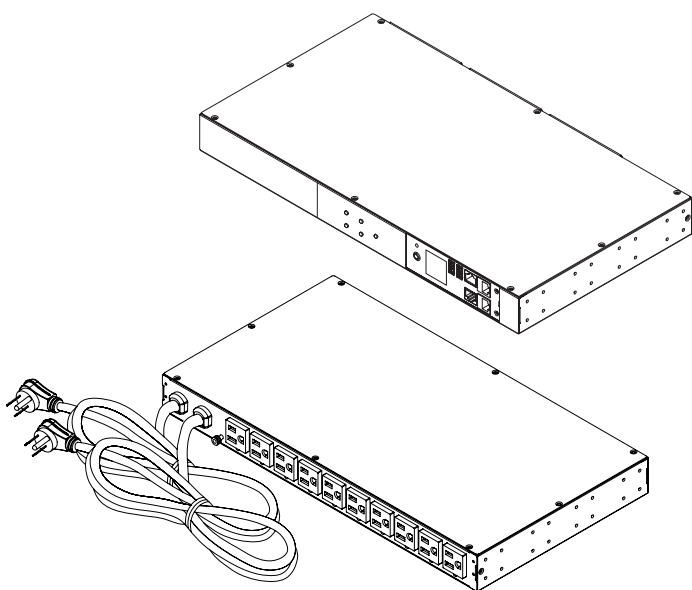




YOUR ULTIMATE ALLY IN POWER

AUTOMATIC TRANSFER SWITCH POWER DISTRIBUTION UNITS

USER MANUAL



Cyber Power Systems (USA), Inc.

4241 12th Avenue East, Suite 400 | Shakopee, MN 55379

CyberPowerSystems.com

TABLE OF CONTENTS

OVERVIEW	2
MODEL LIST	2
SAFETY PRECAUTIONS.....	3
INTRODUCTION	5
Package Contents, 1U Models.....	5
Package Contents, 2U Models	6
PRODUCT FEATURES	7
1U 15A Models.....	7
Front / Rear Panel Description	7
Technical Specifications	8
1U 20A Models.....	9
Front / Rear Panel Description	9
Technical Specifications	10
2U 30A MODELS.....	13
Front / Rear Panel Description	13
Technical Specifications	14
2U 32A MODELS	15
Front / Rear Panel Description	15
Technical Specifications	16
INSTALLATION GUIDE.....	17
ATS PDU Configuration	17
Minimum Acceptable Configuration	17
Front Mounting - 1U Models	18
Front Mounting - 2U Models.....	20
Rear Mounting - 1U Models	22
Rear Mounting - 2U Models.....	24
Replacing the LCD Panel	27
Electrical Installation.....	27
Locking Power Cord - For IEC Type ATS PDU.....	28
Network Installation	29
OPERATION	31
Remote Management.....	31
Web	31
Telnet and SSH.....	31
SNMP	31
Local Management	32
LCD Operation.....	32
Environmental Monitoring (optional)	33
Device Reset.....	34
Unattended/Automatic Shutdown.....	34
FIRMWARE UPGRADE.....	35
TROUBLESHOOTING	39
CONFORMANCE APPROVALS	40
CUSTOMER SERVICE & WARRANTY	41
Product Registration.....	41
APPENDIX A - HYPER TERMINAL	42
APPENDIX B - POWER DEVICE NETWORK UTILITY 2	43
APPENDIX C - PDU DAISY-CHAIN FUNCTION	46
APPENDIX D - RJ45 / DB9 SERIAL PORT CONNECTION CABLE PINOUT.....	47
APPENDIX E - POWER SHARING FUNCTION.....	47

OVERVIEW

CyberPower Automatic Transfer Switches (ATS) PDUs with dual input for power provide redundant and increased reliability for critical devices with a single power plug. Users can define the preferred input power source. When a selected source is unstable or unavailable, the ATS PDU will switch to the second power source to constantly provide power to connected devices. The entire ATS PDU series are designed with LED and LCD interfaces for users to easily observe power status and device load. On-site power management is accomplished as users can configure power settings, via LCD interface, according to local power condition. Available in both switched and metered/monitored configurations, users have a broad base of options to select the ATS PDU that best fits their needs.

