

P3 PowerPort 500 IP Rental

INDOOR/OUTDOOR POWER+DATA UNIT FOR MARTIN CREATIVE LED FIXTURES

SPEC SHEET



OVERVIEW

The Martin P3 PowerPort 500 IP Rental delivers seamless power and data to Martin's Creative LED fixtures and is ideal for indoor/outdoor rental applications. It merges stable power delivery with high-speed, high-capacity data distribution, simplifying fixture deployment. The housing caters to rack-, truss-, and wall-installation, for maximum deployment flexibility.

To ensure utmost flexibility for designers and integrators, it can be driven using industry standard protocols, including Art-Net and sACN as well as Martin's award-winning P3 control protocol. It requires no local configuration or setup, enabling easy deployment and allowing power supplies to be located at significant distances from the lighting fixtures. It supports longer cables, more fixtures per daisy chain, and split branches. The built-in network switch eliminates the need for third-party switches, and power limiting control increases the number of fixtures per daisy-chain while implementing energy-saving measures.

The P3 PowerPort 500 IP Rental is a robust and reliable solution, as it protects all inputs and outputs against overload and surge conditions and built-in fail-safe bypass technology prevents single unit failures from disrupting the entire network. In addition, it is a single unit that provides data and power over a single cable to the fixtures. Furthermore, it features local status indication LEDs and a test button, eliminating the need for a person to be physically located at the controller or computer.

All P3 PowerPort-enabled Creative LED fixtures can be paired with the P3 PowerPort 500 IP Rental, even on the same daisy-chain.

KEY MESSAGES

ENABLES CONTROL OF MARTIN LED FIXTURES WITH ANY PROTOCOL

The combination of Martin Creative LED fixtures + Martin P3 PowerPort products is compatible with industry-standard protocols Art-Net and sACN in addition to Martin's proprietary P3 protocol to provide maximum flexibility to system designers and integrators.

MORE CABLING FREEDOM

Support for longer cables between P3 PowerPort and fixtures, compared to previous generation or competitor solutions, allows for more fixtures per daisy chain, and the creation of split branches. Moreover, P3 PowerPort half-power mode doubles the quantity of fixtures per daisy-chain, enabling enhanced energy savings.

HIGHLY ERGONOMIC INSTALLATION

The P3 PowerPort family does not require any local configuration or setup. The family offers a wide variety of solutions suitable for any installation method or environment. These solutions feature local status indication LEDs and a test button, eliminating the need for a person to be physically located at the controller or computer.

ROBUST AND RELIABLE SOLUTION

The P3 PowerPort system protects all inputs and outputs against overload and surge conditions. Built-in fail-safe bypass technology ensures that a single unit failure will not disrupt the entire network. Furthermore, P3 PowerPorts are single units that provide data and power over a single cable to the fixtures.

COMPATIBLE FIXTURES

- VDO Sceptron XB
- Exterior Dot-HP Pro
- Exterior Dot-1 Pro (via Exterior DC-Feeder)
- Exterior Dot-4 Pro (via Exterior DC-Feeder)
- Exterior Dot-9 Pro (via Exterior DC-Feeder)

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FEATURES

- Indoor/Outdoor power+data supply unit for rental Martin Creative LED fixtures
- Ideal for rental applications
- Features 1 power+data output for connection of fixtures
- Built-in network switch for easy daisy-chaining
- Status LEDs providing real-time feedback
- Local test button for easy diagnostics
- Built-in power-control enables more fixtures per daisy-chain when full output is not needed
- Built-in Hibernation mode enables energy-saving when system not in use
- Compatible with Art-Net, sACN and Martin P3
- Fitted with connectors for easy deployment
- Can be rack-, truss-, or wall-mounted
- IP65 rated

ORDERING INFORMATION

- Martin P3 PowerPort 500 IP RentalP/N MAR-90721201

INCLUDED ITEMS

- 1x Multi-Language Safety & Installation Manual
- 1x Safety Cable Attachment Eyelet, incl. screws
- 2x Short Rack Mounting Ears (usable for rack-, wall-, and clamp-mounting), incl. screws
- 1x Long Rack Mounting Ear (usable for rack-mounting), incl. screws
- 1x Coupling Plate (useable for rack-mounting), incl. screws

