E+E

your partner
in sensor
technology.

Product Catalogue

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E+E Elektronik is an Austrian sensor specialist in the fields of humidity, dew point, moisture in oil, CO_2, air velocity, flow, pressure and temperature. Handheld measuring devices, humidity calibration systems and calibration services complete the comprehensive product portfolio. The aim of E+E is to support its partners in the area of energy savings and process optimization. The main applications for E+E products are in industrial measurement technology as well as HVAC and building automation.

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Sensors

Sensors by E+E Elektronik are renowned for their high quality, outstanding measuring accuracy and excellent long-term stability. They are used worldwide in a wide variety of fields.

The main areas of application are in industrial measurement technology, HVAC and building automation but also many other applications such as meteorology, the pharmaceutical and food industries.

Humidity and Temperature Sensor for Intrinsically Safe Applications

EE300Ex-M1

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 180 °C (-40 ... 356 °F)
Pressure range	0.01 ... 20 bar (1.5 ... 300 psi)
Analogue output	4 - 20 mA
Ex certifications	ATEX, IECEx, FM, NEPSI, KCs, TIIS

Humidity and Temperature Sensor for High Humidity and Chemically Polluted Conditions

HTS801

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-80 ... 180 °C (-112 ... 356 °F)
Pressure range	0.01 ... 300 bar (0.15 ... 4 350 psi)
Analogue output	0 - 1 V / 0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Digital interface	RS485 with Modbus RTU Ethernet PoE with Modbus TCP

High-End Humidity and Temperature Sensor

EE310

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 180 °C (-40 ... 356 °F)
Pressure range	0.01 ... 20 bar (0.15 ... 300 psi)
Analogue output	0 - 1 V / 0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Digital interface	RS485 with Modbus RTU Ethernet PoE with Modbus TCP

Heated Humidity and Temperature Probe for Meteorological Applications

EE260

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-60 ... 60 °C (-76 ... 140 °F)
Sensing element	E+E proprietary coating Dual heating system for high humidity operation
Analogue output	0 - 1 V / 0 - 2.5 V / 0 - 5 V / 0 - 10 V
Digital interface	Modbus RTU

Intrinsically Safe Humidity and Temperature Sensor

EE100Ex

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 60 °C (-40 ... 140 °F)
Sensing element protection	E+E proprietary coating
Analogue output	4 - 20 mA
Ex certifications	ATEX, IECEx, KCs, CSA
Types	Wall mount / remote probes fixed or pluggable

Humidity and Temperature Module for OEM Applications

EE99-1

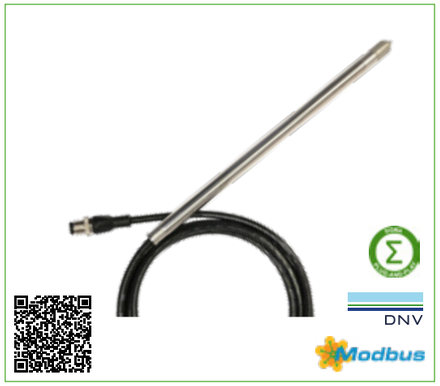
Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-50 ... 180 °C (-58 ... 356 °F) Short term up to 200 °C (392 °F)
Sensing element protection	E+E proprietary coating
Output	Humidity: 4 - 20 mA T passive

Humidity

Humidity and Temperature Sensor for Demanding Applications

EE23

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 180 °C (-40 ... 356 °F)
Sensing element protection	E+E proprietary coating
Analogue output	0 - 10 V 0 - 20 mA / 4 - 20 mA
Enclosure material	Polycarbonate or Metal (AlSi9Cu3)



Digital Humidity and Temperature Probe

HTP501

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 120 °C (-40 ... 248 °F)
Sensing element protection	E+E proprietary coating and sensor leads protection
Enclosure material	Stainless steel
Digital interface	Modbus RTU
Pressure range	0.01 ... 20 bar (0.15 ... 300 psi)

Humidity and Temperature Sensor for Continuous High Humidity

EE211

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 60 °C (-40 ... 140 °F)
Sensing element	E+E proprietary coating Heated for high humidity operation
Analogue output	0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Digital interface	Modbus RTU

Humidity

Humidity and Temperature Sensor with Interchangeable Probes

EE220

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 80 °C (-40 ... 176 °F)
Sensing element protection	E+E proprietary coating
Analogue output	0 - 1 V / 0 - 10 V 4 - 20 mA
Enclosure material	Polycarbonate or Metal (AlSi9Cu3)

New

Modular Humidity and Temperature Sensor for Demanding Climate Control

HTS401

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 80 °C (-40 ... 176 °F)
Sensing element	E+E proprietary coating RapidX intelligent exchangeable sensing module
Analogue output	0 - 5 V / 0 - 10 V 4 - 20 mA
Types	Wall mount / duct mount / remote probe
Digital interface	Modbus RTU

