S040

.SUTO

Be smart. **Measure it.**

Atmospheric Sensor

The SUTO S040 Atmospheric Sensor is a reliable and accurate instrument for simultaneous measurement of temperature, humidity and air pressure. With its multi-parameter capabilities and flexible options, it is designed to meet the diverse needs of various industrial applications.
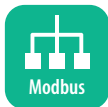
ALL IN ONE
Temperature, humidity, atmospheric pressure

EASY INSTALLATION
Incl. wall mounting clip

MODBUS/RTU INTERFACE
Digital data readout

COMPACT DESIGN
Installation in tight space

Benefits

- Measure Temperature, humidity and atmospheric pressure, altitude simultaneously.
- Optional displays units are available
- Intelligent filtering algorithm ensures accuracy and stability
- Modbus/RTU digital data output
- High protection class IP66 for harsh environmental conditions
- Simple installation and efficient handling

Application

- Compressor efficiency: FAD calculation for compressor tests
- HVAC & Industrial: Optimise air quality and conditions in manufacturing and warehousing.
- Labs & Automation: Supports controlled environments and intelligent building integration.

Technical Data

Measurement

Temperature

Measuring range	-40 °C ... 80 °C
Accuracy	±0.5 °C
Resolution	0.1 °C
Response time (T_{50})	1 ... 5 s

Humidity

Measuring range	0 ... 100 % RH
Accuracy	±2 % RH
Resolution	0.1 % RH
Response time (T_{50})	1 ... 5 s

Atmospheric pressure

Measuring range	30 ... 120 KPa
Accuracy	±100 Pa
Resolution	1 Pa
Response time (T_{50})	1 ... 5 s

Signal / Interface & Supply

Power supply	5 ... 24VDC
Communication protocol	Modbus/RTU
Hardware interface	RS-485

Operating conditions

Ambient temperature	-40 °C ... 80 °C
Ambient humidity	0 ... 100 % RH
Medium	Air, N_2, CO_2
Operating Pressure	Atmospheric pressure (0.3 ... 120 kPa)

General data

Electrical connection	M12 connector, 4 pole
Housing material	SS304
Protection class	IP66/67
Weight	75 g
Approvals	CE
Transport Temperature	-55 °C ... 80 °C
Storage temperature	-55 °C ... 80 °C

S040 Dimensions

40mm ±1mm   46mm ±1mm   14mm ±0.5mm
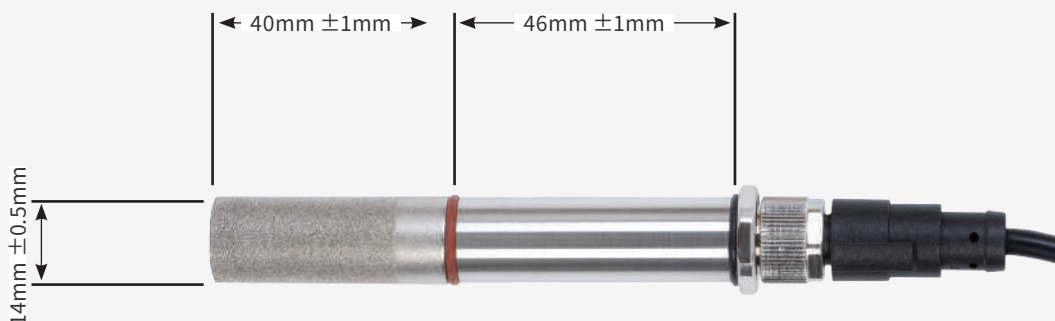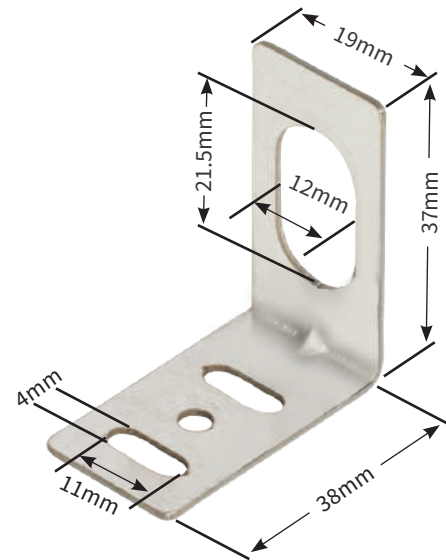
Metarial: SS304
Thickness: 1mm

Ordering

Please use the following table to assist in placing your order with our sales staff.

S040 Atmospheric Sensor	
Order No.	**Description**
S654 0400	S040 Atmospheric sensor, measures temperature, humidity and atmospheric pressure, Modbus/RTU (RS-485), Supply: 5 ... 24 VDC, incl. M12 cable with open ends, 5m

Optional display units: S330, S331,S335

Please contact SUTO iTEC for further information on how to connect the S040 Atmospheric Sensor to a display unit via Modbus/RTU.