RELATED ITEMS

- Martin P3 PowerPort 2000.....P/N MAR-90721200
- Martin P3 PowerPort 500 IP Install.....P/N MAR-90721202
- Martin DCE PSU 240 IP..... P/N MAR-90721203
- Martin DCE DataSplitterBooster IP.....P/N MAR-90721204
- Martin Companion Firmware Upload, Addressing and Stand-Alone Programming Software Free download from martin.com
- P3-175 System ControllerP/N MAR-90721100
- P3-275 System ControllerP/N MAR-90721101
- P3-PC System Controller..... Free download from martin.com

ACCESSORIES

AC Power Input Cables

- Power Input Cable, H07RN-F, 2.5 mm², bare ends to TRUE1 NAC3FX-W TOP (female), 1.5 m (4.9 ft.) : P/N 91611797
- Power Input Cable, SJ00W, 12 AWG, bare ends to TRUE1 NAC3FX-W TOP (female), 1.5 m (4.9 ft.): P/N 91610173

AC Power Linking Cables

- Power Relay Cable, H07RN-F, 2.5 mm², TRUE1 to TRUE1, 2.5 m (8.2 ft.):..... P/N 91611796
- Power Relay Cable, SJ00W, 12 AWG, TRUE1 to TRUE1, 2.5 m (8.2 ft.):..... P/N 91610172

AC Power Connectors

- Cable Connector, Neutrik PowerCON TRUE1 Female:..... P/N 91611789HU
- Cable Connector, Neutrik PowerCON TRUE1 Male:..... P/N 91611788HU

Pre-Assembled Hybrid DCE Cables

- DC + Ethernet Cable DCE-DCE 1m: P/N MAR-91700100
- DC + Ethernet Cable DCE-DCE 2.5m: P/N MAR-91700101
- DC + Ethernet Cable DCE-DCE 5m: P/N MAR-91700102
- DC + Ethernet Cable DCE-DCE 10m: P/N MAR-91700103
- DC + Ethernet Cable DCE-DCE 25m: P/N MAR-91700104

Bulk Hybrid DCE Cables

- DC + Ethernet Cable 100m: P/N MAR-91700105
- DC + Ethernet Cable LSZH 100m: P/N MAR-91700106

Field-Installable DCE Connectors

- Field-installable Connector DCE Male:..... P/N MAR-91700107
- Field-installable Connector DCE Female: P/N MAR-91700108

Closing Caps for DCE Connectors

- Closing Cap Male DCE Connector:..... P/N MAR-91700109
- Closing Cap Female DCE Connector:..... P/N MAR-91700110

Hybrid DCE Adapters

- DC + Ethernet Adapter DCE Male-Male:..... P/N MAR-91700111
- DC + Ethernet Adapter DCE Female-Female: ... P/N MAR-91700112
- DC + Ethernet Adapter EtherCON+Wires to DCE:..... P/N MAR-91700113
- DC + Ethernet Adapter DCE to EtherCON: P/N MAR-91700114

Rigging Accessories

- Super Lightweight Half Coupler Rigging Clamp, black: P/N MAR-91602018
- G-clamp: P/N MAR-91602003
- Half-coupler clamp: P/N MAR-91602005
- Quick trigger clamp:..... P/N MAR-91602007
- Safety Cable, SWL 60 kg, BGV C1 / DGUV 17, black:..... P/N MAR-91604006
- Safety Cable, SWL 60 kg, BGV C1 / DGUV 17, silver:..... P/N MAR-91604007

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TECHNICAL SPECIFICATIONS

CONTROL AND PROGRAMMING

Control Protocols:.....P3, sACN, Art-Net and RDM over Art-Net
Protocol Detection:.....Automatic
Setting:.....P3 or RDM over Art-Net
Fixture identification:.....User-settable ID number
Art-Net Compliance:.....Art-Net 1, 2, 3 and 4; including RDM over Art-Net
sACN Compliance:.....ANSI E1.31 - 2018
Martin P3 Compliance:.....P3 System Controller Software 6.1.0 or newer
Ethernet Transceiver IN:.....100/1000Mbit (with fail-safe bypass to Ethernet THRU)
Ethernet Transceiver THRU:.....100/1000Mbit (with fail-safe bypass to Ethernet IN)
Ethernet Transceiver OUT:.....100Mbit
Firmware Update:.....via Ethernet using Martin Companion or P3 System Controller

