

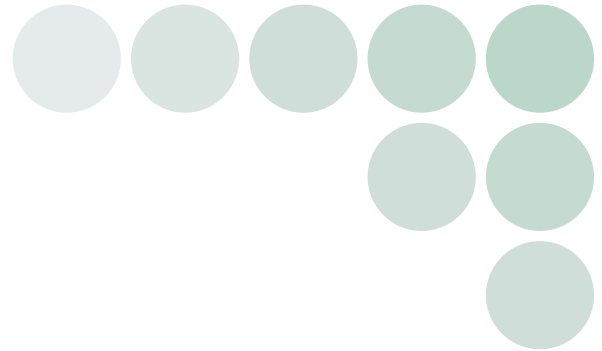
+New

OMRON

DeviceNet-compatible Digital Controllers

E5□R-DRT

The E5□R-DRT Digital Controllers excel in both speed and precision, and connect to DeviceNet.



***Innovation
in the Solution Age***

OMRON INDUSTRIAL AUTOMATION



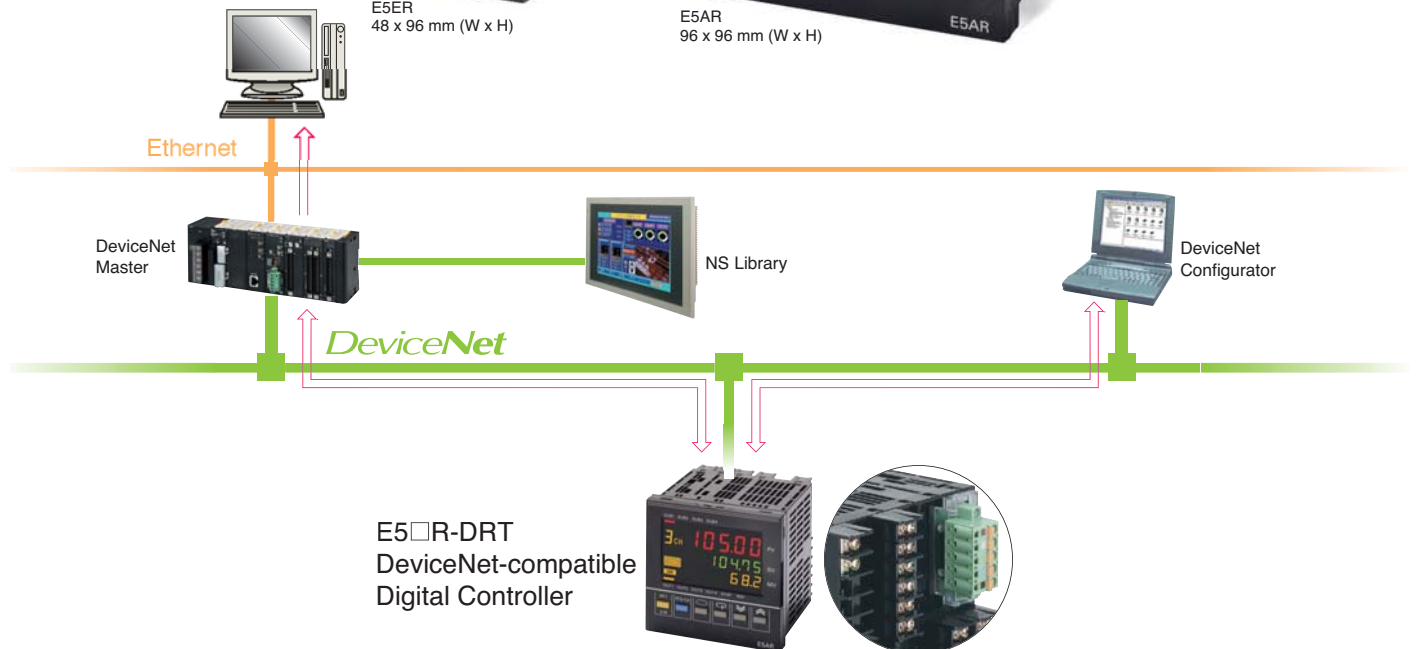
Linked to DeviceNet, the E5□R-DRT Digital Controllers Speed Up Communications and Boost Productivity

The E5□R-DRT Digital Controllers connect to DeviceNet, the standard field network for today's production sites, enabling instant communications with PLCs without special programming. This puts the high speed and precision of the E5□R-DRT Digital Controllers to work in large-scale production lines, such as semiconductor production lines and automotive assembly lines, while reducing equipment wiring requirements and helping to improve productivity with functions such as temperature data logging and data analysis.



