

*Portable hygrometer for very dry gas*

# **TK-100 - Model NK- I**

- **Measurement Range from  $-100$  to  $+20$  °Cdp**
- **Accuracy  $\pm 2$ °Cdp**
- **Quick response at very low dew point**
- **4-20mA analog output**
- **Easy Connection to sampling line**
- **Simple Operation, Compact**
- **Traceability to National Standard**



## **Overview**

The Hygrometer TK-100 Model NK- I is a battery-powered portable instrument. It is suitable for the field measurements where electrical power is inconvenient or the multiple-points measurements. TK-100 Dew Point Transmitter is equipped inside of the instrument for the measurement from  $-100$ °Cdp to  $+20$ °Cdp, at an accuracy of  $\pm 2$  °Cdp.

## **TK-100 Transmitter**

The core measurement tool for Model NK- I is TK-100 Dew Point Transmitter, manufactured by TEKHNE Corporation, Japan. TEKHNE Ceramic Sensor is designed to secure the best mixture of accuracy, high response speed and long term stability. Most advanced technology is used for this purpose.

Also, the advanced microprocessor technology realized temperature compensation mechanism, which minimizes the effect by process temperature to the dew point measurement.

## **Quick response at very dry gas**

This model has dry chamber which keeps the sensor at around  $-70$ °Cdp, so you can quickly start to measure very dry gas and get fast response time. Although it equipping dry chamber, the size is compact and light, so you can bring it anywhere and anytime.

## **Power**

Model NK- I contains re-chargeable batteries inside of the instrument. The battery makes the instrument work for 15 hours, by 8 hours charge time. You can also use it continuously over 24 hours, by AC adaptor drive.

## **Easy to Use**

One of the most important features for such instruments is how easily users start operation. Model NK- I needs only 3 steps for measurement, those are; Charge the battery, connect the line and press start button. So the product does not choose users.

You can see 4-20mA analog output with attached output cable.

If you desire an optional ranges other than  $-100/+20$ , (ex.  $-80/0$  or  $-80/+20$ , whatever within  $-100/+20$ ), we can set the ranges as you like before shipping.

## **Options**

- 6 mm or 1/4" OD Pipe Connection
- Sampling Set
  - including Filter, Needle Valve and Flow Meter
- Aluminum Carrying case

## Technical Specifications

<b>Display</b>	3-1/2 digit LCD	<b>Output</b>	4~20 mA
<b>Range</b>	-100 to +20°C dp	<b>Power</b>	Re-chargeable Battery, or 100 – 240VAC with AC adaptor
<b>Accuracy</b>	+/- 2°C dp	<b>Charge time</b>	8 hours
<b>Operating Conditions:</b>		<b>Run time</b>	15 hours
<b>Pressure</b>	Atomosphere	<b>Weight</b>	3.5 kg
<b>Flow Rate</b>	1 to 10 L/min	<b>Size</b>	120 W x 149 H x 188D mm
<b>Temperature</b>	0 to +50°C	<b>Sample Connection</b>	6 mm (standard), or 1/4"(optional) OD pipe connection
<b>Humidity</b>	35~85%	<b>Traceability</b>	NIST Traceable
<b>Storage Conditions:</b>			
<b>Temperature</b>	-10 to +60°C		
<b>Humidity</b>	35~85%RH		

## Dimensions

