

### You Asked, We Delivered!

Future Design's DR 5000 offers the best of both worlds, ink cartridge or thermal printing!

The DR 5000 is a circular chart recorder like no other. Programmable alarm options combined with "ease of setup" provide the flexibility required for multiple recording applications. The ink style DR 5000 is the first recorder to "self document" setup configuration and can operate using standard or competitive charts, another first in the industry. Eliminate "multi-vendor" chart inventories while reducing operator confusion. Protect your process with the DR 5000 battery backup option, continuous recording for up to 48 hours in the event of power loss .

The thermal print version offers a single chart inventory for all of your recording needs. "Print your own" chart technology includes real time trend and digital data directly on your historical records. No more confusion when replacing charts. The DR 5000 – the right choice for recording.



# DR 5000

DR 5000 CIRCLE CHART RECORDER

- Ink or "Print Your Own" chart style
- No manual required for setup
- No "dip switches" to set during configuration
- Uses standard or competitive charts
- Up to 48 hrs of recording during power loss
- Latching or Non-latching relays
- UL, CSA, CE
- "Self Documents" setup configuration

## DR 5000 SPECIFICATIONS

### POWER

**Line Voltage:** 110/220VAC, 50/60Hz  
**Power Consumption:** 15 VA maximum

### INPUT

**Thermocouple (T/C):** Type J, K, T, R, B, S,  
**RTD:** PT 100 ohm RTD (385 curve)  
**Linear:** 4-20 mA, 0-5 VDC  
**Range:** Per table in manual  
**Common Mode Rejection:** > 120dB at 60 Hz  
**Cold Junction Accuracy:** ± 0.2°C @ 25°C ambient  
**Cold Junction Error:** ± 0.2°C @ 25°C ambient  
**Ambient Error:** ± 0.01% span/°C from 25°C ambient  
**Isolation:** PV inputs isolated from all alarm outputs  
**Ink Style:** Inputs isolated on 2 pen units  
**Thermal 2 pen:** Inputs share common ground

### RECORDING

**Chart Size:** 10"  
**Recording Accuracy:** ± 0.5% of span (100 division span)  
**Sensor Break:** Full scale Pen < 10 seconds  
**Chart Speed:** Configurable  
**Input Filtering:** Programmable up to 120 seconds

### OPTIONS

**Relay:** DPDT, 1.0 Amps @ 120 VAC resistive  
**Relay Program:** Process, Band, Non-latching, Latching  
**Error Protection:** De-energized during sensor break  
**Hysteresis:** Set at 2 units, activation is safe sided  
**Battery Back up:**  
**Ink Style:** Up to 48 hours of recording (optional)  
**Thermal Print Style:** Maintains real time clock

### ENVIRONMENTAL AND PHYSICAL

**Operating Temperature:** 0 to 60°C  
**Storage Temperature:** -40 to 65°C  
**Humidity:** 0-90% RH (non-condensing)  
**Vibration:** 0.3 to 100Hz @ 0.2g  
**Mounting:** ± 20 degrees of vertical  
 ± 10 degrees of horizontal  
**Moldings:** Fire retardant Noryl w/acrylic window  
**Panel Rating :** Nema 3 std(Nema4 option)  
**Dimensions:** 14.0" (H) x 14.0" (W) x 3.8" (D)  
**Panel Cutout:** Industry Standard 12.7" x 12.7"  
**Weight:** 7 pounds maximum

# ORDERING INFORMATION

Enter a number in each box which corresponds to the specifications you want when ordering the DR 5000.

## DR 5000

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### POWER INPUT

- 1: 110/220VAC 50/60 Hz Selectable

### RECORDING STYLE

- 1: 1 Pen Ink
- 2: 2 Pen Ink
- 3: 1 Pen Thermal
- 4: 2 Pen Thermal

### OUTPUTS

- 0: None
- 1: 1 Relay, DPDT 1A/120VAC resistive
- 2: 2 Relay, DPDT 1A/120VAC resistive \*

### DISPLAY OPTIONS

- 0: None

### CHART OPTIONS

- 1: 10" Counterclockwise Rotation (standard)
  - 2: 10" Clockwise Rotation
- Thermal recorder is only available with counterclockwise rotation

### ENCLOSURE OPTIONS

- 1: Standard
- 2: Nema 4
- 3: Platen Mount

### SPECIAL OPTIONS

- 0: None
- 1: Battery Backup\*\*

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\* Not available on single pen ink model.  
\*\* 48 hours of continuous recording on ink style recorders.  
\*\* Battery standard on thermal unit. Use order code "0".

