



RACK MOUNT DIGITAL LIGHT MODULE

LumiCat™ 1 Port

Unrivaled Capability in Power & Control

Optum has developed a disruptive technology for Digitally Processing Power and Control of LED Illumination. This technology is more powerful, easier to commission and less expensive to install than POE (power over ethernet) or Distributed DC Power. Optum's Digitally Processed Lighting sets a new standard for LED Illumination, challenging traditional methods of illumination. Digital Light Modules, Powerful Control Hubs, Advanced Wall Controls and Specialized fixtures create the Illumination System of the future.

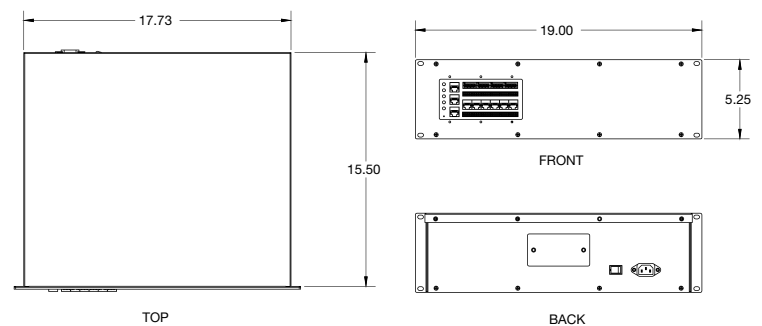
One port for a power or control module and up to **1,200 watts** of 24 VDC or 48 VDC power. Up to **eighty-five** 1 Port Docks can be connected providing **102,000 watts** of DC power and **510** controllable zones.



FEATURES:

- DC power over Cat-5 cable or up to 16 AWG 2 conductor wire
- Radically reduced installation costs
- Easiest system to commission on the market
- Programmed or manual switching to alternate energy sources such as solar, wind, storage battery, emergency egress power, etc.
- All aluminum and stainless-steel construction
- DMX, 0-10 VDC, BACnet or KNX control

DIMENSIONS



Digital Light Docks™

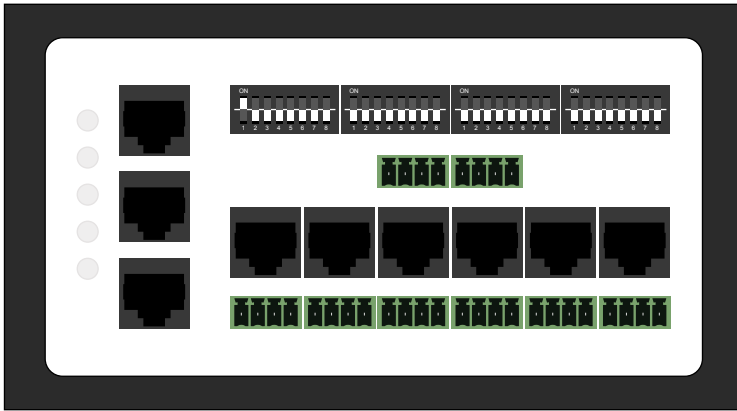
Optum's **Digital Light Docks** combine with specialized Digital Ports to create a virtually unlimited number of Rack Mount and Wall Mount Digital Light Modules, meeting the most complex illumination requirements.

Following is a listing of the Digital Port options used to configure LumiCat's Digital Light Module