WARNING: This automatic transfer switch has dual power cords (A & B) to provide redundant power sources to devices with single power supplies and can be plugged into separate compatible sources* to ensure continuous access. Users select the preferred source as the primary input. CyberPower Smart App Online and Sinewave series UPS are highly recommended for use as the power source.

***Note:** Only sine wave AC power sources are compatible with this ATS PDU. Simulated sine wave AC power sources are NOT compatible.

MODEL LIST

Switched Metered by Outlet Series

1U	2U
PDU84001G	PDU84003G
PDU84002G	PDU84007G
PDU84004G	PDU84302G
PDU84005G	
PDU84006G	
PDU84301G	

Metered by Outlet Series

1U	2U
PDU74001G	PDU74003G
PDU74002G	PDU74007G
PDU74004G	PDU74302G
PDU74005G	
PDU74006G	
PDU74301G	

Switched Series

1U	2U
PDU44001G	PDU44003G
PDU44002G	PDU44007G
PDU44004G	PDU44302G
PDU44005G	
PDU44006G	
PDU44301G	

Monitored Series

1U	2U
PDU34001G	PDU34003G
PDU34002G	PDU34007G
PDU34004G	PDU34302G
PDU34005G	
PDU34006G	
PDU34301G	

Selected models may not be available in certain regions. Please contact your CyberPower sales team for more information.

SAFETY PRECAUTIONS

Read the following before installing or operating the Automatic Transfer Switches (ATS) PDU:

- Use only the supplied hardware to attach the mounting brackets.
- The ATS PDU must be plugged into a single phase three-wire, grounded outlet on a circuit that is protected by a fuse or circuit breaker.
 - For 15A PDU series, use a 15A circuit protector.
 - For 20A PDU series, use a 20A circuit protector.
 - For 30A PDU series, use a 30A circuit protector.Connection to any other type of power outlet may result in an electrocution hazard.
- Do not use extension cords or adapters with these ATS PDUs.
- Never install an ATS PDU or associated wiring or equipment during a lightning storm.
- Ensure that the power cord, plug, and socket are in good condition.
- For the ATS PDU with attached input Power Cords, the socket must be installed near the equipment and must be easily accessible.
- Make sure to disconnect all power supply cords before attempting to service or remove this unit.
- As for overcurrent protection, please note that all ATS PDUs with an input current rating greater than 20A are equipped with two flush-mount branch circuit breakers.

Rack Mount

- Elevated Operating Ambient Temperature - The ambient temperature within the rack may be greater than the room ambient temperature. Ensure to install the equipment in an environment compatible with the maximum ambient temperature. The maximum operating temperature of the equipment is 113°F (45°C).
- Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.
- Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not created due to uneven mechanical loading.
- Circuit Overloading - Check nameplate ratings of equipment to ensure that there is no overloading of supply circuits that could have an effect on overcurrent protection and supply wiring.
- Reliable Grounding - Maintain reliable grounding of the ATS PDU. Particular attention should be given to supply connections when connecting to power strips, rather than direct connections to the branch circuit.

 WARNING!	To prevent the risk of fire or electrocution, this ATS PDU should be installed in a temperature and humidity controlled indoor area free of conductive contaminants. Do not install this ATS PDU where excessive moisture or heat is present.
 CHECK!	Before using, please check to ensure the package contains all the items shown below. If there are missing parts, please contact your local CyberPower sales team for technical support.

