

E+E

—
your partner
in sensor
technology.

**+ Product
Catalog**



+ Made in Austria



E+E Elektronik is an Austrian sensor specialist in the fields of humidity, dew point, moisture in oil, CO₂, 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



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	0.1 ... 20 bar (1.5 ... 290 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)
Measuring range - Pressure-tight probe	0.01 ... 300 bar (0.15 ... 4350 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 ... 290 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

+ Humidity



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)

+ 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)



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
Enclosure material	Stainless steel
Digital interface	Modbus RTU
Electrical connection	M 12 x 1 plug on cable



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 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

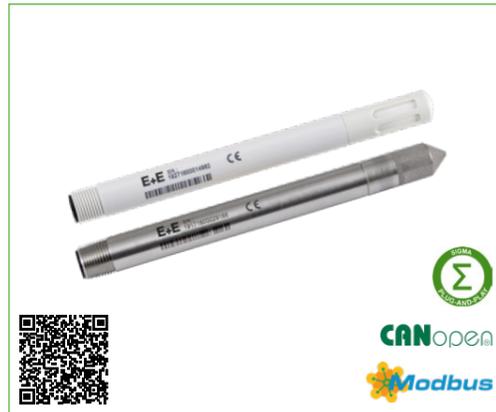


Modular Humidity and Temperature Sensor

EE212

Measuring range - Humidity	0 ... 100 %RH
Measuring range - Temperature	-40 ... 60 °C (-40 ... 140 °F)
Sensing element	E+E proprietary cating Interchangeable module with rapidX technology
Analogue output	0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Types	Wall mount / duct mount
Feature	With rapidX Technology
Digital interface	Modbus RTU

+ 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

+ Humidity



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 and Temperature Sensor for Demanding Climate Control

EE210

Measuring range - Humidity	0 ... 100 %RH
Measuring range - Temperature	-40 ... 60 °C (-40 ... 140 °F), Remote probe -40 ... 80 °C (-40 ... 176 °F)
Sensing element protection	E+E proprietary coating
Analogue output	0 - 5 V / 0 - 10 V 0 - 20 mA / 4 - 20 mA
Digital interface	Modbus RTU



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



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 Room Sensor

HTS201

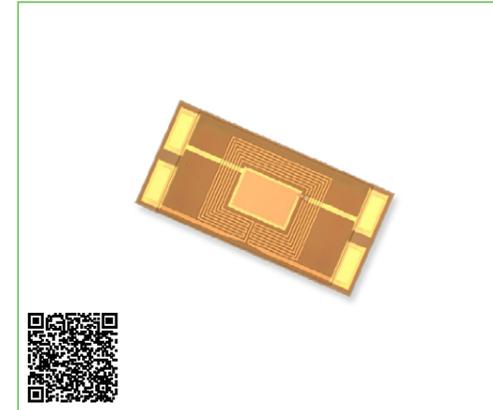
Measuring range - Humidity	0 ... 100 %RH, non-condensing
Measuring range - Temperature	-30 ... 60 °C (-22 ... 140 °F)
Analogue output	0 - 10 V 4 - 20 mA
Digital interface	Modbus RTU



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



Heated Humidity Sensing Element for Radiosondes

HMC03M

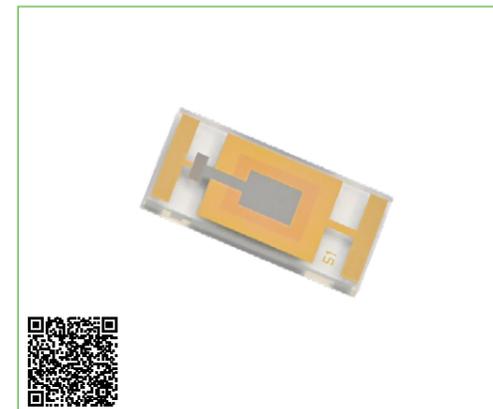
Nominal capacitance C_0 (at 30 °C / 86 °F)	120 ± 40 pF
Sensitivity	0.41 pF / % RH
Measuring range - Humidity	0 ... 100 % RH
Measuring range - Temperature	-80 ... 60 °C (-112 ... 140 °F)
Response time t_{63}	< 8 s at -30 °C / < 11 s at -40 °C



