DIGIREC A/B Pen and Multipoint Recorder

CR300
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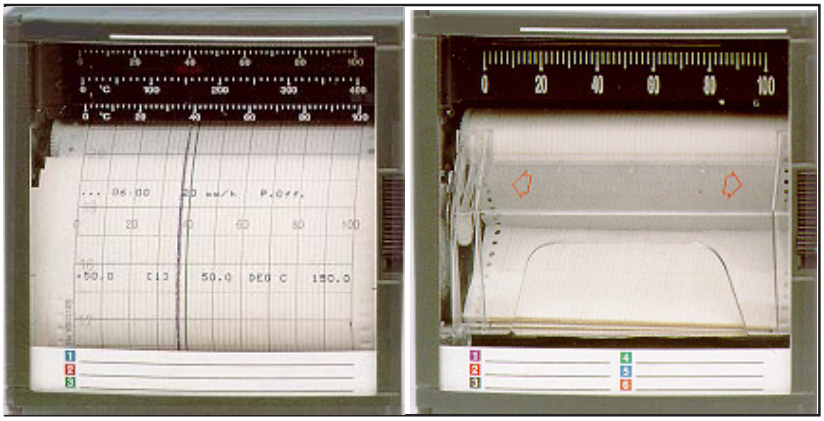
The DIGIREC A and B are the low cost, high functionality 100 mm chart-width microprocessor-based recorders which has been designed for general purpose applications worldwide. Its design meets the requirements of quality, ruggedness, flexibility, ease of use and optimum price/functionality combination.

The two versions are:
· DIGIREC A: a 1 to 3 continuous pen recorder;
· DIGIREC B: a 1 to 6 channel multipoint recorder.

These recorders has been designed for applications in the metal, glass, ceramics and utilities industries, as well as for the new and fast growing markets related to:
· environmental monitoring
· health and sanitation
· food processing
· pilot plants and laboratories

MAIN FEATURERS

- Microprocessor-based
- 1, 2 or 3 pens, or 1 to 6 channels multipoint
- 100 mm chart-width (DIN 16230)
- 0.25% accuracy full-scale (IEC 873)
- Analogue displays with a wide selection of ranges and scales
- Fully configurable universal inputs (T/C, RTD, High level)
- Roll or fan fold chart paper
- Chart documented with date, time, range, engineering unit, chart speed, identification number, alarm setpoints and events
- Up to 6 alarm relay outputs (Pen: 2 alarm set-points per pen, Mpt: 1 alarm set-point per channel)
- Up to 2 optional logic inputs for event recording, print inhibit and change speed
- Non-volatile memory
- 2 configurable chart speeds (Pen: 10 to 6000 mm/h; Mpt: 10 to 1500 mm/h)
- Simplified product configuration with prompts printed on the chart
- Full product configuration by PC software connected by a front jack connector
- Product calibration to certify input sensor: zero, span adjustments per channel
- Universal power supply: 85 to 264 VAC 50/60 Hz, 24 or 48 VAC/DC
- Permanent operation up to 50°C (120°F)



- Rugged construction for industrial applications
- IP 54 front protection (IEC 529)
- Compact dimensions: 144 x 144 mm (DIN 43700/43718), depth 245 mm (9.7") behind panel

OPTIONS

- Illuminated chart
- Key lock
- Rear terminal cover
- 24 VDC 75 mA max. to supply 3 transmitters
- Operating temperature up to 60°C (140°F)
- Pen offset compensation
- 2 logic inputs
- 2, or 6 alarms output
- Portable unit
- Abrasion-resistant plastic window

FUNCTIONAL SPECIFICATIONS

Technical data

Analogue inputs

DIGIREC A pen recorder
1, 2 or 3 continuous traces. Pen 1 also prints all chart documentation.

DIGIREC B multipoint recorder
1 up to 6 channels. Inputs are scanned by relays, galvanically isolated and individually configurable to any listed actuation.

Signal source
Thermocouple with individual cold junction compensation.
Line resistance up to 1000 ohms T/C, mV, mA, Volt
RTD Pt 100 3-wire connections, lead resistance per wire 40 Ω balanced.

Field calibration
A channel field calibration 0 % and 100 % span, may be made to certify input sensor loop.

Burnout
T/C, mV, Volt; factory set fo upscale (configurable to downscale or none)
RTD: inherent upscale.
mA: inherent downscale

Scanning time

Pen:

Chart Speed	Inputs	
	mV,V,mA	T/C, RTD
at 10-60 mm/h	330 ms	2 sec
at 60-300 mm/h	330 ms	1 sec
at > 300 mm/h	330 ms	330 ms

Mpt: 5 seconds for 6 channels.

Input impedance
10 Mohm for T/C, mV inputs.
>1 Mohm for volt inputs

Stray rejection
Series mode ≥ 60 db.
Common mode at 250 VAC ≥ 130 db

Logic inputs (option)
Up to 2-dry contact inputs (1.5 mA - 12 VDC).

Actions
Change chart speed 1 to speed 2.
Print inhibit.
Event marking:
Pen: Pen 1 used as operation marker on the right side of the chart.
Multipoint: 2 traces maximum on the right side of the chart. (L_1 = purple, L_2 = red).

Scales

Pen
1 analogue scale per pen in accordance with the input range configuration.
Multipoint
1 analogue scale, 0 to 100 linear.

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