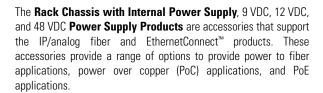
EthernetConnect[™] and IP/Analog Fiber Accessories power supplies. RACK CHASSIS WITH INTERNAL POWER SUPPLY

Product Offerings

- USRACK/EURACK: Rack Chassis with Internal 9 VDC, 6.5 A Power Supply, 14 Slots
- FXTPS: 9 VDC, 2 A, Power Supply Provides Power to Stand-Alone Units
- ECPS-12VDC-0.5A: 12 VDC, 0.5 A, Power Supply Provides Power to Stand-Alone Units
- ECPS-12VDC-3A: 12 VDC, 3 A, Power Supply Provides Power to Stand-Alone Units
- FXTPS-48V: 48 VDC, 1.36 A, Power Supply Provides Power Over Ethernet (PoE) Power to Stand-Alone Units
- ECPS-48VDC-5A: 48 VDC, 5 A, Power Supply, DIN Rail Mount, Ideally Suited for PoE Applications
- ECPS-48VDC-10A: 48 VDC, 10 A, Power Supply, DIN Rail Mount, Ideally Suited for PoE Applications



The 14-slot **Rack Chassis** allows for module installation in a chassis that is rack mountable. The chassis contains an internal 9 VDC, 6.5 A power supply that provides power directly to all modules installed in the chassis; no external power supply is required. The power supply provides current limiting at each slot for short circuit protection.

The 9 VDC, 12 VDC, and 48 VDC **Power Supply Products** provide excellent voltage and current alternatives for powering stand-alone IP/analog fiber and Ethernet modules. The 48 VDC, 5 A and 10 A power supplies are ideally suited for PoE applications.







FEXTPS/ECPS-12VDC-3A

ECPS-12VDC-0.5A



FEXTPS-48V



ECPS-48VDC-5A



ECPS-48VDC-10A





RECOMMENDED POWER SUPPLIES AND HARDWARE

9 VDC POWER SUPPLY PRODUCT FEATURES

USRACK/EURACK RACK CHASSIS

- · Output Voltage: 9 VDC
- Output Current: 6.5 A
- Input Voltage: 90 to 264 VAC
- Provides Fourteen 1-Inch Slots
- Rack Mount and Power for 14 Modules
- Automatic Current Limiting at Each Module Slot (Not at the Power Supply Output)
- Voltage Transient Protection on all Power and Signal Input/Output Lines Provides Unconditional Protection
- · All Modules Installed in the Chassis are Hot-Swappable
- 3 RU High
- IEC Cord Included: US, UK, EU, or AUS
- Optional RACK1B Single-Width Blank Filler Panel Covers the Front of an **Empty Chassis Slot**

- · Output Voltage: 9 VDC
- · Output Current: 2 A
- Input Voltage: 100 to 240 VAC
- Broad Input Voltage Range for EU and US Application
- Frequency Range of 50 to 60 Hz for EU and US Application
- Changeable Input Voltage Pin Head; US Pin Head Standard
- · Pin Heads Also Included for Europe, Australia, and UK

12 VDC POWER SUPPLY PRODUCT FEATURES

ECPS-12VDC-0.5A

- · Output Voltage: 12 VDC
- Output Current: 0.5 A
- Input Voltage: 100 to 240 VAC
- Broad Input Voltage Range for EU and US Application
- Frequency Range of 50 to 60 Hz for EU and US Application
- Changeable Input Voltage Pin Head: US Pin Head Standard
- Pin Heads Also Included for Europe, Australia, and UK

ECPS-12VDC-3A

- Output Voltage: 12 VDC
- Output Current: 3 A
- Input Voltage: 100 to 240 VAC
- Broad Input Voltage Range for EU and US Application
- Frequency Range of 50 to 60 Hz for EU and US Application
- Changeable Input Voltage Pin Head; US Pin Head Standard
- Pin Heads Also Included for Europe, Australia, and UK

