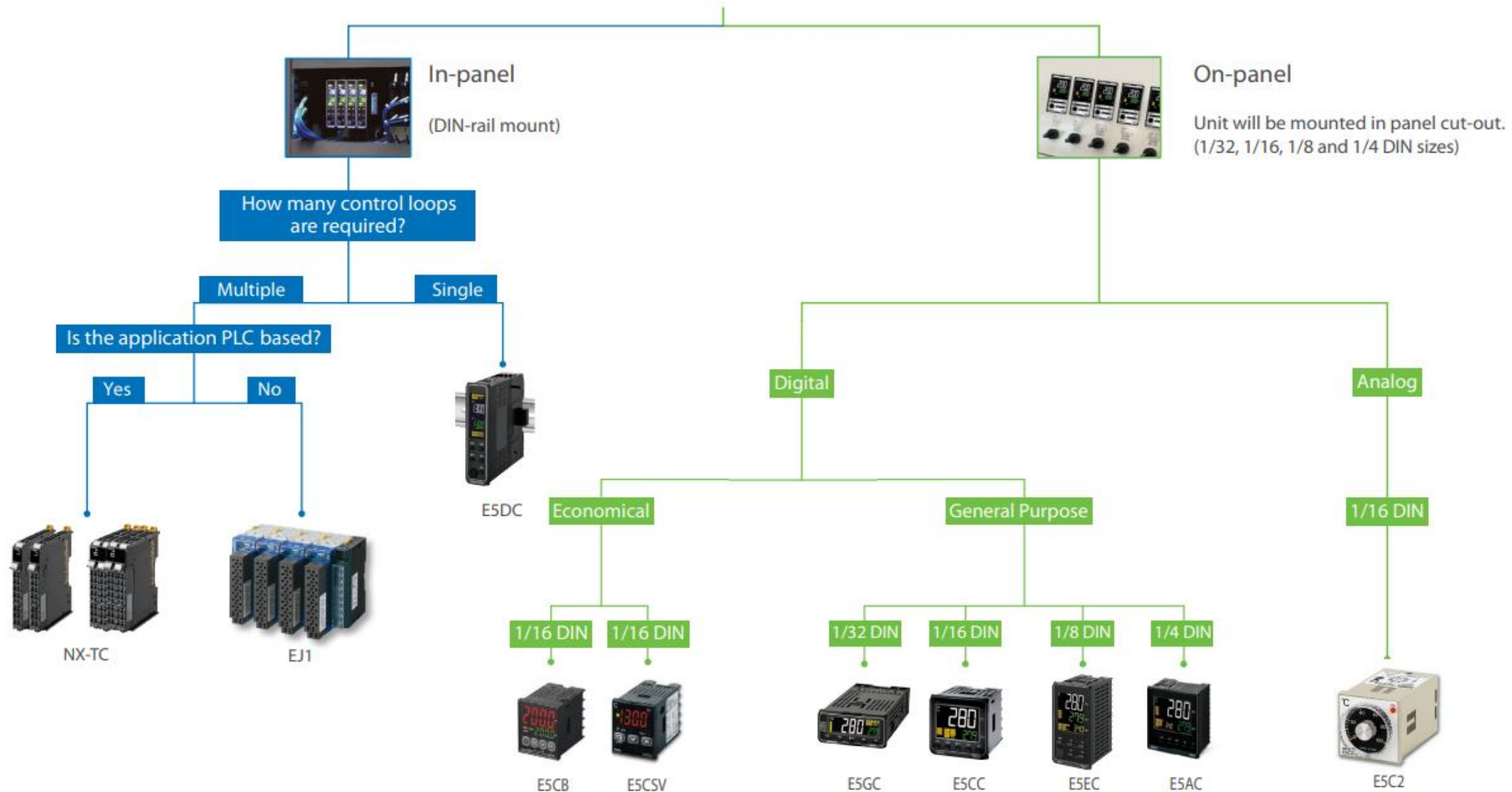


Temperature Controllers

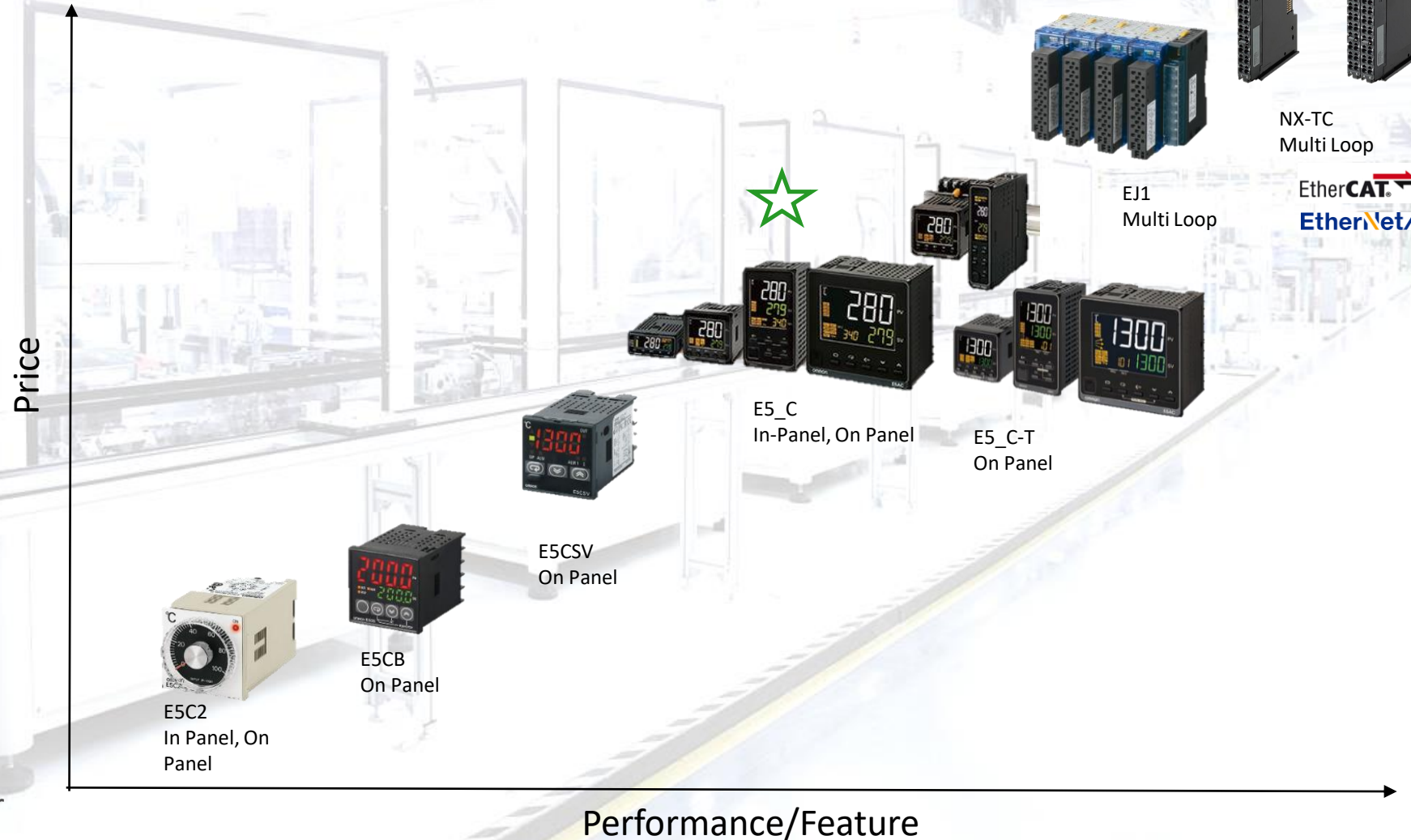
Manufacturing temperature controllers for over 40 years

Where will the temperature controller be mounted?



Temperature Controllers

★ Top Sellers



Offering

- On-Panel
- In-Panel
- Single and Multi-loop
- Digital Temperature Controllers
- Adaptive (PID) Control
- PLC based Temperature Controller

On-Panel Temperature Controllers

Temperature Controllers for use for on-panel applications

Design Attributes

- Control Loops
- Digital/Analog
- Panel cut-out size

[Click anywhere on this page to be taken to Omron's Temperature Controller Offerings](#)





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1/16 DIN Economical
Temp Controller

E5CSV: 1/16 DIN Cost Reduced Digital PID Temp Controller

Specifications:

- All setting field configurable with switches
- Multi-input (Thermocouple/Pt100)
- Clearly visible 3.5-digit display with character height of 13.5mm
- Control output: relay, voltage (for driving SSR)
- ON/OFF or 2-PID control with auto-tuning and self-tuning
- Output and alarm status



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1/16 DIN Dual Display
Economical Temp
Controller

E5CB: 1/16 DIN Cost Reduced Dual Display Digital Temp Controller

Specifications:

- Precise control using our unique 2-PID system with auto-tune
- Easy to read from a distance via large 16.2 mm PV display
- Low unit depth (only 60 mm)
- Alarm, output and status indicators
- Alarm relays

E5_C series Temperature Controller Series

Specifications:

- Various Sizes (1/32, 1/16, 1/8, ¼ DIN Size), determines E5_C series
- Input voltage: 100-240 VAC, 24 VDC
- Output Types: Relay, Transistor, Linear Current
- Sensor input: Thermocouple (E52), RTD (E52), infrared sensors (ES1)
- Control method: On/Off, 2-PID (with auto-tuning)
- Heating and cooling control
- Accuracy: $\pm 0.3\%$ of PV
- Optional features
 - FM approval (limited models)
 - Heater burnout alarm
 - RS-485 communication
 - Pluggable base for easy replacement (E5DC)



