



# DATA SHEET



# SMART-PLUG Smart Measurement Probes & Cables For KT 320 KISTOCK Data Loggers





All the probes for KT 320 KISTOCK are equipped with the SMART PLUG technology. An automatic recognition and the storage of the adjusment parameters make them 100 % interchangeable.



### Pt100 Temperature probes

The temperature probes have a Pt100 Class A (as per IEC 751 standard) sensing element. Each of these probes come with an 8-pin mini-DIN connector with SMART-PLUG technology.

Reference		Description	Measuring range and accuracy*
KIRGA-50	IP65	IP65 immersion probe KIRGA-50 Stainless steel contact tip Contact tip size: Ø6 x 50 mm Output on PVC cable of 2 m length	Pt100 sensing element: From -40 to +120°C $\pm 0.4\%$ of reading $\pm 0.3$ °C
KIRGA-150	IP65	IP65 immersion probe KIRGA-150 Stainless steel contact tip Contact tip size: Ø6 x 150 mm Output on PVC cable of 2 m length	Pt100 sensing element: From -40 to +120°C $\pm 0.4\%$ of reading $\pm 0.3$ °C
KIRAM-150		Ambient probe 150 mm  Stainless steel perforated contact tip Contact tip size: Ø6 x 150 mm Output on PVC cable of 2 m length	Pt100 sensing element: From -40 to +120°C $\pm 0.4\%$ of reading $\pm 0.3$ °C
KIRPA-150	IP65	IP65 penetration probe Stainless steel contact tip Contact tip size: Ø6 x 150 mm Output on PFA cable of 2 m lenght	Pt100 sensing element: From -50 to 250°C $\pm 0.4\%$ of reading $\pm 0.3$ °C
KIPI3-150-E	IP68	IP68 penetration probe with handle Stainless steel contact tip Contact tip size: Ø3 x 150 mm, Ø10 mm stainless steel handle Output on PFA cable of 1 m lenght	Pt100 sensing element: From -50 to 250°C ±0.4% of reading ±0.3°C
KITI3-100-E	IP68	IP68 penetration probe with T-handle Stainless steel contact tip Contact tip size: Ø3 x 100 mm, T-handle Output on PFA cable of 1 m lenght	Pt100 sensing element: From -50 to 250°C $\pm 0.4\%$ of reading $\pm 0.3$ °C
KITBI3-100-E	IP68	IP68 penetration probe with corkscrew handle Stainless steel contact tip Contact tip size: Ø8 x 100 mm, T-handle Output on PFA cable of 1 m lenght	Pt100 sensing element: From -50 to 250°C ±0.4% of reading ±0.3°C
KIRV-320	•	Velcro® probe Output on PVC cable of 2 m length Contact tip size: Ø4.5 x 150 mm Velcro® length: 350 mm	Pt100 sensing element: From -20 to $\pm$ 0.4% of reading $\pm$ 0.3°C
KICA-320		Smart adapter for Pt100 probe  3-wire, containing a connection terminal and a mini-DIN connector.	From -200 to +600°C acording to the Pt100 probe



Protection against powerful water jets in any direction



Watertight to continuous immersion

#### **Hygrometry and temperature probes**

The temperature and hygrometry probes have a NTC for temperature or capacitive for hygrometry sensing element. Each of these probes come with an 8-pin mini-DIN connector with SMART-PLUG technology.

Reference	Description	Measuring range and accuracy*
КІТНА	Interchangeable hygrometry and ambient temperature probe Probe body in ABS, 94.5 mm length, capacitive sensing element, stainless steel filter and mini-DIN connector	Hygrometry (capacitive): from 0 to 100%RH Accuracy: $\pm 2$ %RH from 10 to 80%RH at 25°C Temperature dependence: $\pm 0.04$ x (T-20) %RH (if T<15°C or T>25°C)  Temperature (NTC): from -20 to +70°C $\pm 0.4$ °C from 0 to 50°C, $\pm 0.8$ °C below 0°C or above 50°C
KITHP-130	 Remote interchangeable hygrometry and temperature probe Probe body in ABS, 130 mm length, NTC sensing element, stainless steel filter, PVC cable of 2 m length with mini-DIN connector	Hygrometry (capacitive): from 0 to 100%RH Accuracy: $\pm 2$ %RH from 10 to 80%RH at 25°C Temperature dependence: $\pm 0.04$ x (T-20) %RH (if T<15°C or T>25°C)  Temperature (NTC): from -20 to $\pm 0.4$ °C from 0 to 50°C, $\pm 0.8$ °C below 0°C or above 50°C
KITHI-150	Remote interchangeable hygrometry and temperature probe Probe body in stainless steel, 150 mm length, capacitive sensing element, stailess steel filter, silicone cable of 2 m with mi- ni-DIN connector	Hygrometry** (capacitive): from 0 to 100%RH Repeatability, linearity: ±1.5%RH (fom 15 to 25°C and from 5 to 95%RH) Hysteresis: <2 %RH at 25°C Temperature dependence: ±0.04 x (T-20) %RH (if T<15°C or T>25°C)  Temperature (Pt100): from -40 to 180°C Accuracy: ±0.3% of reading ±0.25°C

#### Current and voltage input cables and pulse input cables

The pulse, voltage and current cables have a PVC cable of 2 m and an 8-pin mini-DIN connector with SMART-PLUG technology.

Reference	Description	Measuring range and accuracy*
КІСТ	<b>Voltage input cable</b> Measuring range: 0 – 5 V or 0 – 10 V	From 0 to 5/10 V $\pm 0.2\%$ of the measurement $\pm 1$ mV
KICC	Current input cable Measuring range: $0-20 \text{ mA}$ or $4-20 \text{ mA}$	From 0/4 to 20 mA $\pm 0.2\%$ of the measurement $\pm 1 \mu A$
KICI	Pulse input cable	Maximal voltage: 5 V Type of input: TTL frequency counting Maximal frequency: 10 kHz Maximum number of recordable pulses: 20,000

## **Ammeter clamps**

The ammeter clamps have a PVC cable of 2 m and an 8-pin mini-DIN connector with SMART-PLUG technology.

Reference			Description	Measuring range and accuracy*
			KIPID-50 ammeter clamp Range from 0 to 50 A	From 0 to 50 $A_{AC}$ $\pm 1\%$ of reading $\pm 0.1A$ Frequency range: from 40 Hz to 5000 Hz
KIPID-50 KIPID-100 KIPID-200	E A	8	KIPID-100 ammeter clamp Range from 0 to 100 A	From 1 to 100 $A_{AC}$ ±1% of reading ±0.1A Frequency range: from 40 Hz to 5000 Hz
			KIPID-200 ammeter clamp Range from 0 to 200 A	From 1 to 200 $A_{AC}$ ±1% of reading ±0.2A Frequency range: from 40 Hz to 5000 Hz
KIPID-600	<b>&gt;</b>	4	KIPID-600 ammeter clamp Range from 0 to 600 A	From 1 to 600 A <sub>AC</sub> ±2.5% of reading ±0.6A Frequency range: from 40 Hz to 5000 Hz

<sup>\*</sup>All accuracies indicated in this document were stated in laboratory conditions and can be guaranteed for measurements carried out in the same conditions, or carried out with compensation.
\*\*Accuracy in RH depends on temperature: typical ±2% RH below 10°C and above 50°C.

