

E5AN/E5EN/E5CN/E5GN

1/4 DIN, 1/8 DIN, 1/16 DIN and 1/32 DIN Digital Temperature Controllers



F e a t u r e s

Safety features (Meets UL, CSA, and IEC standards.)

Water-resistant (NEMA4X: IP66)

Compact and Intelligent General-purpose Temperature Controllers E5AN/E5EN/E5CN/E5GN

The E5AN (1/4 DIN), E5EN (1/8 DIN), E5CN (1/16 DIN) and E5GN (1/32 DIN) are OMRON's standard Temperature Controllers.

E5_N series meet various demands from basic to advanced applications

Basic function

- Control mode is selectable from ON/OFF control and 2-PID
- Auto-tuning is available while self-tuning

Advanced function

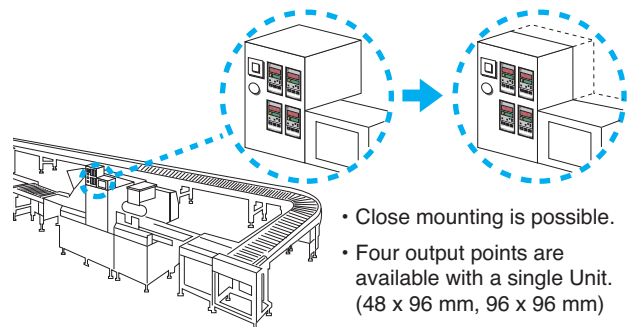
- Heating and Cooling
- Communication (RS485, RS232C)
- Event input for RUN/STOP or Multi SP
- Various alarms including standby sequence, alarm latch
- Input digital filter
- SP ramp
- PV color change (E5CN only)
- MV limit
- Input error output

Compact



General Industrial Machinery

Control panels can be made thinner.



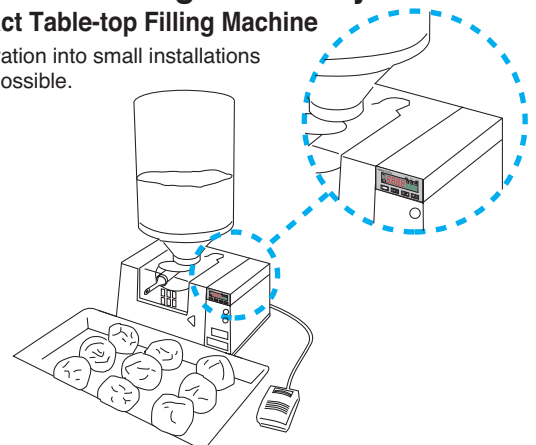
48 x 24-mm surface area is
1/2 that of the 48 x 48 mm model.



Food Processing Machinery

Compact Table-top Filling Machine

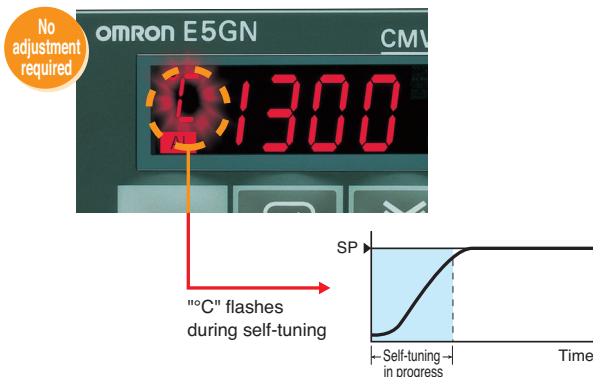
Incorporation into small installations is also possible.



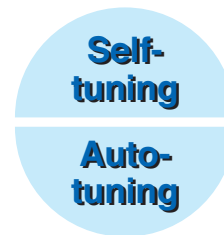


Event input
Heater burnout alarm
Heating and cooling control
Water tight structure: NEMA4X
Safety standard: UL, CSA, IEC

Easy



All of the handy functions, such as run/stop and auto-tuning, can be operated from the keys on the front panel.

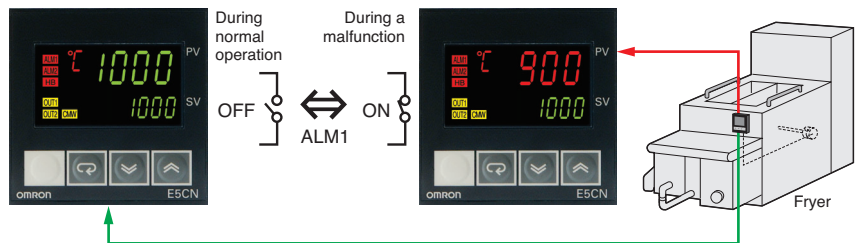


Auto-tuning can be executed during self-tuning.

PV color change (E5CN only)

Check conditions with changing PV temperature colors (green and red).

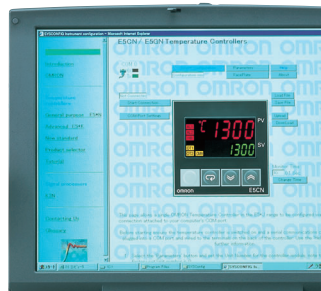
- The color of the PV temperature display shows the operating condition (normal/malfunction) at a glance.
- Enables quick response when a malfunction occurs.