High Precision Miniature Humidity and Temperature Probe

EE08

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 80 °C (-40 ... 176 °F)
Analogue output	0 - 1 V / 0 - 2.5 V / 0 - 5 V / 0 - 10 V / T passive
Digital interface	E2
Supply	4.5 - 15 V DC / 7 - 30 V DC

Humidity

Humidity and Temperature Probe with Digital Interface

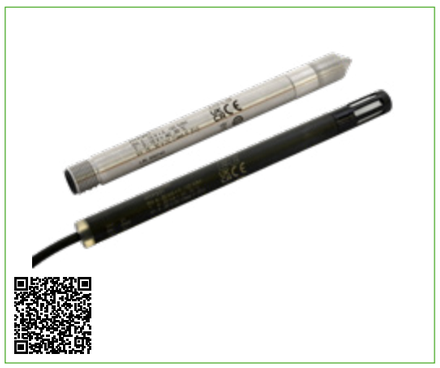
EE072

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 80 °C (-40 ... 176 °F)
Sensing element protection	E+E proprietary coating
Enclosure material	Polycarbonate or stainless steel
Digital interface	Modbus RTU / CANopen

HVAC Humidity and Temperature Sensor

EE160

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 60 °C (-40 ... 140 °F)
Sensing element protection	E+E proprietary coating
Analogue output	0 - 10 V 4 - 20 mA / T passive
Digital interface	Modbus RTU
Types	Wall mount / duct mount

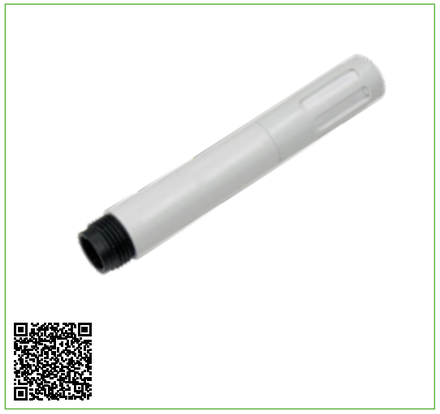


Humidity and Temperature Probe with Analogue Output

HTP201

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 80 °C (-40 ... 176 °F)
Sensing element protection	E+E proprietary coating
Enclosure material	Polycarbonate or stainless steel
Output	0 - 1 V / 0 - 5 V / 0 - 10 V 4 - 20 mA / T passive

Humidity



Humidity and Temperature Probe with Digital Interface

EE07-M1

Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 80 °C (-40 ... 176 °F)
Sensing element protection	E+E proprietary coating
Enclosure material	Polycarbonate or stainless steel
Digital interface	E2
Supply	Standard: 3.8 - 5.5 V DC With energy saving option: 2.7 - 5.5 V DC

Humidity and Temperature Room Sensor

HTS201

Measuring range – Humidity	0 ... 100 %RH, non-condensing
Measuring range – Temperature	-30 ... 60 °C (-22 ... 140 °F)
Analogue output	0 - 10 V 4 - 20 mA
Digital interface	Modbus RTU

Compact Humidity and Temperature Sensor

EE040

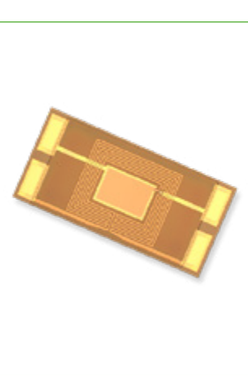
Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-40 ... 85 °C (-40 ... 185 °F)
Sensing element protection	E+E proprietary coating
Analogue output	0 - 2.5 V
Supply	5 V DC

Humidity

Condensation Monitor

EE046

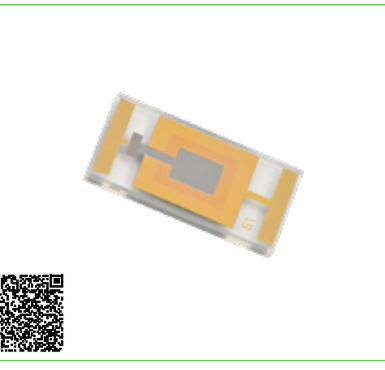
Measuring range – Humidity	10 ... 100 %RH
Switching point	90 ±3 %RH
Sensing element protection	E+E proprietary coating
Output	Switch / max. 24 V AC/DC / 1 A
Mounting	Wall, pipe or snap-on mount



Heated Humidity Sensing Element for Radiosondes

HMC03M

Nominal capacitance C_0 (at 30 °C / 86 °F)	120 ± 40 pF
Sensitivity	0.41 pF / %RH
Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-80 ... 60 °C (-112 ... 140 °F)
Response time t_{63}	< 8 s at -30 °C / < 11 s at -40 °C

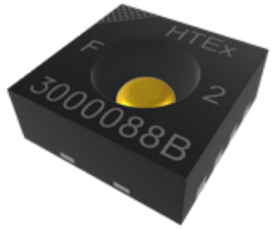


Very Fast Humidity Sensing Element for Radiosondes

HC103M2

Nominal capacitance C_0 (at 30 °C / 86 °F)	160 ± 40 pF
Sensitivity	0.55 pF / %RH
Measuring range – Humidity	0 ... 100 %RH
Measuring range – Temperature	-80 ... 60 °C (-112 ... 140 °F)
Response time t_{63}	< 3 s at 23 °C / < 15 s at -20 °C

