



## **EPS5000-120 External Power Supply**



**For Fiber Optic Modules**

**C1632M-A (10/06)**



# Important Safety Instructions

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1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the points where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases shall be placed on the apparatus.
16. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
17. Installation should be done only by qualified personnel and conform to all local codes.
18. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
19. Use only installation methods and materials capable of supporting four times the maximum specified load.
20. **CAUTION:** These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
21. Only use replacement parts recommended by Pelco.

The product and/or manual may bear the following marks:



**WARNING:** This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

**CAUTION:**

**RISK OF ELECTRIC SHOCK.  
DO NOT OPEN.**

# Regulatory Notices

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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## **RADIO AND TELEVISION INTERFERENCE**

This equipment has been tested and found to comply with the limits of a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes and Modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission's rules.

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

# Description

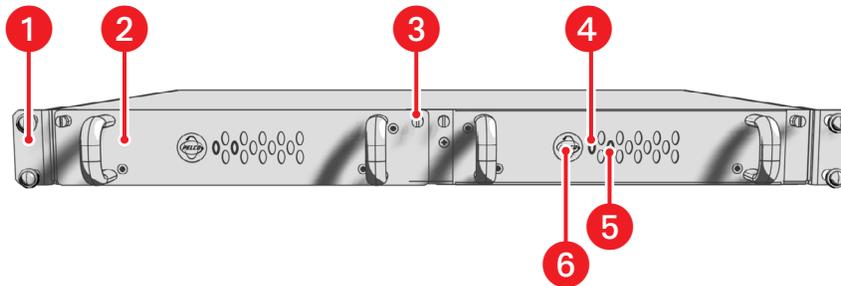
The EPS5000-120 external power supply, which is 1 rack unit (RU) high, has dual 120 W power supplies that slide into a tray. The external power supply can be mounted into a 19-inch, EIA-standard rack. The EPS5000-120 can be used in the following ways:

- Provide power to two fully populated RK5000-3U
- Provide power to one fully populated RK5000-3U
- Provide redundant power to one fully populated RK5000PS-3U
- Provide redundant power to two fully populated RK5000PS-3U

The relay output connector on the back of the EPS5000-120 is tied to the alarm LED. The alarm LED turns red when there is an alarm condition, such as the loss of the optical signal or the video signal. The relay will close or open, depending on whether it is set to normally closed (N.C.) or normally open (N.O.). The 6-pin power connector allows you to connect an over-molded cable (supplied) from the EPS5000-120 to either the RK5000-3U or the RK5000PS-3U. The power fail LED turns red when there is a problem with the power supply that can cause it to fail. If one of the power supplies fails, the blue Pelco badge will turn off.

## FRONT VIEW

- 1 Rack Ears (2)
- 2 Power Supply with Handles (2)
- 3 Thumbscrews for Fastening Power Supply (4)
- 4 Power Fail LED (2)
- 5 Alarm LED (2)
- 6 Pelco Badge Power Indicator (2)



**Figure 1.** EPS5000-120 Front View

# BACK VIEW

- 1 Power Switch (2)
- 2 AC Power Cord Connector (2)
- 3 6-Pin Power Connector (2)
- 4 Relay Output Connector (2)
- 5 Spare Fuse (2)

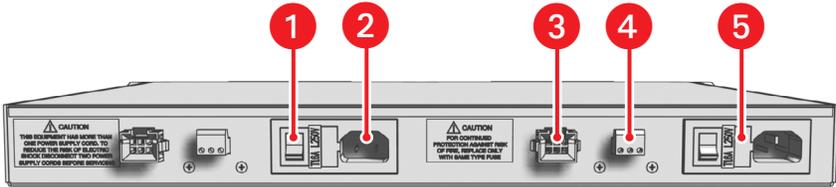


Figure 2. EPS5000-120 Back View

# Installation

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The following items are supplied with each EPS5000-120.

- 1 Rack mount chassis
- 2 Snap-on ferrites
- 2 Power supplies (EPSPWR-120)
- 4 Power cords (2 USA standard and 2 European standard)
- 2 G-power cables (over-molded)
- 4 Screws, 10-32 x 0.750-inch, Phillips, pan head with washers

## ATTACHING THE FERRITES

Two snap-on ferrites are supplied with the EPS5000-120 external power supply, one for each over-molded cable. Each ferrite must be attached to the end of the over-molded cable that plugs into either an RK5000-3U or RK5000PS-3U. The ferrites must be attached to the over-molded cables for the external power supply to comply with FCC and CE emissions requirements.