48 VDC POWER SUPPLY PRODUCT FEATURES

FEXTPS-48V

- Output Voltage: 48 VDC
- Output Current: 1.36 A
- Input Voltage: 100 to 240 VAC
- Broad Input Voltage Range for EU and US Application
- Frequency Range of 50 to 60 Hz for US and EU Application
- For Use on Standalone PoE Models
- IEC Cord Included: US, UK, EU, or AUS

ECPS-48VDC-5A

- Output Voltage: 48 VDC
- Output Current: 5 A
- AC Input Voltage: 85 to 264 VAC, 47 to 63 Hz
- DC Input Voltage: 120 to 375 VDC
- Output Overvoltage Protection: <57 VDC
- Output Overcurrent Protection: >150% of Rated Load Current
- Output Short Circuit Protection: Hiccup Mode, Non-Latching (Auto-Recovery When the Fault is Removed)
- Power Factor: >0.96 at 115 VAC, >90 at 230 VAC
- High Operating Efficiency: >90% at 115 VAC, >92% at 230 VAC
- Small Package for Limited Space Installations
- Mounts on 35 mm (1.4 in) DIN Rail in Accordance with EN60715
- Natural Convection Cooling: No Fans Required

ECPS-48VDC-10A

- Output Voltage: 48 VDC
- Output Current: 10 A
- AC Input Voltage: 85 to 264 VAC, 47 to 63 Hz
- DC Input Voltage: 120 to 375 VDC
- Output Overvoltage Protection: <57 VDC
- Output Overcurrent Protection: >150% of Rated Load Current
- Output Short Circuit Protection: Hiccup Mode, Non-Latching (Auto-Recovery When the Fault is Removed)
- Power Factor: >0.96 at 115 VAC, >90 at 230 VAC
- High Operating Efficiency: >91% at 115 VAC, >93% at 230 VAC
- Small Package for Limited Space Installations
- Mounts on 35 mm (1.4 in) DIN Rail in Accordance with EN60715
- Natural Convection Cooling: No Fans Required

9 VDC Rack Power Supply Products

MODELS

USRACK 9 VDC, 14-slot chassis, internal power supply

with US AC power cord, 19-inch, 3 RU rack

mount

EURACK 9 VDC, 14-slot chassis, internal power supply

with UK, EU, or AUS AC power cord, 19-inch,

3 RU rack mount

ELECTRICAL

Input Voltage 90 to 264 VAC at 70 W maximum

Output Voltage 9 VDC

Accuracy ± 5% at 6.5 A at 75°C

Output Current 6.5 A

Fusing 1.25 A slow-blow (rack power supply) plug-in

modules individually electronically fused; each power supply unit is individually fused.

MTBF >100,000 hours
Power Indicator Red LED

AC Line Cord Detachable, IEC-connected; US, UK, EU, or

AUS power cords available

MECHANICAL

Dimensions 48.2 x 19 x 17.5 cm

(19.0" D x 7.5" W x 6.9" H)

Rack Slots 14 slots available, 1-inch slots

Unit Weight 2.27 kg (5 lb) Shipping Weight <3 kg (6.61 lb)

GENERAL

 Operating Temp
 -40° to 75°C (-40° to 167°F)

 Storage Temp
 -40° to 85°C (-40° to 185°F)

 Relative Humidity
 20% to 80%, noncondensing

Heat Generation 240 BTU

CERTIFICATIONS/RATINGS

- CE, Class A
- FCC, Class A
- UL/cUL Listed
- C-Tick
- Meets NEMA TS-1/TS-2 Standards and the Caltrans Specification for Traffic Signal Control Equipment

RECOMMENDED ACCESSORY

RACK1B Single-width blank filler panel covers the

front of an empty chassis slot



BLANK FILLER PANEL

9 VDC Power Supply Product

MODEL

FEXTPS 9 VDC switching power supply

ELECTRICAL

Input Voltage Range 100 to 240 VAC
Input Frequency Range 50 to 60 Hz
Input Power Consumption <0.5 W (at no load)
Input Current 600 mA RMS maximum

Output Voltage 9 VDC
Output Load Range 2 A maximum

MECHANICAL

Input Pins Includes input voltage pin heads for US/North

America, Europe, Australia, and UK

Note: Refer to the Product Features section

for pictorial descriptions.