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On Panel Full Feature
Temperature Controller
Product Line



E5AC: 1/4 DIN On Panel Digital PID Temp Controller

Specifications:

- 1/4 DIN Panel Size, Short body with a depth of 60mm
- High contrast white PV display, front panel IP66 rated
- High-speed sampling at 50ms
- Available auxiliary outputs, event inputs, a transfer output, and a remote SP input
- Set up the controller without the need for a power supply
- Easy connections to a PLC with program-less communications
- Temperature controllers can be linked to each other via component communications
- Options:
 - RS-485 Communication
 - Heater burnout alarm



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1/4 DIN Full Feature
Temperature Controller



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1/8 DIN Full Feature
Temperature Controller

E5EC: 1/8 DIN On Panel Digital PID Temp Controller

Specifications:

- 1/8 DIN Panel Size, Short body with a depth of 60mm
- High contrast white PV display, front panel IP66 rated
- High-speed sampling at 50ms
- Available auxiliary outputs, event inputs, a transfer output, and a remote SP input
- Set up the controller without the need for a power supply
- Easy connections to a PLC with program-less communications
- Temperature controllers can be linked to each other via component communications
- Options:
 - RS-485 Communication
 - Heater burnout alarm



E5CC: 1/16 DIN On Panel Digital PID Temp Controller

Specifications:

- 1/16 DIN Panel Size, Short body with a depth of 60mm
- High contrast white PV display, front panel IP66 rated
- High-speed sampling at 50ms
- Available auxiliary outputs, event inputs, a transfer output, and a remote SP input
- Set up the controller without the need for a power supply
- Easy connections to a PLC with program-less communications
- Temperature controllers can be linked to each other via component communications
- Options:
 - Available push-in plus terminals for easier wiring
 - Plug-in models for easy replacement
 - FM (Factory Mutual) Models
 - RS-485 Communication
 - Heater burnout alarm



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1/16 DIN Full Feature
Temperature Controller



E5GC: 1/32 DIN On Panel Digital PID Temp Controller

Specifications:

- 1/16 DIN Panel Size, Short body with a depth of 60mm
- High contrast white PV display, front panel IP66 rated
- High-speed sampling at 50ms
- Available auxiliary outputs, event inputs, a transfer output, and a remote SP input
- Set up the controller without the need for a power supply
- Easy connections to a PLC with program-less communications
- Temperature controllers can be linked to each other via component communications
- Options:
 - Available push-in plus terminals for easier wiring
 - Plug-in models for easy replacement
 - FM (Factory Mutual) Models
 - RS-485 Communication
 - Heater burnout alarm



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1/32 DIN Full Feature
Temperature Controller

In-Panel Temperature Controllers

Temperature Controllers for use for in-panel applications

Design Considerations

- Control Loops
- Standalone/For use with PLC

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E5DC: In-Panel Full Feature Digital PID Temp Controller

Specifications:

- High quality LCD display
- Push-in Plus Terminals
- Ultra-slim 22.5 mm body
- Removable terminal block
- Modular interconnection
- 50 ms sampling speed
- 2-PID Control system
- RS-485 Communication available
- Up to 2 auxiliary outputs and 1 event input
- Heater burnout alarm



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Full featured in-panel
temperature controller



NX-TC: In-Panel Temperature Controller for use with a NX-series PLC or Communication Coupler

Specifications:

- 2 loop and 4 loop models
- ON/OFF or PID control models available
- Heater Burnout error detection function
- Thermocouple or RTD inputs
- EtherNet/IP or EtherCAT capabilities with PLC or Coupler
- Omron Temperature Control with competitive PLCs
- Programmed with Sysmac Studio
- Voltage output (for driving SSR) and linear current output types available
- Ability to specify the manipulated variable to output
- Adaptive Control Function, Automatic Filter Adjustment Function, and Water-cooling Output Adjustment Function
- Simple wiring and cUL Listing



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Temperature control for use
with NX PLC or Coupler



EJ1: Modular In-panel Controller with Wide Integration to Host Devices

Specifications:

- Interfaces to a wide range of industrial networks
- Reduced engineering due to program-less communications, smart active parts and function block libraries
- Available with screw terminals and screw-less clamp terminals
- One unit handling various types of input, such as Pt, Thermocouple, mA, and V input
- Various Control Strategies
 - Gradient Temperature Control (designed to handle complex temperature profiles)
 - 2-PID Control
 - Disturbance control
- Up to 16 EJ1's can connect to single DeviceNet communications unit
- RS-485/Modbus RTU, CompoWay/F



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In-panel flexible
controller

Omron Temperature Controller Solutions

Omron is Your One Stop Shop for Industrial Temperature Controller Solutions