Humidity



High Precision Digital Sensing Element for Humidity and Temperature

HTE501

Measuring range	0 ... 100 %RH / -40 ... 135 °C (-40 ... 275 °F)
Accuracy	up to ± 1.8 %RH (incl. hysteresis) up to ± 0.2 °C (0.36 °F)
Features	Constant current heater (max. 288 mW); Dew Point output
Digital interface	I^2C with 8 selectable addresses and direct 16 bit integer output
Supply	2.35-3.60 V
Sensing element protection	E+E proprietary coating

Cost Optimised Digital Sensing Element for Humidity and Temperature

HTE301

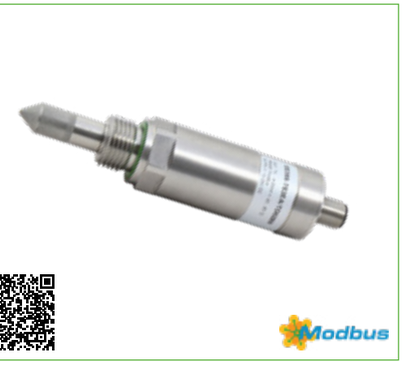
Measuring range	0 ... 100 %RH / -40 ... 125 °C
Accuracy	up to ± 1.8 %RH (incl. hysteresis) up to ± 0.2 °C (0.36 °F)
Feature	Constant current heater (max. 16 mW)
Digital interface	I^2C with 4 selectable addresses and 16 bit unsigned integer
Supply	2.35-3.60 V
Sensing element protection	E+E proprietary coating

Dew Point

Dew Point Sensor

EE371

Measuring range – Dew point	-60 ... 60 °C (-76 ... 140 °F Td)
Working range – Temperature	-40 ... 70 °C (-40 ... 158 °F)
Pressure rating	100 bar (1450 psi)
Analogue output	0 - 10 V 4 - 20 mA



Dew Point Sensor

EE355

Measuring range – Dew point	-60 ... 60 °C Td (-76 ... 140 °F Td)
Working range – Temperature	-40 ... 70 °C (-40 ... 158 °F)
Pressure rating	80 bar (1200 psi)
Analogue output	4 - 20 mA
Digital interface	Modbus RTU

Dew Point Sensor

EE354

Measuring range – Dew point	-20 ... 50 °C Td (-4 ... 122 °F Td)
Working range – Temperature	40 ... 60 °C (-40 ... 140 °F)
Pressure rating	80 bar (1200 psi)
Analogue output	4 - 20 mA
Digital interface	Modbus RTU

Moisture in Oil

High-End Moisture in Oil Sensor

EE360

Measuring range – Water activity	0 ... 1 aw
Measuring range – Temperature	-40 ... 180 °C (-40 ... 356 °F)
Pressure rating	20 bar (300 psi)
Analogue output	0 - 1 V / 0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Digital interface	RS485 with Modbus RTU Ethernet PoE with Modbus TCP

Moisture in Oil Sensor

EE381

Measuring range – Water activity	0 ... 1 aw
Measuring range – Temperature	-40 ... 120 °C (-40 ... 248 °F)
Pressure rating	100 bar (1450 psi)
Analogue output	0 - 10 V 4 - 20 mA

Moisture in Oil Sensor

EE364

Measuring range – Water activity	0 ... 1 aw
Measuring range – Temperature	-40 ... 100 °C (-40 ... 212 °F)
Pressure rating	20 bar (300 psi)
Analogue output	4-20 mA
Digital interface	Modbus RTU

Moisture in Oil

Moisture in Oil Insertion Probe with Modbus RTU

MOP301

Measuring range – Water activity	0 ... 1 aw
Measuring range – Temperature	-40 ... 120 °C (-40 ... 248 °F)
Enclosure material	Stainless steel
Pressure rating	20 bar (300 psi)
Digital Interface	Modbus RTU
Sensing element protection	Sensor leads protection

Carbon Dioxide

Modular Probe for CO_2, Humidity, Temperature and Ambient Pressure

EE872

Measuring range – CO_2	0 ... 2 000 / 5 000 / 10 000 ppm 0 ... 3 / 5 %
Measuring range – Humidity	0 ... 100 %RH
Measuring range – Pressure	700 ... 1100 mbar (10 ... 16 psi)
Measuring range – Temperature	-40 ... 60 °C (-40 ... 140 °F)
Analogue output	0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Digital interface	Modbus RTU

CO_2 Sensor for Railway Applications

EE8915

Measuring range – CO_2	0 ... 2 000 / 5 000 / 10 000 ppm
Working range – Temperature	-40 ... 60 °C (-40 ... 140 °F)
Analogue output	0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Compliance	Railway standards
Protection rating	IP65 / NEMA 4X

