AND COMPATIBILITY

DUOS Hygrotemp Firmware version >= 7.0.0.

DUOS IoT Gateway Software version >= 3.1.1.

¹ Typical tolerance of $\pm 0.2^{\circ}\text{C}$ [0 to 90°C].

² Typical value for operation in normal RH/T operating range. Maximum value is < 0.5 %RH/year. Higher drift values might occur due to contaminant environments with vaporized solvents, out-gassing tapes, adhesives, packaging materials, etc.

³ The sensor shows best performance when operated within recommended normal temperature and humidity range of 5 °C– 60 °C and 20 %RH – 80 %RH, respectively. Long-term exposure to conditions outside normal range, especially at high humidity, may temporarily see a creep effect of the RH signal [e.g. +3 %RH after 5h kept at >80 %RH]. After returning into the normal temperature and humidity range the sensor will slowly come back to calibration state by itself. Prolonged exposure to extreme conditions may accelerate ageing.

REVISION HISTORY

VERSION

E01B	Update resolution value from "Temperature" table Update of chart about accuracy from "Temperature" table Notes about sensor performance
E01C	Correction of temperature range measurement.

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