Dimensions 7.4 x 4.4 x 3.5 cm

(2.9" D x 1.7" W x 1.4" H)

Unit Weight 0.25 kg (0.55 lb) Shipping Weight <0.45 kg (1 lb)

GENERAL

Operation Temperature 0° to 40°C (32° to 104°F)
Storage Temperature -10° to 70°C (14° to 158°F)
Relative Humidity 20% to 80%, noncondensing

CERTIFICATIONS/RATINGS

- CE, Class A
- FCC, Class A
- UL/cUL Listed
- C-Tick

12 VDC Power Supply Products

MODELS

ECPS-12VDC-0.5A 12 VDC, 0.5 A switching power supply ECPS-12VDC-3A 12 VDC, 3 A switching power supply

ELECTRICAL

Input Voltage Range 100 to 240 VAC Input Frequency Range 50 to 60 Hz <0.3 W (at no load) Input Power Consumption

Input Current

ECPS-12VDC-0.5A 0.3 A RMS maximum ECPS-12VDC-3A 1 A RMS maximum 12 VDC

Output Voltage

Output Load Range

ECPS-12VDC-0.5A 0.5 A maximum ECPS-12VDC-3A 3 A maximum

MECHANICAL

Input Pins Includes input pin heads for US/North America, Europe, Australia, and UK

Note: Refer to the Product Features section

for pictorial descriptions.

Dimensions

6.4 x 4.1 x 3.0 cm ECPS-12VDC-0.5A

(2.5" D x 1.6" W x 1.2" H)

7.4 x 4.4 x 3.5 cm ECPS-12VDC-3A

(2.9" D x 1.7" W x 1.4" H)

Unit Weight

ECPS-12VDC-0.5A 0.25 kg (0.55 lb) ECPS-12VDC-3A 0.25 kg (0.55 lb

Shipping Weight

ECPS-12VDC-0.5A <0.45 kg (1 lb) ECPS-12VDC-3A <0.45 kg (1 lb)

GENERAL

0° to 40°C (32° to 104°F) Operation Temperature -10° to 70°C (-4° to 158°F) Storage Temperature 20% to 80%, noncondensing Relative Humidity

CERTIFICATIONS/RATINGS

- CE, Class A
- FCC, Class A
- UL/cUL Listed
- C-Tick

48 VDC Power Supply Products

MODEL

FEXTPS-48V 48 VDC switching power supply

ELECTRICAL

Input Voltage Range 100 to 240 VAC Input Frequency Range 50 to 60 Hz Input Power Consumption <0.5 W (at no load) 1.4 A RMS maximum Input Current

48 VDC Output Voltage

Output Load Range 1.36 A maximum

MECHANICAL

Dimensions 11.5 x 5.3 x 3.8 cm (4.5" D x 2.1" W x 1.5" H) Unit Weight 0.32 kg (0.70 lb) Shipping Weight <0.68 kg (1.50 lb)

GENERAL

0° to 40°C (32° to 104°F) Operation Temperature Storage Temperature -20° to 80°C (-4° to 176°F) Relative Humidity 20% to 80%, noncondensing

CERTIFICATIONS/RATINGS

- CE, Class A
- · FCC, Class A
- UL/cUL Listed
- C-Tick

TECHNICAL SPECIFICATIONS

48 VDC 5 A Power Supply Products

MODEL

ECPS-48VDC-5A 48 VDC switching power supply, 240 W

ELECTRICAL

Output

Output Voltage Trim Range

Typical VDC Minimum 48 VDC
Typical VDC Maximum 56 VDC
Typical Current 5 A

Efficiency >90% at 115 VAC, >92% at 230 VAC

Line Regulation <0.5% typical
Load Regulation <1% typical

Output Voltage Tolerance ±1% (initial set point tolerance from factory)
Hold-Up Time >20 ms at 115 VAC and 230 VAC (100% load)

