

Series IQ

The Universal 2-Wire Transmitters

IQ series is the world's first 2-wire 4-20mA analog transmitter to offer a combination of selectable input and multiranging capabilities in a single DIN rails mounting instrumentation package.

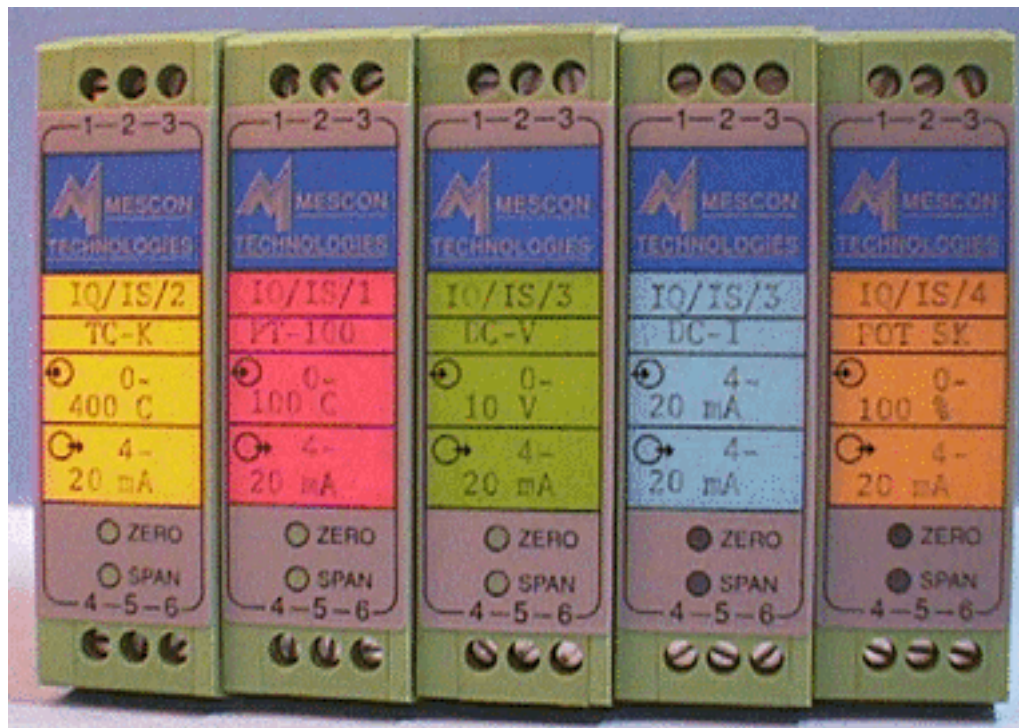
Input sensor type is selectable via DIP switch configuration and offers the choice of most common sensors used in the industrial environment. Ranging is equally easy and can be done in a matter of minutes.

Only one instrument is used for all types and ranges of thermocouples, RTD's, Potentiometric and DC inputs.

The IQ is housed in a slim line High Density package for a minimum of panel space and highest cost efficiency.

IQ ADVANTAGES:

- **Universal inputs**
- **High density design**
- **High accuracy**
- **Reduced inventory**
- **Low cost**



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IQ GENERAL SPECIFICATIONS



Output.....4-20mA limiting at <28mA
 I/O Isolation.....IS option only: 1000VDC or peak AC min.
 Power supply.....12-50VDC reverse polarity protected.
 Supply voltage variation effect.....negligible over 12-50V.
 Linearity.....±0.05% of span (for linear input).
 Calibration.....±0.1% of span or better (for linear input).