E5ER
48 x 96 mm (W x H)

E5AR
96 x 96 mm (W x H)



Program-less, High-speed Data Communications with a PLC

A DeviceNet connection enables high-speed data transfer by simply allocating settings and parameters to be monitored in PLC I/O areas. This greatly reduces the program development requirements for communications.

| PLC Memory | |
|------------|--|
| IN | Process value |
| | Manipulated variable monitor (heating) |
| | Status |
| OUT | Set point |
| | Bank 0: Alarm 1 value |
| | Bank 0: Alarm upper limit 1 |
| | Bank 0: Alarm lower limit 1 |
| | Bank 0: Alarm 2 value |
| | Bank 0: Alarm upper limit 2 |
| | Bank 0: Alarm lower limit 2 |
| | Operation commands |

Unified Management with the DeviceNet Configurator

Using the DeviceNet Configurator, all E5□R-DRT parameters can be uploaded or downloaded in a single operation. Set parameters can also be saved, loaded, and printed, dramatically reducing production and maintenance steps for mass-production equipment.

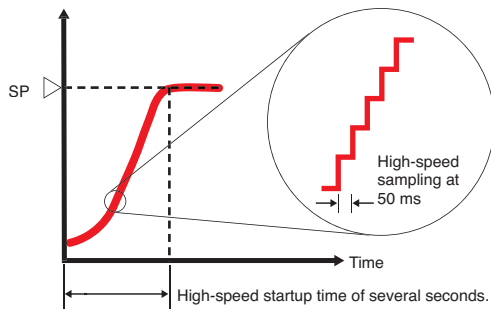


Optimal Use of the Unique High Speed and Precision of the E5□R-DRT

High-speed Sampling at 50 ms

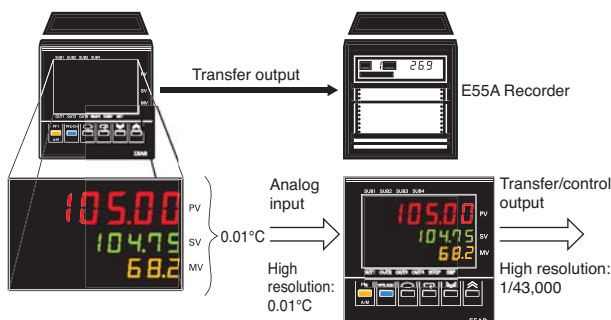
The E5□R-DRT offers high-speed sampling at 50 ms per loop (a fivefold improvement on previous OMRON products). This is optimal for control operations such as ceramic heater control, flowrate control, and pressure control. Extraction of square root is also provided for use in flowrate control.

- Stable control of objects requiring high-speed response is possible.



High-resolution of Pt 0.01 °C

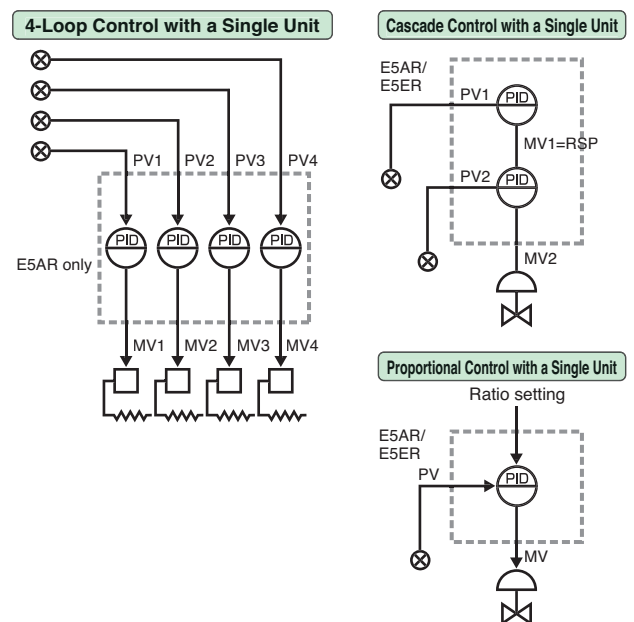
High-precision analog inputs of $\pm 0.1\%$ (a threefold improvement on previous OMRON products). A high resolution of Pt0.01°C has been achieved. The transfer and control outputs also have a high resolution of 1/43,000 (for 4 to 20 mA, a twentyfold improvement on previous OMRON products). This allows high resolution when measuring, detecting changes, or logging internal temperature and humidity of devices, such as environmental testing equipment.