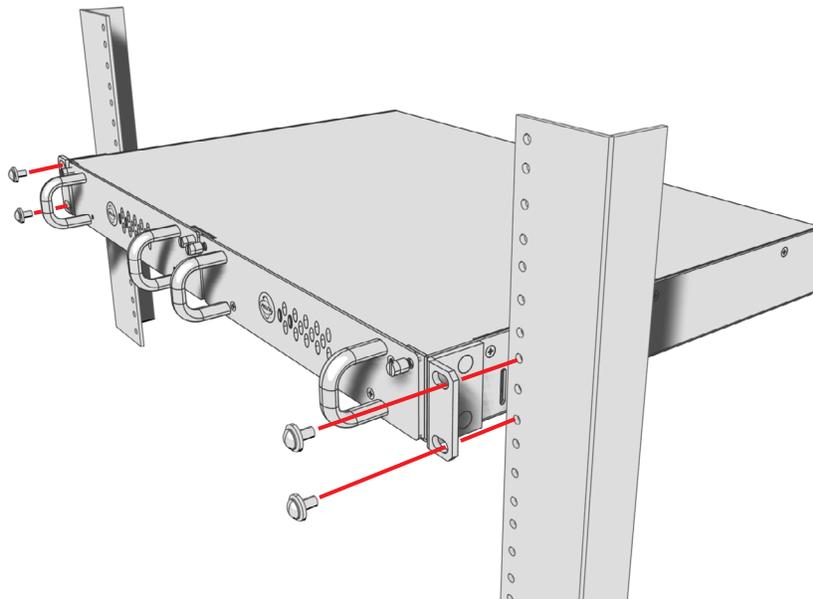
**NOTE:** The ferrites should fit securely around the cables. If the ferrites are loose and slide along the cables, loop the cables through the ferrites before closing the ferrites. If the thickness of the cables prevents the ferrites from closing, use a tie wrap to hold the ferrites in place rather than looping the cables.

## MOUNTING AN EPS5000-120

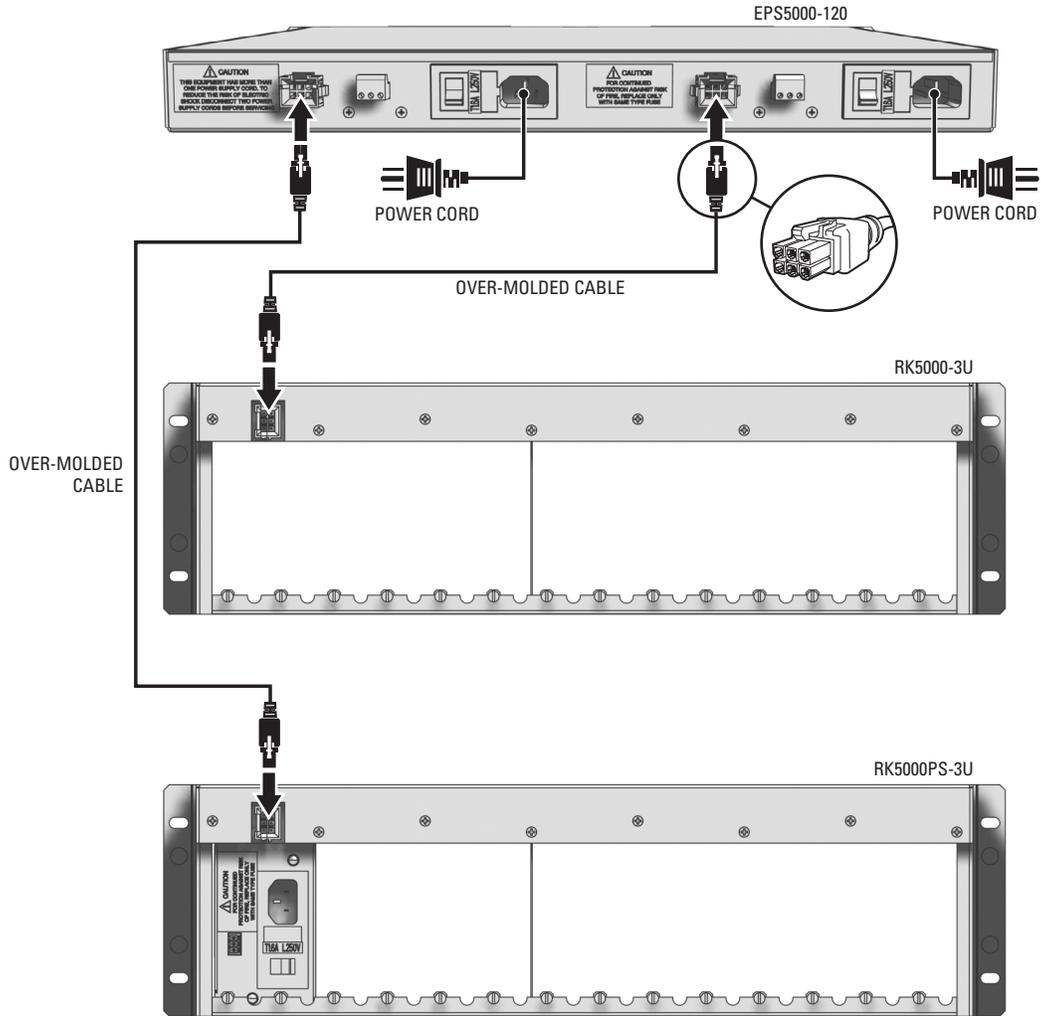
**⚠ WARNING:** To ensure adequate ventilation, 1 RU of space is required above and below the EPS5000-120.