 2 WIRE, 3 WIRE, ΔT RTD	 THEMOCOUPLE	 DC/Volt
Δ Max. 800 °C Δ Min. 10 °C	E, J, K, R, S, T , B, N, W3, W5	Minimum 2mV Maximum 300V
4-20 mA	4-20 mA	4-20 mA
SENSOR EXCITATION: 1 mA constant current (nominal) LINEARITY (referred to sensor temperature): Better than ± 0.05% of span. STABILITY: Zero: Better than 0.01% of span/ °C for 50°C span and higher Better than .04% of span/ °C for 10°C and higher, Span: Better than 0.007% of span/ °C COMPENSATION (3-wire sensor): Standard. INPUT SPAN: Minimum: 10°C Maximum: 800°C	INPUT SPAN: Minimum: 5mV. Burnout detection: Upscale, standard. INPUT IMPEDANCE: 10 MOhms. LINEARITY: Better than ± 0.05% of span. (referred to mV input). STABILITY (10 mV input): Zero: 1μV/°C or 0.01% of span/ °C whichever is greater Span: Better than 0.007% of span/ °C REFERENCE JUNCTION: 1.0°C max. error referred to input over 0-50°C operating ambient tempera- ture.	INPUT SPAN: Minimum: 2mV Maximum: 300 Volts PROTECTION: 20X of rated input 300 VDC maximum INPUT IMPEDANCE: 5mV to 200mV - 20MOhms 200mV to 300 Volt - 1MOhm STABILITY (10 mV input): Zero: 1μV/°C or 0.01% of span/ °C whichever is greater Span: Better than 0.007% of span/ °C LINEARITY: ± 0.05% for linear input.

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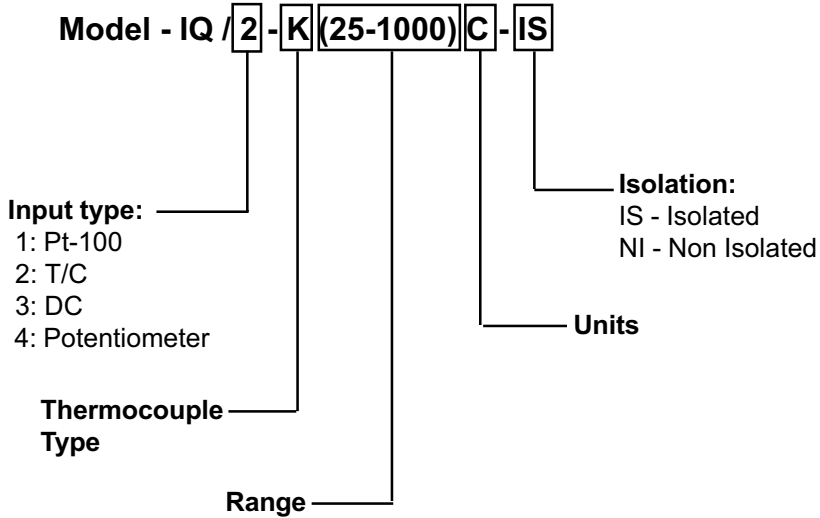
Output ripple (to 1kHz).....<0.02% of span.
 C.M.R.R.....>120 db DC to 60Hz.
 Zero/Span adjustability.....±20% of span min.
 Operating temperature.....-10 °C to 70 °C
 Humidity.....0 to 95%RH, non-condensing
 Mounting.....DIN rail 35mm or panel.
 Dimensions.....W:22.5 x H:79 x D:83mm.

 DC/mA	3	 POTENTIOMETRIC	4	INPUT
Minimum 10µA Maximum 100mA		Minimum 100Ω Maximum 20KΩ		RANGE
4-20 mA		4-20 mA		OUTPUT
INPUT SPAN: Minimum: 10µA Maximum: 100mA INPUT PROTECTION (60 seconds): 20X of rated input 250mV maximum VOLTAGE DROP: 200mV maximum. STABILITY (10 mV input): Zero: Better than 0.005% of span/ °C Span: Better than 0.007% of span/ °C LINEARITY: ± 0.05% for linear input.		INPUT SPAN: 10% of potentiometer, min. RESISTANCE (end to end): Maximum: 100 Ohms Maximum: 20 kOhms SENSOR EXCITATION: 50mV constant voltage (nominal) STABILITY: Zero: 0.01% of span/ °C Span: 0.007% of span/ °C LINEARITY: ± 0.05% of span referred to potentiometer wiper position.		

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ORDERING INFORMATION



IQ SET-UP

