

Product Information Note

DR4300 Circular Chart Recorders: Digital Recording at the Price of Analog



Proven Quality, Accuracy and Value

Basic 10-inch Recorders

Honeywell's multi-purpose circular chart recorder, the DR4300 answers the need for basic-function, low-priced instrumentation. The DR4300 is ideally suited to applications handled by low-cost analog recorders, with accuracy requirements not exceeding 0.50%, and is appropriate for most high-performance applications requiring accuracy not exceeding 0.25%. Some typical examples include: dairy, textile and food machinery, industrial ovens, environmental chambers, pharmaceutical equipment, industrial furnaces and farm machinery. Both recorders use 10-inch charts and are available in either single or dual pen models.

The DR4300 offers you the best of both worlds. It combines the simplicity, reliability and low price of analog instruments with the performance superiority of digital design. It's fully field configurable, a real benefit for your multi-range/actuation requirements. You will find it uncomplicated and easy to use because it does what it has to, and no more.

The Digital Difference

The DR4300 is a multi-application, microprocessor-based recorder. It features simple, modular construction making it easy to maintain, modify and service. Chart range and rotation speed are easily set and reset in the field. Design simplicity makes operation a snap, even for inexperienced operators.

The basic DR4300 is set by adjusting a group of mechanical switches, while the Enhanced DR4300 offers the convenience of a bright, digital display and a configuration keypad. Honeywell stocks over 150 pre-printed charts for use with either model. Both units are self-testing. Since there is no custom configuration required on either model, you can stock up and save money.



The DR4300 Circular Chart Recorder:

- Offers the best price/performance ratio of any competitive instrument in their class.
- Features Honeywell quality, assured by a rock-solid warranty program, toll-free telephone technical assistance, and an expert customer support network.
- Provides functionality that's targeted to market segments so that you never have to buy more capability than you need.

Choose the Model that Meets Your Need

DR 4300 (no display)

- Accuracy $\pm 0.35\%$ of span
- Up to 2 inputs (limited selection)
- Fully user configurable
- 10-inch chart
- Up to 2 digital inputs

DR 4300 (with display)

- Display Accuracy $\pm 0.10\%$ of span
- Up to 2 inputs
- Up to 4 alarm/control relays
- Fully user configurable
- Digital PV display
- 10-inch chart
- Up to 2 control loops - full PID control
- Totalization and timers
- Optional 24 volt transmitter power supply
- Optional MODBUS communications

Features of DR4300 (no display):

- **Accuracy** - 0.35% of span
- **Built-in Self Test**
- **Field Configurable** - Fully configurable via DIP switches. Set chart range and speed to meet your individual requirements.
- **Digital Electronics** - Assures accurate, reliable operation in severe applications.
- **Actuations** - Accepts thermocouple types J, K, R, S and T; 100 ohm DIN RTD; and the following linear actuations: 0-20 mA, 4-20 mA, 0-20 mV, 0-50 mV, 0-5 VDC and 1-5 VDC. Over 150 preprinted charts available.
- **UL/CSA/CE Approval** - Optional. Permits its use where many safety, fire and insurance codes must be observed.
- **Selected Thermocouple Burnout Protection** - Should a thermocouple fail, the pen is driven upscale, safely shutting down your process. Can be field-adjusted for downscale failsafe.
- **One- or Two-pen Recording** - Record is drawn on a large 10-inch diameter chart suitable for filing. Charts may be created per 8-hour shift, per day, or per week.

Features of DR4300 (with display):

- **Accuracy** - 0.10% of span (field calibrated)
- **Built-in Self Test**
- **Digital Display** - Bright, digital display is easy to read, even at a distance.
- **Configuration Keypad** - Recording parameters are easily set-up using plain English prompts and a simple keyboard.

- **Actuations** - Accepts thermocouple types J, K, T, R, S, B, E, W5W26 and Ni Ni Moly; 100 ohm RTD, and the following linear actuations: 4-20 mA, 0-20 mV, 0-100 mV, 0-200 mV, 0-1 VDC, 0-5 VDC, 1-5 VDC and 0-10 VDC.
- **More Sophisticated Control** - Up to two optional controllers are available with current relay outputs. On/off, time proportioning, duplex time proportioning, plus alarm in some cases. PID or PD/MR are available algorithms. Control option provides Accutune II process tuning capability for easy tuning of difficult processes.
- **Totalization of PVs** - Up to two optional totalizers available.
- **Alarming** - Up to two optional alarms per pen.
- **24-Volt Power Supply** - Optional 24-volt power supply to drive transmitters.
- **FM-approved Limit Alarm** - Optional high or low manual reset PY limit alarm. Adjustable, will energize a relay which can be used to activate an alarm or shut down a process.
- Setpoint programming capability available with the PID control function.
- Auxiliary outputs available for retransmitting the input signal for another device.

A Complete Product Offering

Honeywell provides a complete line of temperature sensors, including thermocouples, RTDs, and non-contact sensors which are compatible with Honeywell control products.

Specifications subject to change without notice.

For More Information

To learn more about DR4300 or on any other Honeywell digital recorders, visit our website www.honeywellprocess.com or contact your Honeywell account manager.

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