The external power supply, which is 1 RU high, can power up to two RK5000-3U chassis. It also provides redundant power when used with the RK5000PS-3U. To mount an external power supply, follow these steps and refer to Figure 3.

1. Insert the EPS5000-120 into the rack.
2. Secure the EPS5000-120 to the rack with the four supplied 10-32 x 0.750-inch screws and washers.
3. Connect each power supply to the rack using the supplied over-molded cables. Figure 4 shows the EPS5000-120 providing redundant power to one RK5000PS-3U and powering one RK5000-3U.
4. Plug in the AC power cords.
5. Turn on the power supply switches.



**Figure 3. Mounting an EPS5000-120 into a Rack**



**Figure 4. Connecting to an RK5000-3U/RK5000PS-3U**

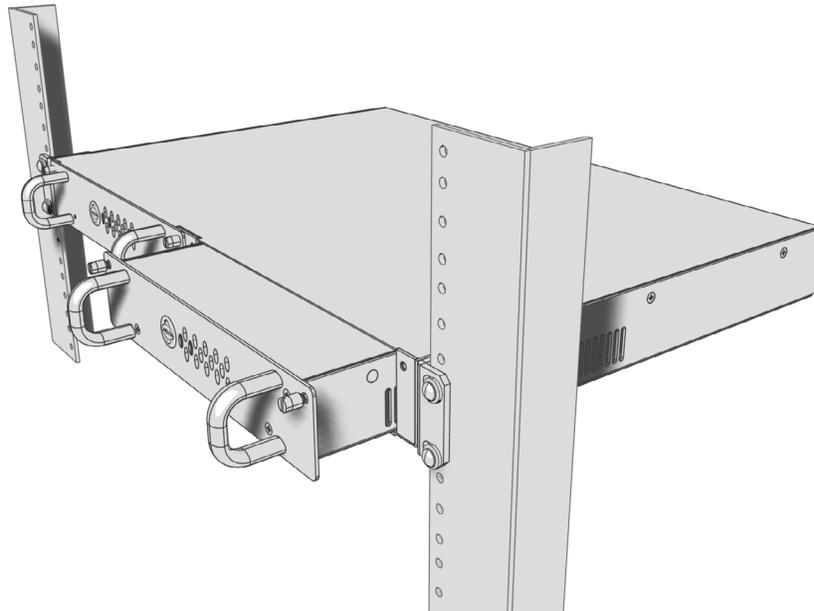
# Service

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## REPLACING A POWER SUPPLY

You can easily replace either of the two power supplies in the EPS5000-120 in case of failure. The power fail LED on the front of each power supply turns red if there is a problem with the power supply. The blue Pelco badge will turn off if one of the power supplies fails. Before replacing a power supply, check the fuse. It can be replaced easily with the supplied spare. If the fuse is not the problem, then follow these steps and refer to Figure 5 to replace the power supply.

1. Unscrew both thumbscrews of the failed power supply.
2. Remove the power supply.
3. Insert the new power supply.
4. Secure the power supply by tightening both thumbscrews.



**Figure 5.** Power Supply Replacement

# Specifications

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## **ELECTRICAL**

Input Voltage	100-240 VAC
Input Current	3.2 A total
Output Voltage	12 VDC per power supply
Output Current	10 A per power supply
Fuse Rating	1.6 A per power supply
Relay Rating	1 A, 40 VDC

## **MECHANICAL**

Rack Units	1
Construction	Aluminum
Finish	Black

## **GENERAL**

Operating Temperature	32° to 122°F (0° to 50°C)
Operating Humidity	80% maximum relative humidity, noncondensing
Dimensions	1.73" H x 17.40" W x 12.00" D (4.39 x 44.20 x 30.48 cm)
Mounting	Fits 19-inch, EIA-standard rack
Unit Weight	7.25 lb (3.29 kg)

## PRODUCT WARRANTY AND RETURN INFORMATION

### WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship for a period of one year after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on FR/FT/FS Series fiber optic products and TW3000 Series unshielded twisted pair transmission products.
- Three years on Spectra® IV products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Three years on PMCL200/300/400 Series LCD monitors.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra III™, Esprit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit and WW5700 Series window wiper (excluding wiper blades).
- Two years (except lamp and color wheel) on Digital Light Processing (DLP®) displays. The lamp and color wheel will be covered for a period of 90 days. The air filter is not covered under warranty.
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

### RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair).

All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid. Ship to the appropriate address below.

*If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:*

Service Department  
Pelco  
3500 Pelco Way  
Clovis, CA 93612-5699

*If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:*

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco  
3500 Pelco Way  
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors  
473 Eccles Avenue  
South San Francisco, CA 94080 USA  
Phone: 650-737-1700  
Fax: 650-737-0933

 Green The materials used in the manufacture of this document and its components are compliant to the requirements of Directive 2002/95/EC.



This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.

### REVISION HISTORY

Manual #	Date	Comments
C1632M	6/05	Original version.
C1632M-A	10/06	Added ferrite information. Revised electrical specifications.

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