Control Up to 4 Loops with a Single Unit

The series includes control models with 1, 2, and 4 analog inputs (see note). Various control modes can be selected in the software settings, including standard control, heating and cooling control, cascade control, proportional control, and remote SP control. This enables a single Unit to perform multipoint control (up to 4 inputs for the E5AR, up to 2 points for the E5ER), cascade control, and proportional control. Up to four points, including temperature, humidity, and pressure, can be controlled simultaneously from a single Unit, contributing to reduced costs and downsizing panels.


Models with four analog inputs are 96 x 96 mm (E5AR).




Select from 12 Models with 96 x 96 mm or 48 x 96 mm Dimensions

■ Ordering Information

● DeviceNet-compatible E5AR

| Size | Control type | Control mode | Outputs (control/transfer) | Optional functions | | | Models |
|--|---|--|--|-------------------------|--------------|----------------|----------------|
| | | | | Auxiliary outputs (SUB) | Event inputs | Communications | |
|  E5AR 96 x 96 x 99 mm (W x H x D) | Basic control (1 loop) | Single-loop standard control Single-loop heating and cooling control | 2 points: Pulse voltage and Pulse voltage/current | 4 | 2 | DeviceNet | E5AR-Q4B-DRT |
| | | | 2 points: Current and Current | | | | E5AR-C4B-DRT |
| | | | 4 points: Pulse voltage and Pulse voltage/current and Current (2 points) | | | | E5AR-QC4B-DRT |
| | 2-loop control | 2-loop standard control 2-loop heating and cooling control Single-loop cascade control Single-loop control with remote SP Single-loop proportional control | 4 points: Pulse voltage (2 points) and Pulse voltage/current (2 points) | 4 | — | DeviceNet | E5AR-QQ4W-DRT |
| | 4-loop control | 4-loop standard control 2-loop standard control 2-loop heating and cooling control | 4 points: Current (4 points) | 4 | — | DeviceNet | E5AR-CC4WW-DRT |
| Position-proportional control (1 loop) | Single-loop position-proportional control | Relay output (1 open, 1 closed) | 4 | — | DeviceNet | E5AR-PR4F-DRT | |
| | | Relay output (1 open, 1 closed) 1 current (transfer) output | | | | E5AR-PRQ4F-DRT | |

● DeviceNet-compatible E5ER

| Size | Control type | Control mode | Outputs (control/transfer) | Optional functions | | | Model |
|---|---|---|---|-------------------------|--------------|----------------|--------------|
| | | | | Auxiliary outputs (SUB) | Event inputs | Communications | |
|  E5ER 48 x 96 x 99 mm (W x H x D) | Basic control (1 loop) | Single-loop standard control Single-loop heating and cooling control | 2 points: Pulse voltage and Pulse voltage/current | 2 | 2 | DeviceNet | E5ER-QTB-DRT |
| | | | 2 points: Current and Current | | | | E5ER-CTB-DRT |
| | 2-loop control | 2-loop standard control Single-loop heating and cooling control Single-loop cascade control Single-loop control with remote SP Single-loop proportional control | 2 points: Pulse voltage and Pulse voltage/current | 2 | — | DeviceNet | E5ER-QTW-DRT |
| | | | 2 points: Current and Current | | | | E5ER-CTW-DRT |
| Position-proportional control (1 loop) | Single-loop position-proportional control | Relay output (1 open, 1 closed) | 2 | — | DeviceNet | E5ER-PRTF-DRT | |

For detailed specifications, refer to the most recent version of the E5AR/E5ER DeviceNet Operation Manual (H124) .

OMRON Corporation

Industrial Automation Company

Industrial Devices and Components Division H.Q.

Measuring Components Department

Shiokoji Horikawa, Shimogyo-ku,
Kyoto, 600-8530 Japan

Tel: (81)75-344-7080/Fax: (81)75-344-7189

Regional Headquarters

OMRON EUROPE B.V.

Wegalaan 67-69, NL-2132 JD Hoofddorp
The Netherlands

Tel: (31)2356-81-300/Fax: (31)2356-81-388

OMRON ELECTRONICS LLC

1 East Commerce Drive, Schaumburg, IL 60173
U.S.A.

Tel: (1)847-843-7900/Fax: (1)847-843-8568

OMRON ASIA PACIFIC PTE. LTD.

83 Clemenceau Avenue,
#11-01, UE Square,
239920 Singapore

Tel: (65)6835-3011/Fax: (65)6835-2711

OMRON CHINA CO., LTD. BEIJING OFFICE

Room 1028, Office Building,
Beijing Capital Times Square,
No. 88 West Chang'an Road,
Beijing, 100031 China

Tel: (86)10-8391-3005/Fax: (86)10-8391-3688

Authorized Distributor: