

Datasheet : X-Hum



Description

X-Hum is a new & modern intelligent temperature and humidity transmitter based on the revolutionary CMOSens technology. Resulting in a high accuracy at a competitive price.

X-Hum never needs to be calibrated, as the sensor itself is digital and calibrated from the factory.. 10 bit accuracy / small tolerances combined with great repeatability in different environments makes it ideal for high precision temperature and humidity transmitters.

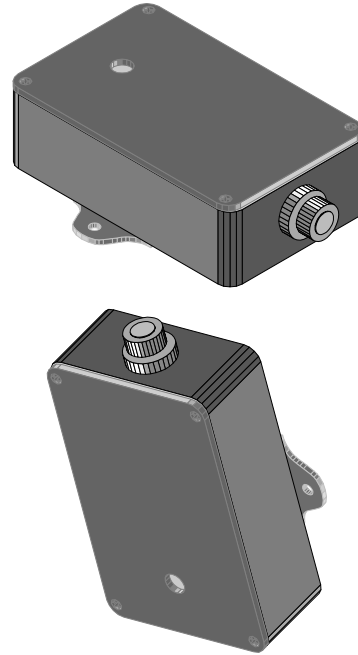
X-Hum is available in both a **digital** and **analogue** version, with outputs for both temperature and humidity.

X-Hum in analogue version will have a standard industry interface, with AC/DC supply, common ground and 0-10V on the outputs.

X-Hum in a digital version comes with a RS485 interface, 5V supply and supplies temperature and humidity on a simple protocol.

X-Hum is enclosed in a Polycarbonate cabinet, with separate lid and sealing, that makes the unit IP67 tight. The sensor itself is protected from a PP+PTFE protective cap and an O-ring

Picture



Technical data X-Hum Digital

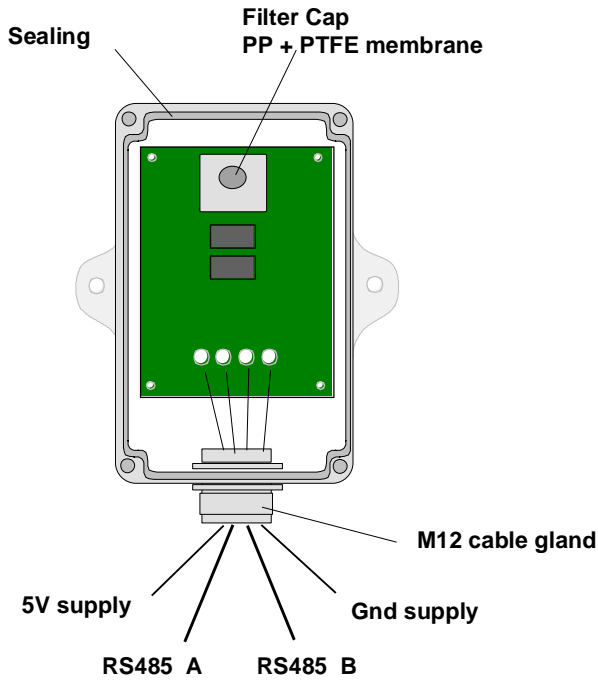
- 5V= +/-10% supply voltage
- Max 5 mA supply current
- Temperature output :
 - Range : -40°C to +60°C
 - Resolution : 0.1°C
 - Accuracy : +/-0.5° C in 0-40°C
 - Accuracy : +/-1.5°C from -40°C to +60°C
 - Repeatability : 0.1°C
 - Response time : 10 sec
- Humidity output :
 - Range :0-100°C
 - Resolution : 0.1% RH
 - Accuracy : +/- 2% in 10-90% RH
 - Accuracy : +/- 4% in 0-100% RH
 - Repeatability : +/- 0.1% RH
 - Response time : 10 sec
 - Nonlinearity : < 1% RH
 - Hysteresis : +/- 1% RH
 - Long term stability : < 1% RH/year
- Output mode :
 - Digital RH 0-100% RH / 10 bit
 - Digital TEMP -40°C to +60°C / 10 bit
 - RS485 interface, unidirectional
- Material base part: polycarbonate, black
- Material lid polycarbonate, black, 4 screws
- Material sensor protective cap PP+ PTFE and O-ring
- Physical measures apr. 60 x 35 x 20 mm
- Cable gland M12 and screw terminals on PCB.

Technical data X-Hum Analogue

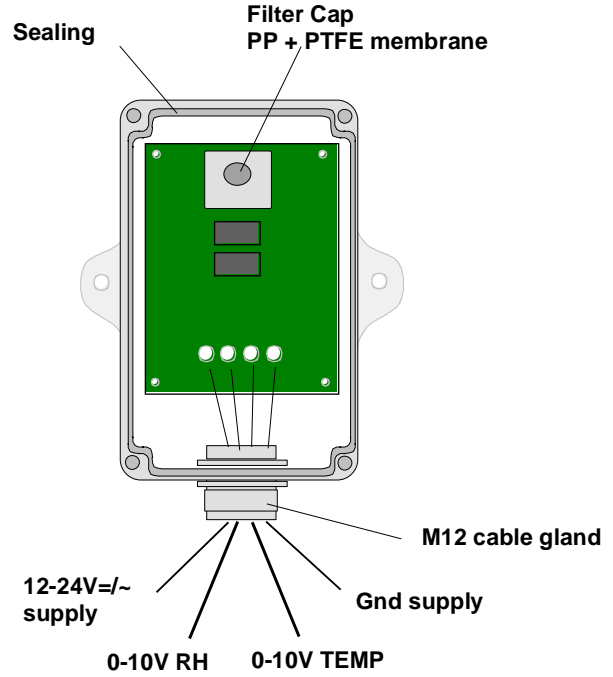
- 12-24V=~/~ supply voltage common ground
- Max 20 mA supply current
- Temperature output :
 - Range : -40°C to +60°C
 - Resolution : 0.1°C
 - Accuracy : +/-0.5° C in 0-40°C
 - Accuracy : +/-1.5°C from -40°C to +60°C
 - Repeatability : 0.1°C
 - Response time : 10 sec
- Humidity output :
 - Range :0-100°C
 - Resolution : 0.1% RH
 - Accuracy : +/- 2% in 10-90% RH
 - Accuracy : +/- 4% in 0-100% RH
 - Repeatability : +/- 0.1% RH
 - Response time : 10 sec
 - Nonlinearity : < 1% RH
 - Hysteresis : +/- 1% RH
 - Long term stability : < 1% RH/year
- Output mode :
 - Analogue RH 0-100% RH / 0-10V max 10mA
 - Analogue TEMP -40°C to +60°C / 0-10V max 10mA
- Material base part: polycarbonate, black
- Material lid polycarbonate, black, 4 screws
- Material sensor protective cap PP+ PTFE and O-ring
- Physical measures apr. 60 x 35 x 20 mm
- Cable gland M12 and screw terminals on PCB.

Connections

X-Hum Digital



X-Hum Analogue



Dimensions

