Technical Data

Low-Voltage Power Module
Distributed Low-Voltage Power System

Catalog#	Prepared by
Project	Date
Comments	Type

Low-Voltage Power Module

System Overview

The Distributed Low-Voltage Power system blends the benefits of both AC and DC power distribution to reduce the total installed cost of a lighting project by up to 20% while providing a completely flexible and electrically efficient solution.

Power Module Overview

Low-voltage power modules are designed to be distributed throughout a facility for an electrically efficient and energy code compliant installation. Power modules have integrated wiring compartments for 120-277VAC 50/60 Hz pass-thru wiring and create multiple low-voltage circuits of up to 100W (connect 90W MAX per low-voltage circuit) to daisy-chain LED light fixtures. Power modules offer connectivity with occupancy and daylighting sensors (integral to fixtures and external), receptacle controls, wall stations and scene controllers. Power modules interface with external time clocks, demand response, and BMS / Egress systems all in a passively cooled and plenum rated housing.

Features

- Supports up to three manual control zones
- Provides power, manual control, occupancy and daylight sensing for up to three separate spaces
- Plenum rated and passively cooled
- Integrated pass-thru Class 1 wiring compartment
- Demand response, time clock, and alert mode integration
- Simple DIP switch configuration
- Over 2000 square feet of LED lighting and controls coverage from a single power module
- Expandable coverage areas by connecting multiple power modules
- Supports integrated or external sensors
- Centralized maintenance and configuration
- Centralized system trim (high and low end) for comfort and energy savings

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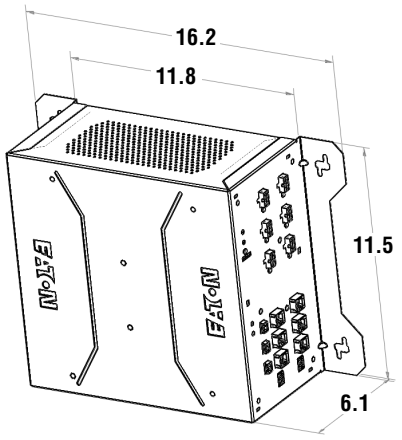
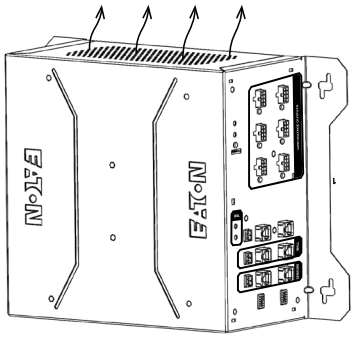
Specifications



Dimensions (inches)



Mounting Orientation

Input Voltage	120-277VAC (50/60 Hz)
Input Current	300W - PM 2.60A @120VAC 1.10A @277VAC
	600W - PM 5.20A @120VAC 2.20A @277VAC
Power Factor	Pf ≥ 0.9 at 50% or greater loads
Total Harmonic Distortion	THDi ≤ 10% at 50% or greater loads
Class 2 output	1.6A MAX @ 57VDC (nom) per low-voltage circuit Connect 90W MAX per low-voltage circuit
Class 2 outputs	300W = 3 600W = 6
Operating environment	32°F - 104°F (0°C - 40°C) Indoor dry locations only
Weight	10 lbs (4.5kg)
Standards	UL 2108 Listed c UL us

