

Optergy 864e

The Optergy 864e is an input and output expansion module for use with the Optergy P864 controller. It can be expanded to a total of 144 hardware points using a Optergy P864 and by adding up to 7 additional Optergy 864e modules.



OVERVIEW

The Optergy P864 controller can directly control Optergy 864e inputs and outputs. The Optergy P864 controller can host control logic, schedules, trends, alarms and is expandable using the Optergy 864e expansion modules up to 144 hardware data points. The Optergy P864 stores all Optergy 864e data into memory in the event of power interruption. Normal operation resumes after power is restored.

APPLICATIONS

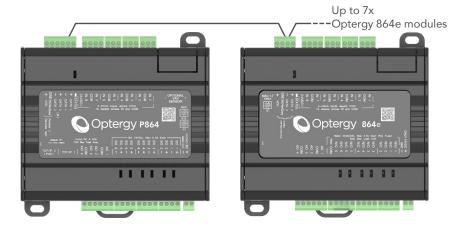
Master Controller
Central Plants

Large built up AHU Small Building Control Unitary Controller

Air Handling Unit Lighting Control Energy Metering

MODELS

Optergy 864e (expansion IO module connects to Optergy P864 only)



Optergy P864 Controller

Optergy 864e (Expansion IO Module)

KEY FEATURES



General

- Input and output setup
- Expanded Optergy P864 count as 1 device for Optergy software licensing
- Program logic, schedules/trends/alarm/ calendars are managed in Optergy P864
- 24 VDC power supply (for sensors and other devices)



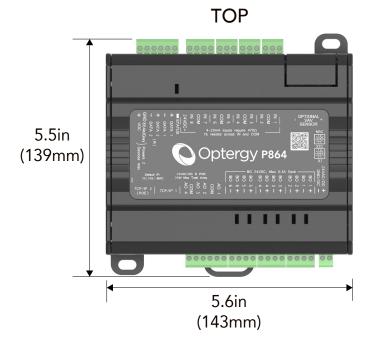
Hardware

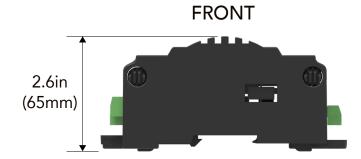
- 8 x universal inputs (12 bit resolution)
- 6 x binary outputs (relay NO/NC contacts)
- 4 x analog outputs (12 bit resolution)
- Powered via 24 VDC

HARDWARE SPECIFICATIONS

Processor & Memory	Arm Cortex-M3 32-bit Micro Controller (72 MHz)64 KB RAM 512 KB Flash Memory
Power	24 VDC, min load: 7 W, max load: 24 W
Inputs	8 universal inputs with 12-bit resolution, software selectable for 10 K. Type 2 thermistor, 3K thermistor, dry contact, 0-5 VDC/4-20 mA or 0-10 VDC signals. Pulse inputs support up to 100 Hz. Each protected by Transient Voltage Suppressing (TVS) diode.
Binary Outputs	6 NO/NC contacts each rated at 24 VAC/DC, 0.7 A passthrough. Total max current not to exceed 4.2 A for all relay contacts. Relay common can be cold or hot, powered by external ELV power supply. Each protected by 1 A Positive Thermal Coefficient (PTC) Fuse and Transient Voltage Suppressing (TVS) diode.
Analog Outputs	4 outputs with 12-bit resolution. Software selectable 0-10 VDC or 4-20 mA. (0-10 VDC min load resistance is 500 ohm). Each protected by 0.1 A Positive Thermal Coefficient (PTC) Fuse and Transient Voltage Suppressing (TVS) diode.
24 VDC Output	Power for external devices (stay within 24W power budget) 0.5 A Positive Thermal Coefficient (PTC) Fuse.
Dimensions	L 5.6 in (143 mm) x W 5.5 in (139 mm) x H 2.6 in (65 mm)
Weight	2.54lbs (1.15kg)
Mounting	Both screw and DIN rail mountable
Terminals	Removable header-type screw terminals accept 14-24 AWG (max 3 x 1.5 mm²)
Environment	-20°C to + 60°C -4°F to + 140°F 0 to 95% RH, non condensing
Communications	External cable (EXP bus)
Status Indication	Status LED. Indicated normal or fault condition.
Agency Certifications	UL 916, CE, FCC Purpose of control: Energy Management Construction of control: Independently Mounted Control for Surface Pollution Degree: 2 Impulse Voltage: 330 V ELV Levels: 24 V
Enclosure	ABS Plastic Fire Retardant Grade V-0
Model Number	864e Expandable Controller

DIMENSIONS





CONFIGURATION OPTIONS

Master Controller with Expansion IO control