Intelligent

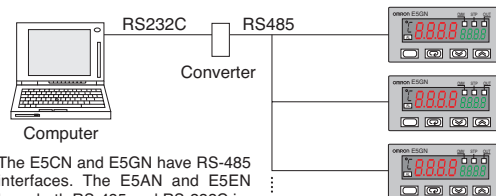
All models have a version equipped with a communications function.

Support software that allows setting from a computer is also available. Multi-channel connections make for improved operability.



Control is possible via connections to up to 32 devices including a computer or Programmable Controller.

System Configuration (for Computer)



The E5CN and E5GN have RS-485 interfaces. The E5AN and E5EN have both RS-485 and RS-232C interfaces. (Only 1-to-1 connection is available for RS-232C.)

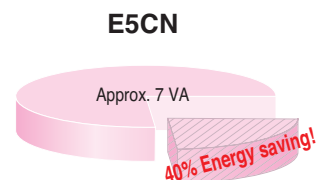
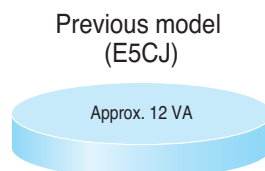
Connection to up to 32 devices including the computer

Energy-saving

Improved reliability by energy-saving

New type of power unit and LCD display enables energy savings

Improved reliability from less internal heat



Ordering Codes

Ordering Information

E5AN/E5EN

● E5AN Standard Models

Size	Power supply voltage	No. of alarm points	Control output	Heater burnout alarm	Thermocouple model	Platinum resistance thermometer model
1/4 DIN 96(W) x 96(H) x 78(D) mm	100 to 240 VAC or 24 VAC/VDC	3	Relay	No	E5AN-R3MTC-500	E5AN-R3MP-500
				Yes	E5AN-R3HMTC-500	E5AN-R3HMP-500
			Voltage (for driving SSR)	No	E5AN-Q3MTC-500	E5AN-Q3MP-500
				Yes	E5AN-Q3HMTC-500	E5AN-Q3HMP-500
Current	No	E5AN-C3MTC-500	E5AN-C3MP-500			

● E5EN Standard Models

Size	Power supply voltage	No. of alarm points	Control output	Heater burnout alarm	Thermocouple model	Platinum resistance thermometer model
1/8 DIN 48(W) x 96(H) x 78(D) mm	100 to 240 VAC or 24 VAC/VDC	3	Relay	No	E5EN-R3MTC-500	E5EN-R3MP-500
				Yes	E5EN-R3HMTC-500	E5EN-R3HMP-500
			Voltage (for driving SSR)	No	E5EN-Q3MTC-500	E5EN-Q3MP-500
				Yes	E5EN-Q3HMTC-500	E5EN-Q3HMP-500
Current	No	E5EN-C3MTC-500	E5EN-C3MP-500			

● E5AN/E5EN Option Units

Name	Model	Function
Communication Unit	E53-AK01	RS-232C communication
	E53-AK03	RS-485 communication
Event Input Unit	E53-AKB	Event input

E5CN

● E5CN Standard Models

Size	Power supply voltage	No. of alarm points	Output	Thermocouple model	Platinum resistance thermometer model
1/16 DIN 48(W) x 48(H) x 78(D) mm	100 to 240 VAC or 24 VAC/VDC	---	Relay	E5CN-RMTC-500	E5CN-RMP-500
			Voltage output (for driving SSR)	E5CN-QMTC-500	E5CN-QMP-500
		2	Relay	E5CN-R2MTC-500	E5CN-R2MP-500
			Voltage output (for driving SSR)	E5CN-C2MTC-500	E5CN-C2MP-500

● E5CN Option Units

Name	Model	Function
Communication Unit	E53-CNH03 (For relay and voltage output)	RS-485 communication and heater burnout alarm
	E53-CN03 (For current output)	RS-485 communication
Event Input Unit	E53-CNHB (For relay and voltage output)	Event input and heater burnout alarm
	E53-CNB (For current output)	Event input

E5GN

● E5GN Standard Models

Size	Power supply voltage	No. of alarm points	Output	Thermocouple model	Platinum resistance thermometer model
1/32 DIN 48(W) x 24(H) x 100(D) mm	100 to 240 VAC or 24 VAC/VDC	---	Relay	E5GN-RTC	E5GN-RP
			Voltage output (for driving SSR)	E5GN-QTC	E5GN-QP
		1 (see note 1)	Relay	E5GN-R1TC	E5GN-R1P
			Voltage output (for driving SSR)	E5GN-Q1TC	E5GN-Q1P

● E5GN Communication Models

Size	Power supply voltage	Communication function	Output	Thermocouple model	Platinum resistance thermometer model
1/32 DIN 48(W) x 24(H) x 100(D) mm	100 to 240 VAC or 24 VAC/VDC	RS-485	Relay	E5GN-R03TC-FLK	E5GN-R03P-FLK
			Voltage output (for driving SSR)	E5GN-Q03TC-FLK	E5GN-Q03P-FLK

Cat. No. H108-E1-03

In the interest of product improvement, specifications are subject to change without notice.

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