CONTROL/USER INTERFACE FRONTPANEL

Power Out Status:.....1x Green LED
Ethernet Out Status:.....1x Amber LED
Ethernet In/Thru Status 1-2:.....2x Green + Amber LED
Device Status:.....1x RGB LED
Device test and reset:.....Pushbutton to call up test pattern on fixtures connected to DCE output and reset device

CONTROL/USER INTERFACE BACKPANEL

Fixtures Power Mode:.....DIP switch to force all connected fixtures in normal power, force all connected fixtures in half power or let controller decide (via P3 or RDM)
Frontpanel Disable:.....DIP switch to disable all (5) Status LEDs and the pushbutton on the frontpanel

CONSTRUCTION

Color:.....Matte Black
Housing Material:.....Aluminum
Protection Rating:.....IP 65
NEMA Enclosure Rating:.....Type 3
Corrosion Resistance:.....ISO 12944-6: 2018; C3 Medium, Test regime ISO 9227, 240h

INSTALLATION

Orientation:.....Any
Single Unit 19-inch Rackmount: Using supplied short and long rack mounting ears
Dual Unit 19-inch Rackmount:.....Using supplied coupling plates and short rack mounting ears
Wallmount:.....Using supplied short rack mounting ears
Trussmount Vertical:.....Using half-coupler clamp in M10 threaded hole, max. bolt length 20 mm
Trussmount Horizontal:.....Using halfcouplers in supplied short rack mounting ears
Location:.....Indoor or temporary outdoor

CONNECTIONS

Power In/Thru:.....Neutrik powerCON TRUE1 TOP
Ethernet In/Thru:.....2x Neutrik etherCON TOP
DC Power & Network output:.....1x chassis-mount DCE hybrid connector (7pin)
All connections hot plugging compatible

OUTPUT PORTS

Quantity:.....1
Power:.....48 VDC / 10 A
Ethernet:.....100Mbit (P3, sACN, Art-Net)

ELECTRICAL

AC power:.....100-240 V AC nominal, 50/60 Hz
Power supply unit:.....Auto-ranging electronic switch mode
Typical half-cycle RMS inrush current at 230 V, 50 Hz:.....2.7 A
Typical earth-leakage current:.....0.53 mA
Power Factor:.....0.99 @ 100 V / 120 V, 0.98 @ 208 V, 0.97 @ 230 V / 240 V
Max current draw:.....5.5 A @ 100 V / 120 V, 3.0 A @ 208 V / 230 V / 240 V
Typical current draw:.....5.3 A @ 100 V / 120 V, 2.6 A @ 208 V / 230 V / 240 V *
Power Consumption:
Maximum:.....500 W
Typical:.....480 W *
Idle:.....5 W *
Hibernation:.....4 W *

* Measurements made at nominal voltage. Allow for a deviation of +/- 10%.
Typical: output at full capacity with all connected fixtures at full output white.
Idle: output at full capacity with all connected fixtures at zero output.
Hibernation: output disabled; wake-up procedure required to re-use fixtures.

THERMAL

Cooling:.....Convection
Maximum Ambient Temperature (Ta max):.....40° C (104° F)
Minimum Ambient Temperature (Ta min):.....-30° C (-22° F)
Maximum Surface Temperature, steady state, at 40° C ambient:.....65° C (149° F)
Typical Heat Dissipation:.....106 BTU/hr.