THE FUTURE OF LIGHTING

Single Channel Class-1 or 6x100 watts Class 2 Ports



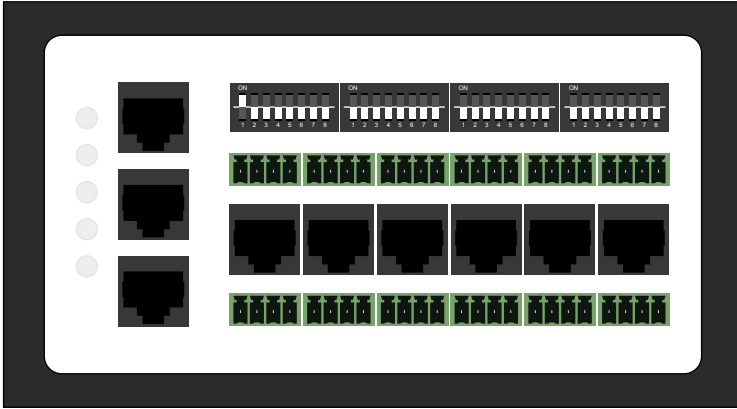
Description:

Three 24 VDC or 48 VDC Class-2 ports for power and control of LED illumination. Up to 200 watts over Cat-5 cable and 6 x 100 watts over 16 AWG wire. DMX channel can be set for individual ports and all ports will accept occupancy and/or daylight harvesting sensor input.

Features

- 1) Single 600 Watt (Class-1) Output and six 200 Watt Class-2 Outputs with hard-wire and RJ-45 connectors.
- 2) Six 200 Watt (Class-2) Channels
- 3) Front panel four-pin connectors for powering and control from Daylight Harvesting and Occupancy Sensors.
- 4) Front Panel Accessible Reset Button.
- 5) Five Front Panel Tri-Color LED System Status Indicators.
- 6) DIP Switch to set the DMX Channel.
- 7) RJ-45 ports for DMX-512 "IN, OUT and THROUGH".
- 8) DIP Switch to enable 0-10 VDC control.
- 9) DIP Switch to select "sink" or "source" 0-10 VDC control.
- 10) DIP Switch to enable occupancy and Daylight Harvesting sensors.
- 11) DIP Switch to enable programable Override in Daylight Harvesting Mode.
- 12) DIP Switch to provide 8 different PWM frequency settings.
- 13) DIP Switch to Enable Battery Back-up Mode.
- 14) DIP Switch to Select 16 different emergency egress light levels between 5% and 100%.
- 15) Proprietary PWM protocol, increasing the typical 256 step to thousands of smaller steps,
- 16) Hardware and Firmware "Watchdog Reset" providing auto system reset and reboot should a failure occur. This self-recovery, self-healing feature is incorporated in all Optum circuitry.

Six - 2 x 100 watt Class-2 Ports



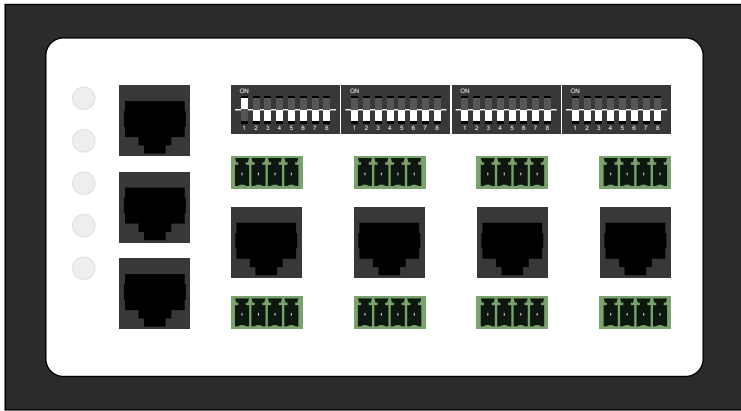
Description:

Six 24 VDC or 48 VDC Class-2 ports for power and control of LED illumination. 12 x 100 watts over Cat-5 cable or 12 x 100 watts over 16 AWG wire. DMX channel can be set for individual ports and all ports will accept occupancy and/or daylight harvesting sensor input.