Output Overvoltage Protection <57 VDC

Output Short Circuit Protection Hiccup mode, non-latching

(auto-recovery when the fault is removed)
Rated Overload Protection >150% of rated load current, hiccup mode,

non-latching (auto-recovery)

Input

Rated Input Voltage Range

AC 85 to 264 VAC DC 120 to 375 VDC

Rated Input Current at Vinput 115 VAC 230 VAC

2.5 A 1.3 A

Frequency Range 47 to 63 Hz

Maximum Inrush Current 115 VAC 230 VAC

<35 A <35 A

MECHANICAL

Cooling Natural convection: requires 5.0 cm (2.0 in)

free space above and below and lateral distance of 2.0 cm (0.79 in) from other units to

ensure adequate cooling

-25° to 80°C (-13° to 176°F)

Cable Mount

Screw Terminal Blocks 12 to 20 AWG flexible or solid cable

Dimensions 12.1 x 8.5 x 12.4 cm (4.8" D x 3.4" W x 4.9" H)

Unit Weight 0.96 kg (2.12 lb) Shipping Weight <1.75 kg (3.86 lb)

GENERAL

Operating Temperature

Power Derating

Vertical Mounting >50°C, derate power by 2.5%/°C
Horizontal Mounting >40°C, derate power by 2.5%/°C
Storage Temperature -25° to 85°C (-13° to 185°F)

Relative Humidity <95%, noncondensing

CERTIFICATIONS/RATINGS

• CE, Class B

• FCC, Class B

UL/cUL Recognized

TECHNICAL SPECIFICATIONS

48 VDC 10 A Power Supply Products

MODEL

ECPS-48VDC-10A 48 VDC switching power supply, 480 W

ELECTRICAL

Output

Output Voltage Trim Range

Typical VDC Minimum 48 VDC
Typical VDC Maximum 56 VDC
Typical Current 10 A

Efficiency >91% at 115 VAC, >93% at 230 VAC

Line Regulation <0.5% typical Load Regulation <1% typical

Output Voltage Tolerance ±1% (initial set point tolerance from factory)
Hold-Up Time >20 ms at 115 VAC and 230 VAC (100% load)

Output Overvoltage Protection <57 VDC

Output Short Circuit Protection Hiccup mode, non-latching

(auto-recovery when the fault is removed) >150% of rated load current, hiccup mode,

non-latching (auto-recovery)

Input

Rated Input Voltage Range

Rated Overload Protection

AC 85 to 264 VAC DC 120 to 375 VDC

Rated Input Current at Vinput 115 VAC 230 VAC

5 A 3.0 A

Frequency Range 47 to 63 Hz

Maximum Inrush Current <u>115 VAC</u> <u>230 VAC</u>

<35 A <35 A

MECHANICAL

Cooling Natural convection: requires 5.0 cm (2.0 in)

free space above and below and lateral distance of 2.0 cm (0.79 in) from other units to

ensure adequate cooling

Cable Mount

Screw Terminal Blocks 12 to 20 AWG flexible or solid cable

Dimensions 12.1 x 14.4 x 11.9 cm (4.8" D x 5.7" W x 4.7" H)

Unit Weight 1.37 kg (3.02 lb) Shipping Weight <2.20 kg (4.85 lb)

GENERAL

Operating Temperature

-25° to 75°C (-13° to 167°F)

Power Derating

Vertical Mounting Only >50°C, derate power by 2.5%/°C

>70°C, derate power by 5%/°C

 $\begin{array}{ll} \mbox{Storage Temperature} & -25^{\circ} \mbox{ to } 85^{\circ}\mbox{C (-13$^{\circ}$ to } 185^{\circ}\mbox{F)} \\ \mbox{Relative Humidity} & <95\%, \mbox{ noncondensing} \\ \end{array}$

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CERTIFICATIONS/RATINGS

• CE, Class B

• FCC, Class B

UL/cUL Recognized