CO_2 Sensor for Demanding Applications

EE820

Measuring range – CO_2	0 ... 2 000 / 5 000 / 10 000 ppm
Working range – Temperature	-20 ... 60 °C (-4 ... 140 °F)
Analogue output	0 - 10 V 4 - 20 mA
Protection rating	IP54

Carbon Dioxide

CO_2 and Temperature Duct Sensor

EE850

Measuring range – CO_2	0 ... 2000 / 10000 ppm
Measuring range – Temperature	-20 ... 60 °C (-4 ... 140 °F)
Analogue output	0 - 10 V 4 - 20 mA
Digital interface	Modbus RTU
Protection rating	Enclosure: IP65/NEMA 4X Probe: IP20

CO_2, Temperature and Humidity Room Sensor

CDS201

Measuring range – CO_2	0 ... 2000 / 5000 ppm
Measuring range – Humidity	0 ... 100 %RH, non-condensing
Measuring range – Temperature	-30 ... 60 °C (-22 ... 140 °F)
Analogue output	0 - 10 V 4 - 20 mA
Digital interface	Modbus RTU

Sensing Module for CO_2, Humidity, Temperature and Ambient Pressure

EE894

Measuring range – CO_2	0 ... 2000 / 5000 / 10000 ppm
Measuring range – Humidity	0 ... 95 %RH (non condensing)
Measuring range – Pressure	700 ... 1100 mbar (10 ... 16 psi)
Measuring range – Temperature	-40 ... 60 °C (-40 ... 140 °F)
Digital interface	I^2C / E2
Supply	4.75-7.5 V DC

Carbon Dioxide

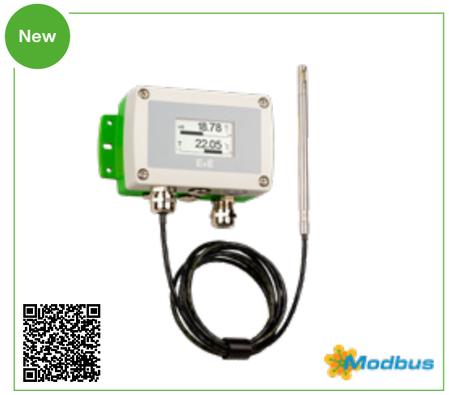
Miniature Sensing Module for CO_2, Temperature and Ambient Pressure

EE895

Measuring range – CO_2	0 ... 2000 / 5000 / 10000 ppm
Measuring range – Pressure	700 ... 1100 mbar (10 ... 16 psi)
Measuring range – Temperature	-40 ... 60 °C (-40 ... 140 °F)
Digital interface	I^2C / UART
Supply	3.3-5 V DC

Air Velocity

New



High Precision Air and Gas Velocity Sensor

AVS701

Measuring range – Air Velocity	0 ... 2 / 15 / 40 m/s (0 ... 400 / 3000 / 8000 ft/min)
Measuring range – Temperature	-40 ... 140 °C (-40 ... 284 °F)
Pressure rating	10 bar (150 psi)
Analogue output	0 - 10 V 0 - 20 mA / 4 - 20 mA
Core feature	Resistance against H2O2
Digital interface	Modbus RTU

Air Velocity and Temperature Sensor for Laminar Flow

EE680

Measuring range – Air Velocity	0 ... 2 m/s (0 ... 400 ft/min)
Measuring range – Temperature	-20 ... 70 °C (-4 ... 158 °F)
Analogue output	0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Digital interface	Modbus RTU
Core feature	Resistance against H2O2
LED Ring	Status indication

Air Velocity Sensor for HVAC Applications

EE650

Measuring range – Air velocity	0 ... 10 / 15 / 20 m/s (0 ... 2000 / 3000 / 4000 ft/min)
Working range – Temperature	-25 ... 50 °C (-13 ... 122 °F)
Analogue output	0 - 10 V 4 - 20 mA
Digital interface	Modbus RTU

Air Velocity

Low Air Velocity Sensor

EE660

Measuring range – Air velocity	0 ... 1 / 1.5 / 2 m/s (0 ... 200 / 300 / 400 ft/min)
Working range – Temperature	-25 ... 50 °C (-13 ... 122 °F)
Analogue output	0 - 10 V 4 - 20 mA
Digital interface	Modbus RTU

Low Air Velocity Probe

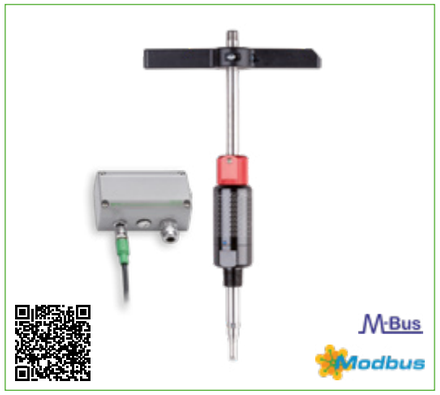
EE576

Measuring range - Air velocity	0 ... 1 / 2 m/s (0 ... 200 / 400 ft/min)
Working range – Temperature	-20 ... 60 °C (-4 ... 140 °F)
Analogue output	0 - 5 V / 0 - 10 V