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



Very Fast Humidity Sensing Element for Radiosondes

HC103M2

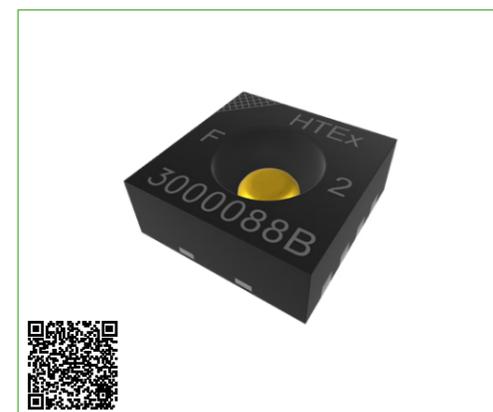
Nominal capacitance C_0 (at 30 °C / 86 °F)	160 ± 40 pF
Sensitivity	0.55 pF / % RH
Measuring range - Humidity	0 ... 100 % RH
Measuring range - Temperature	-80 ... 60 °C (-112 ... 140 °F)
Response time t_{63}	< 3 s at 23 °C / < 15 s at -20 °C



Digital Humidity and Temperature Sensing Module

EE03

Measuring range - Humidity	0 ... 100 % RH
Measuring range - Temperature	-40 ... 85 °C (-40 ... 185 °F)
Accuracy	± 3 % RH / ± 0.3 °C (± 0.54 °F)
Digital interface	E2 (2-wire)
Supply	2.5-5.5 V DC

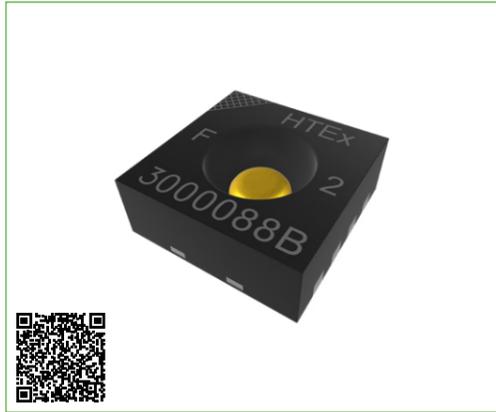


High Precision Digital Sensing Element for Humidity and Temperature

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 ² C with 8 selectable addresses and direct 16 bit integer output
Supply	2.35-3.60 V
Sensing element protection	E+E proprietary coating

+ Humidity

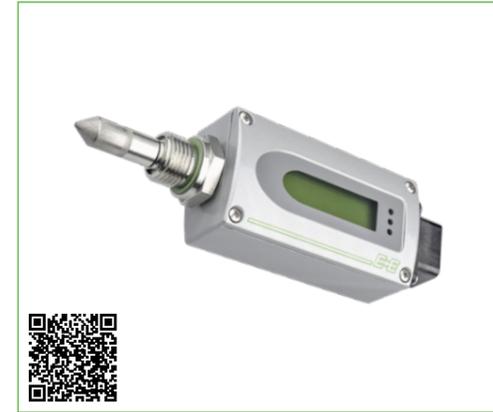


Cost Optimised Digital Sensing Element for Humidity and Temperature

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 ² C 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 (1160 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 (1160 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 (290 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 (290 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
Electrical connection	M 12 x 1 plug on cable
Digital Interface	Modbus RTU

+ Carbon Dioxide



Modular Probe for CO₂, Humidity, Temperature and Barometric Pressure

EE872

Measuring range - CO ₂	0 ... 2000 / 5000 / 10000 ppm 0 ... 3 / 5 %
Measuring range - Humidity	0 ... 100 %RH
Measuring range - Pressure	700 ... 1100 mbar (10.15 ... 15.95 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

+ Carbon Dioxide



CO₂ 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



CO₂ Sensor for Railway Applications

EE8915

Measuring range - CO ₂	0 ... 2000 / 5000 / 10000 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



CO₂, 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



CO₂ Sensor for Demanding Applications

EE820

Measuring range - CO ₂	0 ... 2000 / 5000 / 10000 ppm
Working range - Temperature	-20 ... 60 °C (-4 ... 140 °F)
Analogue output	0 - 10 V 4 - 20 mA
Protection rating	IP54



Sensing Module for CO₂, Humidity, Temperature and Barometric Pressure

EE894

Measuring range - CO ₂	0 ... 2000 / 5000 / 10000 ppm
Measuring range - Humidity	0 ... 95 % RH (non condensing)
Measuring range - Pressure	700 ... 1,100 mbar (10.15 ... 15.95 psi)
Measuring range - Temperature	-40 ... 60 °C (-40 ... 140 °F)
Digital interface	I ² C / E2
Supply	4.75-7.5 V DC

+ Carbon Dioxide



Miniature Sensing Module for CO₂, Temperature and Barometric Pressure

EE895

Measuring range - CO ₂	0 ... 2000 / 5000 / 10000 ppm
Measuring range - Pressure	700 ... 1,100 mbar (10.15 ... 15.95 psi)
Measuring range - Temperature	-40 ... 60 °C (-40 ... 140 °F)
Digital interface	I ² C / UART
Supply	3.3-5 V DC