Installation

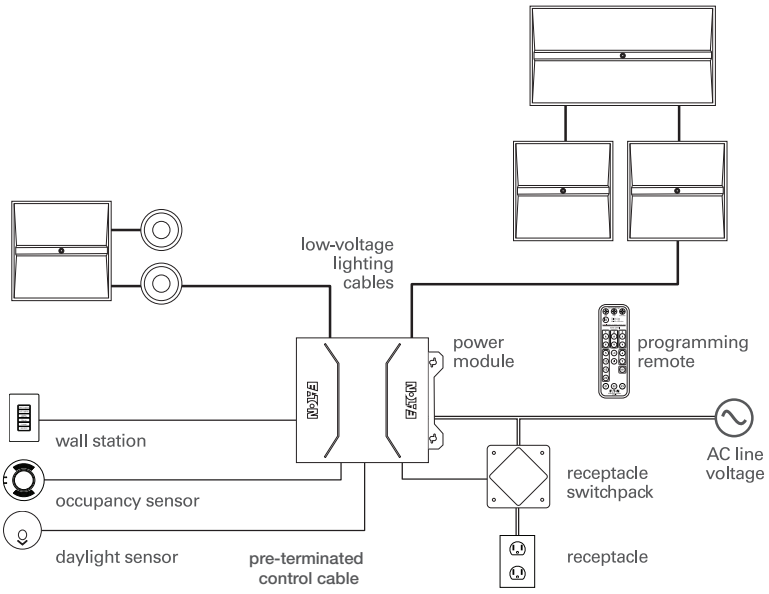
The line voltage wiring compartment of the low-voltage power module provides the installing contractor access to make all line voltage connections without additional junction boxes. The integrated wiring compartment is also suitable for pass-thru wiring. LED light fixtures are connected in a daisy-chain fashion with plug-n-play low-voltage lighting cables. Control devices including wall stations, sensors, and receptacle switch packs are connected with pre-terminated control cables. System configuration is enabled through simple DIP switches located on the face of the low-voltage power module. Addressable LED light fixtures are assigned to control zones with DIP switches located on the back of the fixture or through a handheld remote (integrated sensor models only).

To achieve UL924, a Remote Relay Unit (RRU) and UL1008 transfer switch may be used in conjunction with the low-voltage power module. During a power failure, an emergency power source would run the low-voltage power module turning on the LED lighting loads and disabling control inputs to meet life safety code.

Operation

Low-voltage power modules receive power from line voltage AC and produce multiple low-voltage DC power circuits. These low-voltage power circuits provide power and communications to LED light fixtures through plenum-rated pre-terminated cables for fast error-free connectivity. Control devices are connected in a similar manner using pre-terminated control cables (cables available separately) to complete an energy code compliant installation.

DLVP Wiring Diagram



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Ordering

Low-Voltage Power Modules

Catalog #	Description	Voltage
LVPM-03-100-03	300W Low-Voltage Power Module	120/277 VAC, 50/60 Hz
LVPM-06-100-03	600W Low-Voltage Power Module	120/277 VAC, 50/60 Hz

Additional Options

Low-Voltage Lighting Cable

Catalog #	Description
LVC-8P	DLVP Low-Voltage Plenum Rated Cable, 8 feet
LVC-15P	DLVP Low-Voltage Plenum Rated Cable, 15 feet
LVC-30P	DLVP Low-Voltage Plenum Rated Cable, 30 feet
LVC-WP	DLVP Low-Voltage Plenum Rated Wiring Pigtail
LVC-COUPLER	DLVP Low-Voltage Plenum Rated Coupling

Pre-terminated Control Cable

Catalog #	Description
GGRC-COUPLER	RJ45 Coupler
GGRC-SPLITTER	RJ45 Splitter
GGRJ45-006-G	RJ45 cables 6 inches
GGRJ45-03-G	RJ45 cables 3 feet
GGRJ45-10-G	RJ45 cables 10 feet
GGRJ45-25-G	RJ45 cables 25 feet
GGRJ45-50-G	RJ45 cables 50 feet
GGRJ45-100-G	RJ45 cables 100 feet
GGRJ45-10P-G	RJ45 cables 10 feet plenum rated
GGRJ45-25P-G	RJ45 cables 25 feet plenum rated
GGRJ45-50P-G	RJ45 cables 50 feet plenum rated
GGRJ45-100P-G	RJ45 cables 100 feet plenum rated

Note: See eaton.com/lightingsystems for more information.

Eaton
1121 Highway 74 South
Peachtree City, GA 30269
www.eaton.com/lightingsystems
For service or technical assistance:
1-800-553-3879

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Specifications and dimensions subject to change without notice.