HVAC Air Velocity Probe

EE671

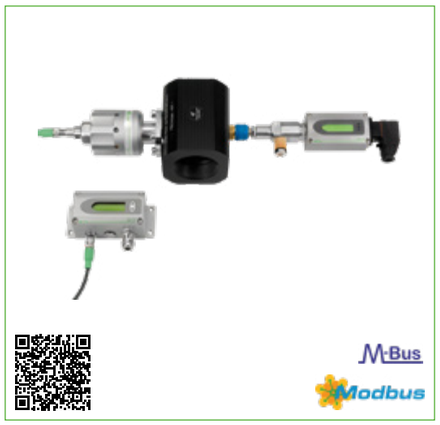
Measuring range – Air velocity	0 ... 5 / 10 / 15 / 20 m/s (0 ... 1000 / 2000 / 3000 / 4000 ft/min)
Working range – Temperature	-20 ... 60 °C (-4 ... 140 °F)
Analogue output	0 - 1 V / 0 - 5 V / 0 - 10 V
Digital interface	Modbus RTU



Insertion Flow Sensor for Compressed Air and Gases

EE776

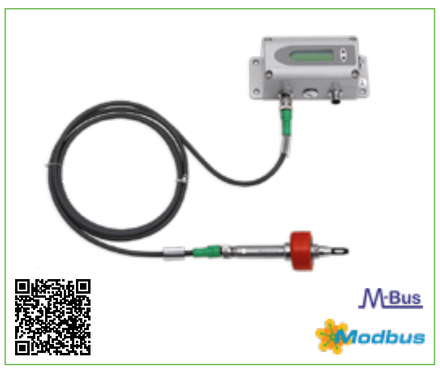
Pipe diameter	DN50 up to DN700 (2" - 28")
Measuring range – Flow	1.7 ... 263 350 m^3/h (1.0 ... 154 919.6 SCFM)
Pressure rating	16 bar (230 psi)
Protection	With patented non-return protection
Output	0 - 10 V 0 - 20 mA / 4 - 20 mA Pulse / Switch
Digital interface	Modbus RTU / M-Bus



Multifunctional Flow Sensor for Compressed Air and Gases

EE772

Pipe diameter	DN40 up to DN80 (1 1/2" - 3")
Measuring range – Flow	2.26 ... 1400 m^3/h (1.33 ... 823.6 SCFM)
Pressure rating	40 bar (580 psi)
Gauge mounting block	With hot tap valve for installation and removal without interruption of the flow
Output	0 - 10 V 0 - 20 mA / 4 - 20 mA Pulse / Switch
Digital interface	Modbus RTU / M-Bus



Flow Sensor for Compressed Air and Gases

EE771

Pipe diameter	DN15 up to DN50 (1/2" - 2")
Measuring range – Flow	0.32 ... 1400 m^3/h (0.19 ... 823.6 SCFM)
Pressure rating	16 bar (230 psi)
Output	0 - 10 V 0 - 20 mA / 4 - 20 mA Pulse / Switch
Digital interface	Modbus RTU / M-Bus

Inline Flow Sensor for Compressed Air and Gases

EE741

Pipe diameter	DN15 up to DN50 (1/2" - 2")
Measuring range – Flow	0.2 - 848.2 m^3/h (0.12 - 493.35 SCFM)
Pressure rating	16 bar (230 psi)
Output	0 - 20 mA / 4 - 20 mA Pulse / Switch
Digital interface	Modbus RTU / M-Bus / IO-Link

Pressure

Low Differential Pressure Sensor

EE610

Measuring range – Pressure	0 ... 25 / 50 / 75 / 100 Pa ±25 / ±50 / ±75 / ±100 Pa
Accuracy	±0.5 Pa = ±0.5 % FS
Working range – Temperature	-20...60 °C (-4...140 °F)
Feature	Auto-zero function
Analogue output	0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Digital interface	Modbus RTU

Differential Pressure Sensor

EE600

Measuring range – Pressure	0 ... 250 / 500 / 750 / 1000 Pa 0 ... 2 500 / 5 000 / 7 500 / 10 000 Pa ±250 / ±500 / ±750 / ±1000 Pa ±2500 / ±5000 / ±7500 / ±10000 Pa
Accuracy	±0.5 % FS
Working range – Temperature	-20 ... 60 °C (-4...140 °F)
Feature	Auto-zero function
Analogue output	0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Digital interface	Modbus RTU

Temperature

Intrinsically Safe Temperature Sensor

EE300Ex-M3

Measuring range – Temperature	Remote probe: -70 ... 200 °C (-94 ... 392 °F) Wall mount: -40 ... 60 °C (-40 ... 140 °F)
Accuracy at 20 °C (68 °F)	±0.2 °C (±0,36 °F)
Pressure range	0.1 ... 20 bar (1.45 ... 300 psi)
Analogue output	4 - 20 mA
Protection rating	IP65 / NEMA 4