+ Air Velocity



High Precision Air and Gas Velocity Sensor

AVS701 Available from spring 2025

Measuring range - Air Velocity	0 ... 2 / 10 / 40 m/s (0 ... 400 / 2000 / 8000 ft/min)
Measuring range - Temperature	-40 ... 140 °C (-40 ... 284 °F)
Pressure rating	10 bar (145 psi)
Analogue output	0 - 10 V 0 - 20 mA / 4 - 20 mA
Core feature	Resistance against H ₂ O ₂
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 H ₂ O ₂
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

+ Flow



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 (232 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 (232 psi)
Output	0 - 10 V 0 - 20 mA / 4 - 20 mA Pulse / Switch
Digital interface	Modbus RTU / M-Bus



**In-line 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 (232 psi)
Output	0 - 20 mA / 4 - 20 mA Pulse / Switch
Digital interface	Modbus RTU / M-Bus / IO-Link



**Low Differential Pressure Sensor
EE610**

Measuring range - Pressure	±25 Pa / ±50 Pa / ±100 Pa / 0...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 ... 2500 / 5000 / 7500 / 10000 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



Intrinsic 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 ... 290 psi)
Analogue output	4 - 20 mA
Protection rating	IP65 / NEMA 4

+ 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



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 ... 290 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



Duct and Immersion Temperature Sensor

EE431

Measuring range - Temperature	Duct sensor: -40 ... 110 °C (-40 ... 230 °F) Immersion sensor: -40 ... +130 °C (-40 ... 266 °C) 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 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 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 Mounted 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

+ Temperature



Temperature Probe with Digital Interface

EE07-M3

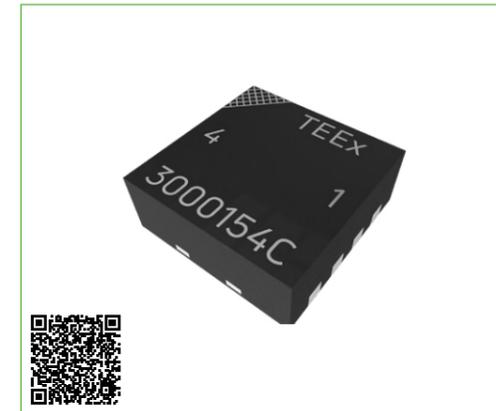
Measuring range - Temperature	-40 ... 80 °C (-40 ... 176 °F)
Accuracy at 20 °C (68 °F)	±0.1 °C (±0.18 °F)
Enclosure material	Polycarbonate or stainless steel
Digital interface	E2
Supply	Standard: 3.8 - 5.5 V DC With energy saving option: 2.7 - 5.5 V DC



Cable Temperature Sensor

EE462

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



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 ² C
Supply	2.35-3.60 V



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
Wiring	2-wire / 4-wire
Cable length	0.5 - 6 m (1.6 - 19.7 ft)



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 ² C
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



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. A calibration determines and documents the deviation of a measuring device from a reference.

Based on the agreements between the members of EA (European Cooperation for Accreditation) and ILAC (International Laboratory Accreditation Cooperation), calibration certificates issued by E+E are compliant to worldwide recognized standards. Special calibration for air velocity, gas concentration carbon dioxide and humidity measuring devices can be performed in the Designated Institute (DI).

E+E Elektronik is commissioned to maintain the national standards for humidity, air velocity and gas concentration carbon dioxide in Austria as Designated Institute (DI) on behalf of the „Bundesamt für Eich- und Vermessungswesen“ (BEV).

 Bundesamt für Eich- und Vermessungswesen

Designated Institute / NMI

Due to direct traceability with the DI / NMI (Designated Institute / National Metrology Institute), a NMI calibration certificate issued by the designated laboratory is of particular interest for devices employed by accredited calibration laboratories or other NMIs.

As highest measurement authority in the country, a designated laboratory own highest level of expertise with respect to specific physical quantities. As such the E+E designated laboratory can perform calibrations beyond the scope of the E+E accreditation.



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.

+ Calibration at the Highest Level

The National Metrological Institute (NMI) or Designated Institutes (DI) maintain the highest national measurement 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.

The measurement uncertainties of NMIs or DIs are not (or hardly) smaller than those of accredited top calibration laboratories, but can also be provided for special calibration tasks as part of the internationally agreed calibration options (CMC data with CIPMMRA-Logo) published in the BIPM (Bureau International des Poids et Mesures).