Features

- 1) Six 100 Watt (Class-2) Outputs, with hard-wire and RJ-45 connectors on each output.
- 2) Front panel four-pin connectors for powering and control from Daylight Harvesting and Occupancy Sensors.
- 3) Front Panel Accessible Reset Button.
- 4) Five Front Panel Tri-Color LED System Status Indicators.
- 5) RJ-45 inputs for DMX-512 "IN, OUT and THROUGH".
- 6) DIP Switch to enable 0-10 VDC control.
- 7) DIP Switch to select "sink" or "source" 0-10 VDC control.
- 8) DIP Switch to enable Occupancy and Daylight Harvesting sensors.
- 9) DIP Switch to provide 8 different PWM frequency settings.
- 10) DIP Switch to Enable Battery Back-up Mode.
- 11) DIP Switch to Select 16 different emergency egress light levels between 5% and 100%.
- 12) DIP Switch providing 4 different combinations of DMX addressing:
 - Same DMX address for all Six Class-2 outputs.
 - Six different sequential DMX addresses for each Class-2 output.
 - One DMX address for the first three and a sequential DMX address for the next three Class-2 outputs.
 - One DMX address for the first two, a sequential DMX address for the next two and a sequential DMX address for the last two Class-2 outputs.
- 13) DIP Switch on each Class-2 output to enable programable Override in Daylight Harvesting Mode.
- 14) Proprietary PWM control, increasing the typical 256 DMX steps to thousands of smaller steps, resulting in smoother dimming.
- 15) Hardware and Firmware "Watchdog Reset" providing auto system reset and reboot should a failure occur. This self-recovery, self-healing feature is incorporated in all Optum circuitry.

Four - 4 Channel RGBW Ports



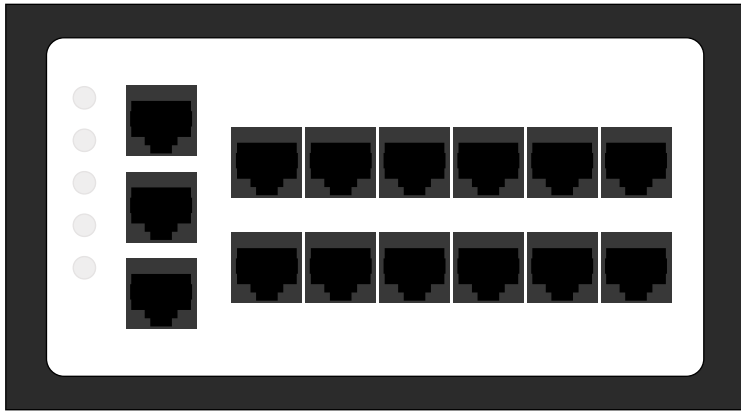
Description:

Four RGBW ports for power and control of full-color illumination. Up to 200 watts of RGBW over Cat-5 cable. DMX channel can be set for individual ports and separate outputs for RGBW over 16 AWG wire are included.

Features

- 1) Four 200 Watt (Class-2) RGBW Outputs, with hard-wire and RJ-45 connectors on each output.
- 2) Front panel four-pin connectors for powering and control from Daylight Harvesting and Occupancy Sensors.
- 3) Front Panel Accessible Reset Button.
- 4) Five Front Panel Tri-Color LED System Status Indicators.
- 5) RJ-45 inputs for DMX-512 "IN, OUT and THROUGH".
- 6) DIP Switch to enable 0-10 VDC control.
- 7) DIP switch to select "sink" or "source" 0-10 VDC control.
- 8) DIP Switch to enable Occupancy and Daylight Harvesting sensors.
- 9) DIP Switch to provide 8 different PWM frequency settings.
- 10) DIP Switch to Enable Battery Back-up Mode.
- 11) DIP Switch to Select 16 different emergency egress light levels between 5% and 100%.
- 12) DIP Switch providing 4 different combinations of DMX addressing:
 - Same DMX address for all Six Class-2 outputs.
 - Six different sequential DMX addresses for each Class-2 output.
 - One DMX address for the first three and a sequential DMX address for the next three Class-2 outputs.
 - One DMX address for the first two, a sequential DMX address for the next two and a sequential DMX address for the last two Class-2 outputs.
- 13) DIP Switch on each Class-2 output to enable programable Override in Daylight Harvesting Mode.
- 14) Proprietary PWM control, increasing the typical 256 DMX steps to thousands of smaller steps, resulting in smoother dimming.
- 15) Hardware and Firmware "Watchdog Reset" providing auto system reset and reboot should a failure occur. This self-recovery, self-healing feature is incorporated in all Optum circuitry.