High-End Temperature Sensor

EE310-M3T24

Measuring range – Temperature	-40 ... 180 °C (-40 ... 356 °F)
Accuracy at 20 °C (68 °F)	±0.2 °C (±0.36 °F)
Pressure range	0.01 ... 20 bar (0.15 ... 300 psi)
Analogue output	0 - 1 V / 0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Digital interface	RS485 with Modbus RTU Ethernet PoE with Modbus TCP

Temperature Probe with Modbus RTU

EE074

Measuring range – Temperature	Electronics: -40 ... 80 °C (-40 ... 176 °F) 70 & 155 mm probe: -40 ... 80 °C (-40 ... 176 °F) 305 mm probe: -70 ... 105 °C (-94 ... 221 °F)
Accuracy at 20 °C (68 °F)	±0.1 °C (±0.18 °F)
Digital interface	Modbus RTU
Protection rating	IP68 (electrical connection IP67)

Temperature

Room Temperature Sensor

TES201

Measuring range – Temperature	-30 ... +60 °C (-22 ... +140 °F)
Accuracy at 20 °C (68 °F)	±0.25 °C ... ±0.38 °C (±0.45 °F ... ±0.69 °F)
Analogue output	0 - 10 V 4 - 20 mA
Digital interface	Modbus RTU

Duct / Immersion Temperature Sensor

EE431

Measuring range – Temperature	Duct sensor: -40 ... 110 °C (-40 ... 230 °F) Immersion sensor: -40 ... 130 °C (-40 ... 266°F) Electronics: -40 ... 70 °C (-40 ... 158 °F)
Accuracy active output at 20 °C (68 °F)	±0.1 °C (±0.18 °F)
Analogue output	0 - 10 V 4 - 20 mA
Digital interface	Modbus RTU
Protection rating	IP65 / NEMA 4X
Probe length	65 - 300 mm (2.56 - 11.81“)

Temperature Sensor with Remote Probe

EE471

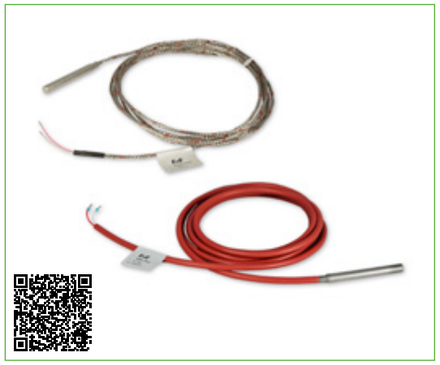
Measuring range – Temperature	Remote probe: -30 ... 105 °C (-22 ... 221 °F) Electronics: -30 ... 70 °C (-22 ... 158 °F)
Accuracy active output at 20 °C (68 °F)	±0.3 °C (±0.54 °F)
Analogue output	0 - 10 V 4 - 20 mA
Digital interface	Modbus RTU
Protection rating	Remote probe: IP67 / NEMA 4X Electronics: IP65 / NEMA 4X
Cable length	0.5 - 10 m (1.64 - 32.8 ft)

Temperature

Wall Mount Temperature Sensor

EE451

Measuring range – Temperature	-40 ... 70 °C (-40 ... 158 °F)
Accuracy active output at 20 °C (68 °F)	±0.1 °C (±0.18 °F)
Analogue output	0 - 10 V 4 - 20 mA
Digital interface	Modbus RTU
Protection rating	IP65 / NEMA 4X



Cable Temperature Sensor

EE462

Measuring range – Temperature	Glass fiber: 0 ... 350 °C (32 ... 662 °F) Silicone: -60 ... 180 °C (-76 ... 356 °F)
Protection rating	IP67
Insulation resistance at 20 °C (68 °F)	typ. >100 MΩ
Cable length	2 m / 3 m
Cable material	Glass fiber / silicone

Cable Temperature Sensor

EE461

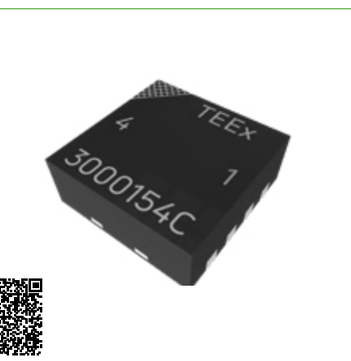
Measuring range – Temperature	-30 ... 105 °C (-22 ... 221 °F)
Protection rating	IP67 / NEMA 4X
Insulation resistance at 20 °C (68 °F)	typ. >100 MΩ
Cable length	0.5 - 6 m (1.6 - 19.7 ft)
Wiring	2-wire / 4-wire

Temperature

Temperature Probe with Digital Interface

EE07-M3

Measuring range – Temperature	-40 ... 80 °C (-40 ... 176 °F)
Accuracy at 20 °C (68 °F)	±0.1 °C (±0.18 °F)
Enclosure material	Polycarbonate or stainless steel
Digital interface	E2
Supply	Standard: 3.8 - 5.5 V DC With energy saving option: 2.7 - 5.5 V DC



