

## TE-660 Hand-held Dew Point Sensor

# TE-660HD

TE-660HD is a hand-held dew point meter that consists of TE-660 dew point transmitter and a TKN-MH1 monitor.

It is suitable for spot check as with real time dew point is displayed on the monitor.

In order to pursuit of its compact size and low price, it specialises in dew point measurement without additional functions such as logging.

It is a user-friendly unit as simply connect the dew point transmitter and TKN-MH1 monitor with a sensor cable and operate via ON/OFF button.



TE-660 dew point transmitter which can measure a low dew point range down to  $-60^{\circ}\text{C dp}$ . It is suitable for use in controlling the dew point of compressed air and dry environment control application such as plastic dryers.

It has an auto-calibration function and allows to measure high accuracy at high response speed.

The optional carrying case is available to store TKN-MH1 monitor, cables and accessories for convenient carrying and storage.

### Typical Application

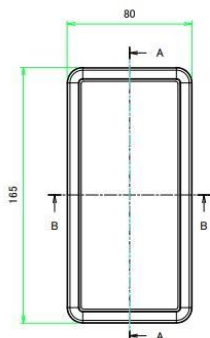
- Dew point control of compressed air
  - Refrigeration and adsorption dryers
  - Critical points in piping
- Furnace
  - Plating furnace
  - Plastic baking furnace
- Nitrogen generator
- Spots measurement for glove box
- Purity control of gas generator
  - Oxygen generator
  - Nitrogen generator

### Features

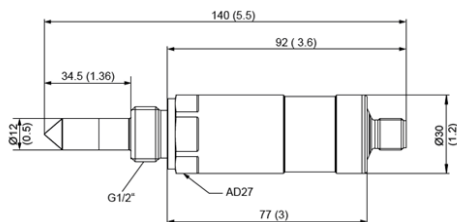
- Compact size for easy transportation
- Accuracy:  $\pm 2^{\circ}\text{Cdp}$  (at  $25^{\circ}\text{C}$  ambient temperature)
- Dew point measurement range:  $-60$  to  $+20^{\circ}\text{Cdp}$
- Automatic calibration function
- Polymer sensor with excellent long-term stability
- High response speed
- Low cost
- 4-20 mA output

## Dimensions mm(inch)

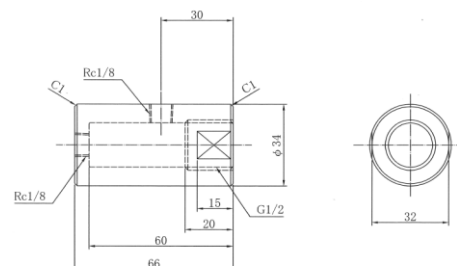
### •TKN-MH1 Monitor (Model: TKN-MH1)



### •Dew Point Transmitter (Model:TE-660TR)



### •Sampling block (Model: TE-SB (option))



## Carrying Case (option)

An optional carrying case is available.

This carrying case is designed to hold the TE-660HD components, such as TKN-MH1 monitor, TE-660 dew point transmitter, cables, and other accessories for transportation and storage.

Model : TE-660HD-C



## Scope of Supply

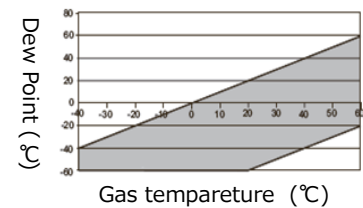
Name	Model	Scope of supply
Dew Point Transmitter	TE-660TR	○
TKN-MH1 Monitor	TKN-MH1	○
Sensor Cable	—	○
Sensor block	TE-SB	option
Protection cover	—	○
Carrying case	TE-660HD-C	option
Eneloop with charger (AA battery×4)	TE-660OP-05	option
Operating manual	—	○
Test Report	TKN-TR	option
Calibration certificate (US NIST tracable)	TKN-KDP	option
Calibration certificate (JCSS, -50/-30/-10°Cdp)	TE-660D-03	option

## Technical Data

### Measurement Specifications

#### Dew Point Application

Measuring range	standard range - 60 ~ +20 °Cdp
Accuracy	±2°C dp (Refer the right graph for guaranteed accuracy range)
Resolution	2 µA
Response Speed	90% response speed -20 °Cdp → -60 °Cdp (less than 5 min)
	-60 °Cdp → -20 °Cdp (less than 15 sec)
Effects Temperature	around ±0.1°Cdp/°C



### General

#### Dew point transmitter

Power supply	18-28 VDC
Analog output	4 – 20 mA (3-wire) RL < 500 Ω
Power consumption(at 24VDC)	Normal : 40 mA maximum Automatic tested : 120 mA maximum
Cable	2m (3-wire type with power supply, 4-20mA output, and common GND)
Operating pressure	0-8 MPa
Material	Stenles steel
Protection grade	IP65
Electric connection	M12x1 (5 pin plug)
Sensor protection	Stainless steel sintered filter
Operating conditions	-40~+70 °C / 0~100%RH (No condensation)
Storage conditions	-40~+60 °C / 0~100%RH(No condensation)
Electromagnetic compatibility	EN61326-1 / EN61326-2-3 FCC Part 15 / ICES-003 ClassB
Process connection	G 1/2"
External dimensions	Φ30×140W mm
Tracability	USA NIST, Option : JCSS



#### TKN-MH1 monitor

Power supply	4 AA batteries
Continuous operation time	Approx. 8 hours
Temperature range	Working temperature range 0~+50 °C Storage temperature range -20~+60 °C
Enclosure material	ABS
Dimensions	80W × 35H × 165D mm (exclusive connector and protection cover)
Weight	Approx. 330 g
Display	LCD display, 42W × 13H mm

This catalog may be changed without advanced notice.

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