Temperature/Process Limit **Alarm Controller**





i8-AL, i16-AL, i32-AL Series



- Universal Inputs
- ✓ High Accuracy
- 2 Relay Alarm Outputs
- ✓ Totally Programmable Color Displays (Visual Alarms)
- ✓ User-Friendly, Simple to Configure
- ✓ Built-In Excitation
- AC or DC Powered Units
- ✓ Front Removable and **Plug Connectors**
- Programmable Digital Filter
- ✓ Remote Reset Input

The NEWPORT® iSeries Limit Alarm Controller offers unparalleled flexibility in process measurement and alarm applications, accepting 10 different thermocouple types. 18 RTD combinations or 4 process voltage/current inputs and providing 2 relay alarm outputs and a large multi-color, programmable display. Easily configured options include 11 different alarm conditions and the unit supports an external reset input and a buzzer audio annunciator. Front panel configuration switches allow the user to select the type of input, the alarm conditions and the resulting display color. Process inputs are fully scalable, supporting virtually all engineering units with a selectable decimal point providing a perfect solution for pressure, flow or other process inputs.

Standard features include a builtin 24 Vdc excitation source for transmitters or other devices and a universal power supply that accepts 90 to 240 Vac. A low power option is available that supports 24 Vac or 12 to 36 Vdc.

Specifications

Input Types: Thermocouple, RTD, analog voltage, analog current

Accuracy: ±0.5°C temp; 0.03% rdg

Temperature Stability:

RTD: 0.04°C/°C;

TC @ 25°C (77°F): 0.05°C/°C - Cold

Junction Compensation; Process: 50 ppm/°C

Reading Rate: 3 samples/s

Display: Single 4-digit 9-segment LED 21 mm (0.83") for **1/8 DIN**; 10.2 mm

(0.40") for **1/32, 1/16 DIN**

Thermocouple Types (ITS 90): J, K, T, E, R, S, B, C, N, L (J DIN)

Thermocouple Lead Resistance: 100

RTD Input (ITS 68): $100/500/1000 \Omega$ Pt sensor, 2-, 3- or 4-wire; 0.00385 or 0.00392 curve)

Voltage Input: 0 to 100 mV, 0 to 1V, 0

Input Impedance: 10 Mohm for 100mV,

1 Mohm for 1 or 10 Vdc

Current Input: 0 to 20 mA (5 ohm shunt)

Series

Excitation

Voltage Excitation: 24 Vdc @ 25 mA (not available with low power option) **Limit Control Alarm 1 and 2**

Outputs

Relay: SPDT, 250 Vac or 30 Vdc @ 3 A (resistive load)

Operation: High/low, above/below, band, latch/unlatch, normally open/ normally closed and process/deviation; front panel configurations

Power: 90 to 240 Vac ±10%, 50 to 400Hz, 110 to 375 Vdc, equivalent

Low Voltage Power Option: 24 Vac, 12 to 36 Vdc; external power source must meet safety agency approvals Operating Temperature: 0 to 55°C

(32 to 131°F); 90% RH non-condensing Protection: 1/8 DIN: NEMA 1/Type 1 front bezel; 1/32, 1/16 DIN: NEMA 4X/

Type 4 (IP65) front bezel

Dimensions

1/8 DIN: 48 H x 96 W x 127 mm D

(1.89 x 3.78 x 5")

1/16 DIN: 48 H x 48 W x 127 mm D

(1.89 x 1.89 x 5")

1/32 DIN: 25.4 H x 48 W x 127 mm D

(1.0 x 1.89 x 5")

To Order Visit newportUS.com/iSeries-AL for Pricing	
Model No.	Description
i8-AL	1/8 DIN limit alarm controller with 2 relays, 90 to 240 Vac
i16-AL	1/16 DIN limit alarm controller with 2 relays, 90 to 240 Vac
i32-AL	1/32 DIN limit alarm controller with 2 relays, 90 to 240 Vac
i8-AL-DC	1/8 DIN limit alarm controller with 2 relays, 12 to 36 Vdc
i16-AL-DC	1/16 DIN limit alarm controller with 2 relays, 12 to 36 Vdc
i32-AL-DC	1/32 DIN limit alarm controller with 2 relays, 12 to 36 Vdc

Ordering Example: i32-AL, 1/32 DIN limit alarm controller with two relay outputs, 90-240Vac.