ENVIRONMENTAL

RoHS:.....Compliant
REACH:.....Compliant
WEEE:.....Compliant
Proposition 65:.....Compliant
FSC:.....Certified cardboard inlay and outer packaging

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TECHNICAL SPECIFICATIONS

APPROVALS

Global CB Certification/IECEE: .. IEC 62368-1

EU safety:..... EN 62368-1

EU EMC:..... EN 55032, EN 55035, EN 61000-3-2,
EN 61000-3-3

US safety:..... UL 62368-1

US EMC:..... FCC Part 15 Class B

Canadian safety:..... CSA C22.2 No. 62368-1

Canadian EMC:..... ICES-003 Class B

Australia/NZ:..... RCM

United Kingdom:..... UKCA



Backpanel



DIMENSIONS

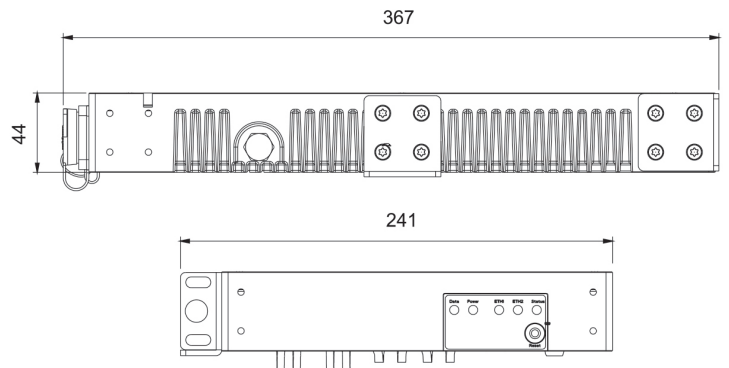
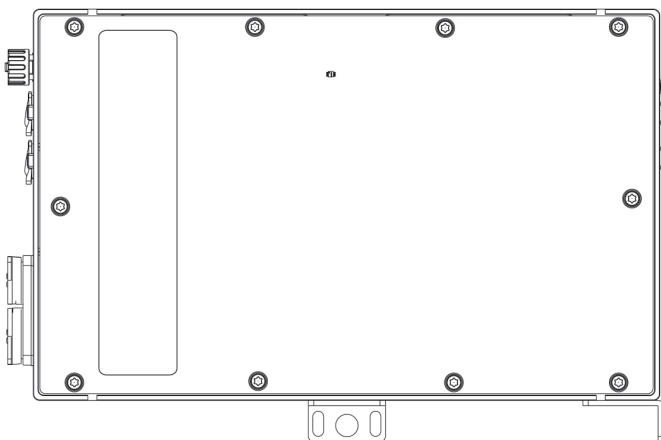
PHYSICAL

Width..... 217.0 mm [8.5 in.] (single or double unit 19" rack-mountable with included rackmount ears)

Height..... 44.45 mm [1.75 in.] (rackmount 1U)

Depth..... 365.0 mm [14.4 in.]

Weight..... 3.5 kg [7.7 lbs.]



All measurements are in mm

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MOUNTING OPTIONS



Single Unit 19-inch Rackmount



Dual Unit 19-inch Rackmount



Wallmount



Trussmount Vertical



Trussmount Horizontal

P3 POWERPORT FAMILY COMPARISON

	P3 PowerPort 2000	P3 PowerPort 500 IP Rental	P3 PowerPort 500 IP Install	DCE PSU 240 IP
Output Capacity	4 x 480 W	1 x 480 W	1 x 480 W	1 x 240 W
Output Power Control	Full / Half / Hibernation	Full / Half / Hibernation	Full / Half / Hibernation	-
Input / Output	Connectors	Connectors	Cable Glands & Wiring Terminals	Cable Glands & Wiring Terminals
Control	Art-Net, sACN & Martin P3	Art-Net, sACN & Martin P3	Art-Net, sACN & Martin P3	Art-Net, sACN & Martin P3
Daisy-Chaining	Yes	Yes	Yes	No
Local Status Indication	Status Indication LEDs	Status Indication LEDs	Status Indication LEDs	-
Local Test Function	Multi-Function Pushbutton	Multi-Function Pushbutton	Multi-Function Pushbutton	-
Environmental Rating	IP20	IP65	IP66	IP66
Installation	Rack / Truss / Wall	Rack / Truss / Wall	Wall	Wall
Size	482 x 44 x 375 mm (19" rack-mount 1U)	217 x 44 x 365 mm (19" rack-mount 1/2U)	325 x 84 x 385 mm	420 x 39 x 86 mm
Weight	6.8 kg (15.0 lbs)	3.5 kg (7.7 lbs)	9.5 kg (20.9 lbs)	1.6 kg (3.6 lbs)