The E+E Accredited Calibration Laboratory issues ISO17025 traceable certificates for the following measurands:

Humidity Dew Point	Moisture in Oil CO ₂	Air Velocity Flow	Pressure Temperature
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 Bundesamt
für Eich- und
Vermessungswesen



 qualityaustria
SYSTEMZERTIFIZIERT
ISO 9001:2015 NR.00100/0
IATF 16949:2016 NR.00042/0



For detailed information www.eplusecal.com

+ E+E Elektronik – Your Partner in Sensor Technology

E+E Elektronik Ges.m.b.H., 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.

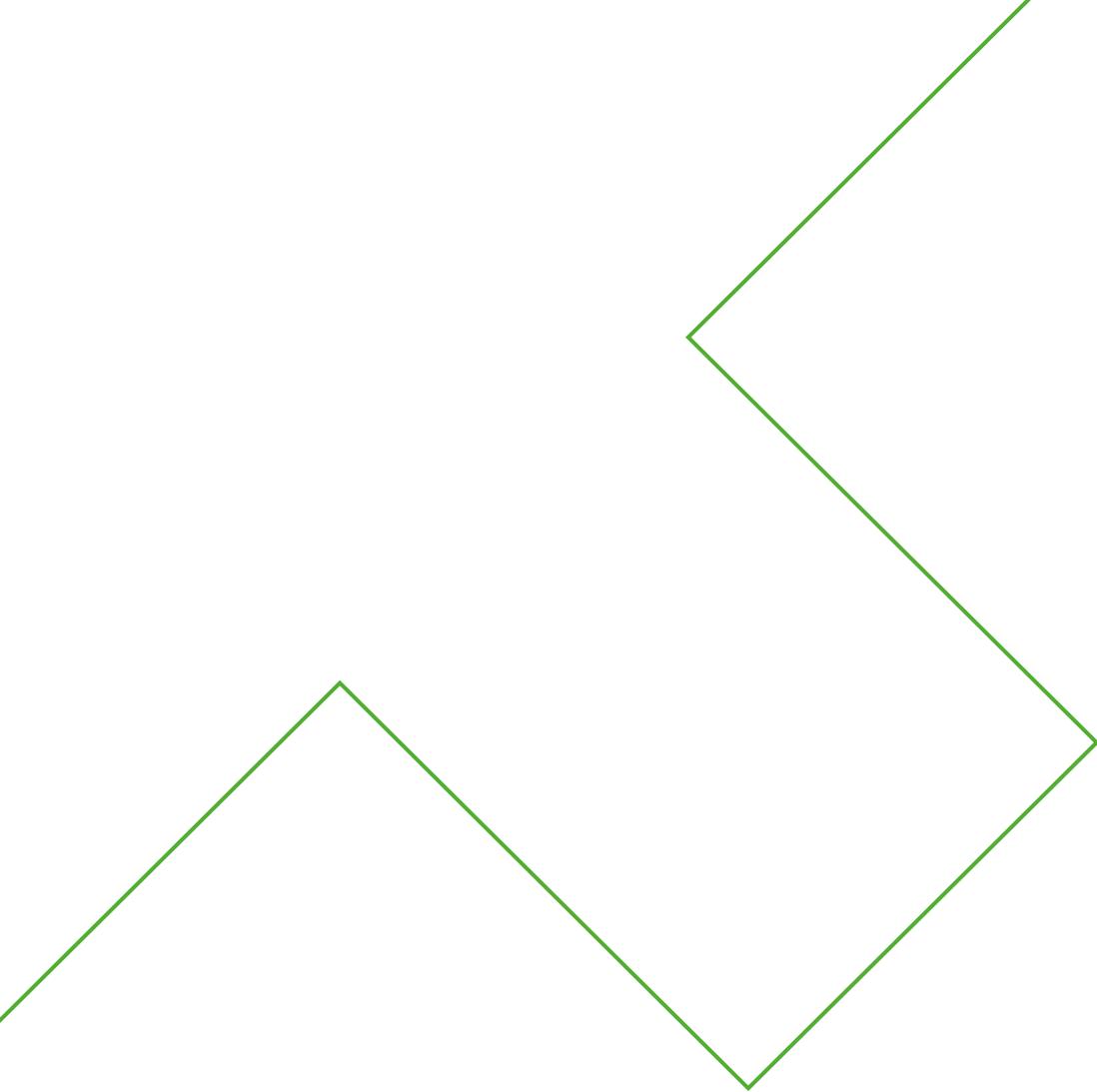
With own clean room sensor manufacturing, in-house design of state-of-the-art electronics and highest competence in calibration, E+E Elektronik is the ideal partner for OEM customers.

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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