High Precision Digital Temperature Sensing Element

TEE501

Measuring range	-40 ... 135 °C (-40 ... 275°F)
Accuracy	± 0.2 °C (0.36 °F)
Digital interface	I^2C
Supply	2.35-3.60 V

Cost Optimised Digital Temperature Sensing Element

TEE301

Measuring range	-40 ... 125 °C (-40 ... 257 °F)
Accuracy	± 0.2 °C (0.36 °F)
Digital interface	I^2C
Supply	2.35-3.60 V

Instruments & Systems

High Precision Humidity Calibrator

Humor 20

Operation principle	Dual pressure generator
Calibrator class	Primary standard
Calibration range	10 ... 95 %RH
Accuracy	±0.3 - 0.9 %RH
Stabilisation time	<3 min/measuring point

New

Multifunctional Hand-held Meter

Omniport 40

Supported probes	Relative humidity, temperature, CO_2, air velocity, moisture in oil, dew point
Modes	On-spot measurement, data logging & data collecting
Features	Oil library, connection of up to two probes
Protection rating	IP67
Power supply	4x AA rechargeable NiMH batteries

Host Device for Sensing Probes with Modbus RTU Interface

Sigma 05

Number of sensing probes (max.)	3
Number of measurands (max.)	5
Enclosure material	Polycarbonate or metal
Analogue output	0 - 1 V / 0 - 2.5 V / 0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Protection rating	IP65 / NEMA 4 X

Your Partner for Calibration

The monitoring of the measuring devices, their calibration and traceability are central topics of most quality assurance systems. With over 25 years of experience, The Designated Institute (BEV/E+E), the Accredited Calibration Laboratory according to DIN EN ISO/IEC 17025 (identification number AA0608) and the ISO 9001 calibration laboratory of E+E Elektronik offer manufacturer-independent calibrations for air velocity, carbon dioxide CO2, dew point, flow, humidity, pressure, temperature.

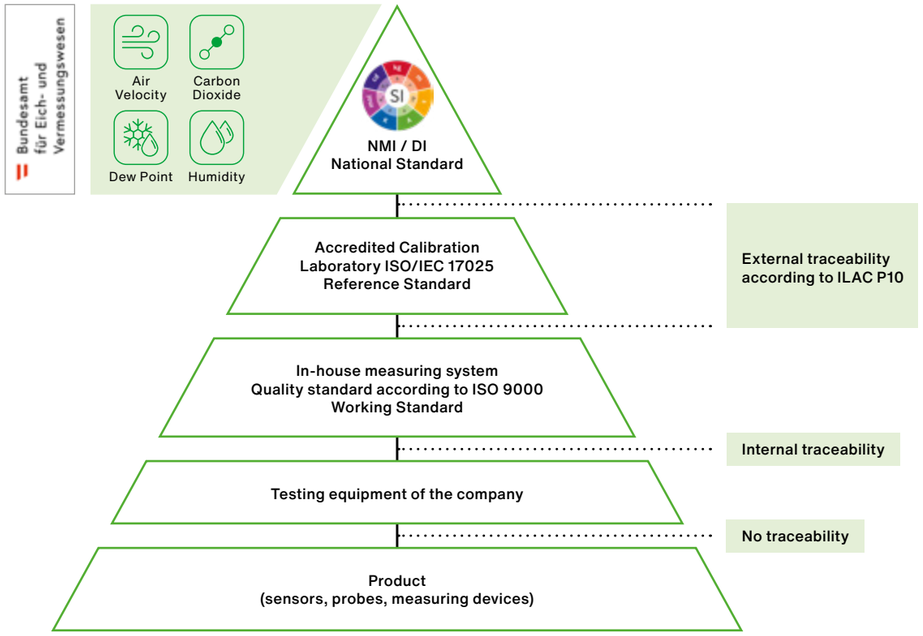
National Metrological Institute / Designated Institute

National Metrological Institutes (NMIs) or Designated Institutes (DIs) maintain the highest national standards and ensure that the measurements correspond to the international system of units (SI). NMIs and DIs participate in international comparative measurements with other NMIs and cooperate in technical committees to ensure that they are the top reference for measurement variables.
As highest measurement authority in the country, the NMI/DI owns highest level of expertise with respect to specific physical quantities. The NMI/DI can provide special calibration tasks as part of the internationally agreed calibration options (CMC data with CIPM MRA-Logo) published in the BIPM webpage.
The Designated Institute (BEV/E+E) is manufacturer independent and offers multi-brand calibration service for the following measurands:

- Air Velocity
- Carbon Dioxide CO_2
- Dew Point
- Humidity

Bundesamt für Eich- und Vermessungswesen

Calibration Hierarchy



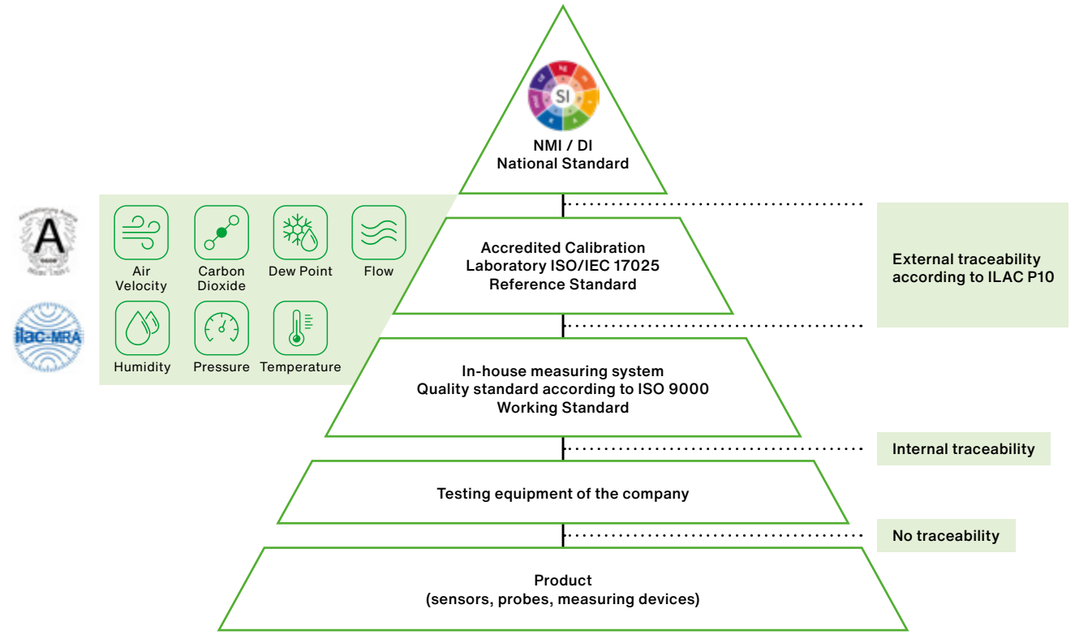
Your Partner for Calibration

Accredited Calibration Laboratory

The calibration laboratory of E+E Elektronik is accredited according to DIN EN ISO/IEC 17025, with identification number 0608, by Akkreditierung Austria / Federal Ministry of Labor and Economics. Accredited calibration certificates document the traceability of the measured values to national standards. The accreditation and the monitoring is performed by Akkreditierung Austria. Each issued accredited calibration certificate is approved by an authorized signatory. Calibration certificates from accredited laboratories are necessary for measuring devices (such as factory standards) when the measured values have to be traceable.

- Air Velocity
- Carbon Dioxide CO_2
- Dew Point
- Flow
- Humidity
- Pressure
- Temperature

Calibration Hierarchy



For detailed information www.eplusecal.com

ISO 9001 Calibration

An ISO 9001 calibration certificate documents the comparative measurement of a measuring instrument against high-quality reference devices. The comparison is performed in accordance with internal procedures that comply with quality management system according to ISO 9001 standard and provide information on the specimen's measuring accuracy. The reference devices are traceable to national standards, however, the calibration process is not accredited. Therefore, an ISO 9001 calibration is neither traceable nor internationally comparable.

An ISO 9001 certificate is recommended in applications where it is necessary to verify that the accuracy of the measuring instrument matches the original specifications on certain points, but traceability to international standards is not required by current regulations.
The E+E Elektronik customer service department is manufacturer independent and offers multi-brand ISO 9001 calibration service.

The customer service at E+E Elektronik headquarters in Engerwitzdorf (Austria), offers ISO 9001 calibration service for the following measurands:

- Air Velocity
- Dew Point
- Humidity
- Pressure
- Temperature

Upon request, on-site ISO 9001 calibration service is also available for the following measurands:

- Humidity
- Temperature

For detailed information www.epluse.com/iso9001cal

E+E Elektronik – Your Partner in Sensor Technology

E+E Elektronik GmbH, with headquarters in Engerwitzdorf, Austria, has been established in 1979 and is part of Dr. Johannes Heidenhain group.

Diverse.

E+E Elektronik is a leading manufacturer of sensors for a multitude of physical quantities and applications. Data loggers, hand-held meters as well as calibration systems and services round up the product portfolio.

Reliable.

Best quality made in Austria, high accuracy and outstanding long-term stability, together with advanced understanding of customer specific requirements are the main competitive advantages of E+E Elektronik.

Versatile.

Measuring devices from E+E Elektronik are used all over the world in most diverse industries such as building automation, meteorology, agriculture, food, pharmaceutical and process control.

Flexible.

With own clean room sensor manufacturing, in-house design of state-of-the-art electronics and highest competence in calibration, E+E Elektronik is the ideal partner for OEM customers.

Certified.

The E+E Elektronik quality assurance system is certified according to ISO 9001 and IATF 16949. The company also complies with the environmental standard ISO 14001. The in-house calibration laboratories are accredited according to DIN EN ISO/IEC 17025.

Global.

E+E Elektronik sales subsidiaries are located in China, Germany, France, India, Italy, Korea and the USA. Additionally, E+E Elektronik maintains a worldwide network of distribution partners.

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& Production Site

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your partner
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