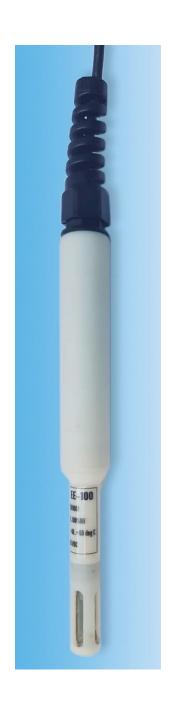


# EE-100 AMBIENT TEMPERATURE , RELATIVE HUMIDITY TRANSMITTER PROBE





### MAIN FEATURES

- Single Transmitter to measure Ambient Temperature and Relative Humidity.
- Ambient Temperature Range is -40 60 deg. C (typical).
- RH range o-100% (typical).
- Temperature Output voltage range o.ooVDC @ -40 deg.C to 1.ooVDC @ 60 deg. C.
- RH Output voltage range o.ooVDC @ o RH% to 1.ooVDC @ 100 RH%.
- Low power consumption
- Excellent long term stability

### **DESCRIPTION**

**EE-100** is an advanced transmitter for measuring Relative Humidity and Ambient Temperature with a high precision and high accuracy .

**EE-100** is combined Humidity and temperature probe for use in meteorology and similar demanding applications for example Weather Stations, tunnels, airports etc.

Except for the sensor element , EE-100 is protected against unintentional penetration of Humidity.

Its linear voltage output has been matched to the requirements of data collection and transmission systems.

**EE-100** is factory adjusted before delivering, for which reason checking upon reception of the instrument is not necessary as a rule. The probe is ready for a reliable measurements 5 sec after being switched on.

The **EE-100** provides an output signals for both Temperature and Humidity. For temperature the output voltage range is 0.00VDC @ -40 deg.C to 1.00VDC @ 60 deg.C. For Humidity the output voltage range is 0.00VDC @ 0 RH% to 1.0VDC @ 100 RH%.

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# TECHNICAL DATA

### <u>Ranges</u>

Temperature -40-60 deg. C. Relative Humidity 0-100 %

### <u>Output signal</u>

Temperature 0.00 VDC - 1.0 VDC Relative Humidity 0.00 VDC - 1.0 VDC

### Accuracy at 23 oC

Temperature +- 0.5 deg. C. Relative Humidity +- 3 RH%

# **Repeatability**

Temperature +- 0.1 deg. C. Relative Humidity +- 0.5 RH%

### Response time

 $\tau$  (63%) (5 sec typical)

### **Long Term Stability for Humidity**

Relative Humidity <0.5 RH% / Year

### **Input Power**

From 7VDC up to 30VDC (12VDC typical power).

### **Characteristic**

Linear

### **Isolation voltage**

500 Vac

## Storage temp.

-40-70°C



# **ELECTRICAL CONNECTIONS**

### **Cable Connection**

RED - Input Power 7 ... 30VDC . (12 VDC typical)

BLACK - Ground

WHITE - Ambient Temperature output voltage, RANGE (0.00VDC - 1.0VDC)

GREEN - Relative Humidity , RANGE ( 0.00VDC - 1.0VDC )

# HOW TO ORDER

### EE-100 - AA - BB - CC - DD-EE

AA – TEMPERATURE RANGE , PLEASE WRITE DIRECTLY -40 – 60 OC (TYPICAL)

BB-RH RANGE, PLEASE WRITE DIRECTLY 0%-100% (TYPICAL)

CC - OUTPUT VOLTAGE

TEMPERATURE : 0.0-+1.0 VDC (TYPICAL)
R. HUMIDITY % : -0.0-+1.0 VDC (TYPICAL)

OTHERS (PLEASE SPECIFY)

DD – SUPPLY VOLTAGE 12 VDC (TYPICAL)

EE – OTHER REQUIREMENTS
PLEASE SPECIFY