Twelve Channel DMX Merge Port



Description:

Used to combine up to 12 DMX control signals into a single DMX Data Stream. Up to eight DMX Merge Control Hubs can be combined to merge up to 96 individual DMX inputs. Available in 5-Port, 19" rack mount or 8-Port wall mount units.

Features

- 1) 13 separate DMX-512 Inputs merge into a single DMX-512 Data stream.
- 2) Front Panel Accessible Reset Button.
- 3) Five Front Panel Tri-Color LED System Status Indicators.
- 4) DMX-512 "IN, OUT and THROUGH" RJ-45 Inputs.
- 5) Hardware and Firmware "Watchdog Reset" providing auto system reset and reboot should a failure occur. This self-recovery, self-healing feature is incorporated in all Optum circuitry.

Six - 0-10 VDC Control to DMX-512



Description:

Used to convert up to six 0-10 VC lighting control signals into a single DMX Data Stream. Will accept sink or source 0-10 VDC commands. Up to eight 0-10 VDC Control Hubs can be combined to merge up to 48 individual 0-10 VDC inputs. Available in 5-Port, 19" rack mount or 8-Port wall mount units.

Features

- 1) 6 Channels of 0-10 VDC Zone Control with Daylight Harvesting and Occupancy Sensing.
- 2) Merges six different 0-10 VDC control signals into a single DMX-512 Data Stream.
- 3) Four-pin connectors for powering and control from Occupancy and Daylight Harvesting Sensors.
- 4) Four-pin connector on each port for 0-10 VDC dimming and on/off control.
- 5) Front Panel Accessible Reset Button.
- 6) Five Front Panel Tri-Color LED System Status Indicators.
- 7) DMX-512 "IN, OUT and THROUGH" RJ-45 Inputs.
- 8) DIP Switch on each port for setting the DMX-512 Start and Stop Channel.
- 9) DIP Switch on each port to enable Occupancy or Daylight Harvesting sensor.
- 10) DIP Switch on each port to select "sink" or "source" 0-10 VDC control.
- 11) DIP Switch on each port to enable programable Override for Daylight Harvesting.
- 12) Hardware and Firmware "Watchdog Reset" providing auto system reset and reboot should a failure occur. This self-recovery, self-healing feature is incorporated in all Optum circuitry.



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Optum DLM Power

Power	Output Voltage	Input Voltage (AC)	Input Voltage (DC)	Output Current
320 Watt	48 VDC	90-305 VAC	127-431 VDC	6 Amps
320 Watt	48 VDC	88-264 VAC	124-370 VDC	7 Amps
600 Watt	48 VDC	115-230 VAC	254-370 VDC	13 Amps
600 Watt	48 VDC	90-305 VAC	127-431 VDC	13 Amps
1500 Watt	48 VDC	180-264 VAC	254-370 VDC	32 Amps
2000 Watt	48 VDC	90-264 VAC	127-370 VDC	42 Amps
2400 Watt	48 VDC	180-264 VAC	254-370 VDC	50 Amps
3000 Watt	48 VDC	180-264 VAC	254-370 VDC	63 Amps
5000 Watt*	48 VDC	196-305 VAC	N/A	105 Amps
6400 Watt*	48 VDC	90-264 VAC	127-370 VDC	134 Amps
6000 Watt**	48 VDC	90-264 VAC	127-370 VDC	126 Amps

*Available only in 8 Port Wall Mount units

**Available only in 19" Rack Mount units