PRÉCAUTIONS DE SÉCURITÉ

Lisez ce qui suit avant d'installer ou d'utiliser le Automatic Transfer Switches (ATS) PDU:

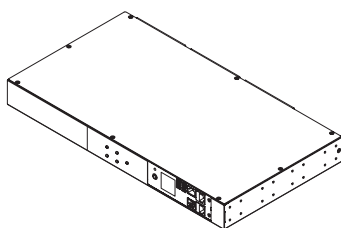
- Utilisez uniquement le matériel fourni pour fixer les supports de montage.
- Le ATS PDU doit être branché sur une prise à trois fils mise à la terre sur un circuit protégé par un fusible ou un disjoncteur.
 - Pour la série PDU 15A, utiliser disjoncteur de 15A.
 - Pour la série PDU 20A, utiliser un disjoncteur de 20A.
 - Pour la série PDU 30A, utiliser un disjoncteur de 30A.La connexion à tout autre type de prise de courant peut provoquer un choc électrique.
- N'utilisez pas de rallonges ni d'adaptateurs avec ces ATS PDU.
- N'installez jamais un ATS PDU ni le câblage ou l'équipement associé pendant un orage.
- Assurez-vous que le cordon d'alimentation, la fiche et la prise sont en bon état.
- Pour le ATS PDU avec les cordons d'alimentation d'entrée connectés, la prise doit être installée à proximité de l'équipement et être facilement accessible.
- Assurez-vous de débrancher les cordons d'alimentation et toutes les sources d'alimentation avant de tenter de réparer ou de retirer cette unité.
- Pour le dispositif de protection contre les surintensités des équipements, veuillez noter que tous les ATS PDU avec un courant d'entrée supérieur à 20 A sont équipés de deux disjoncteurs de dérivation à montage encastré.

Montage en rack

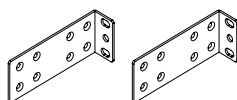
- Température ambiante de fonctionnement élevée- La température ambiante dans le rack peut être supérieure à la température ambiante. Assurez-vous d'installer le matériel dans un environnement compatible avec la température ambiante maximale. La température maximale de fonctionnement de l'équipement dans cet environnement est de 45 ° C (113 ° F).
- Débit d'air réduit - L'installation de l'équipement dans un rack doit être telle que le débit d'air requis pour un fonctionnement en toute sécurité de l'équipement ne soit pas compromis.
- Chargement mécanique - Le montage de l'équipement dans le rack ne doit pas créer de situation dangereuse en raison d'un chargement mécanique inégal.
- Surcharge du circuit - Vérifiez les caractéristiques de la plaque signalétique de l'équipement pour vous assurer qu'il n'y a pas de surcharge des circuits d'alimentation qui pourrait avoir une incidence sur la protection contre les surintensités et le câblage d'alimentation.
- Mise à la terre fiable - Maintenez une mise à la terre fiable du ATS PDU. Une attention particulière doit être accordée aux connexions d'alimentation lors du raccordement à des barrettes d'alimentation plutôt qu'aux connexions directes au circuit de dérivation.

INTRODUCTION

Package Contents, 1U Models



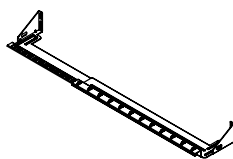
1



2



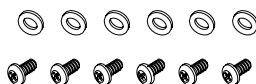
3



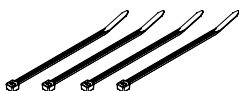
4



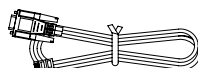
5



6



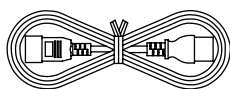
7



8

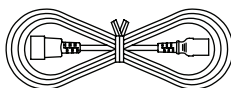
1. ATS PDU
2. Mounting Brackets x 2
3. 24 (M4x8) Bracket Mounting Screws (includes 8 spares)
4. Cord Retention Tray
5. 6 (M3x6) Cord Retention Tray Mounting Screws (includes 2 spares)
6. 6 (M5x12) Rack Mounting Screws/6 Washers (includes 2 spares for each)
7. 18 Cable Ties (NEMA outlet) or 30 Cable Ties (IEC outlet)
8. RJ45 / DB9 Serial Port Connection Cable
9. User's Manual, Software Download Card (not pictured)

Below items only provided with IEC type ATS PDU:



Power Cord 10-ft
IEC-320 C13/C14 x 2

PDU84004G
PDU74004G
PDU44004G
PDU34004G
Models Only

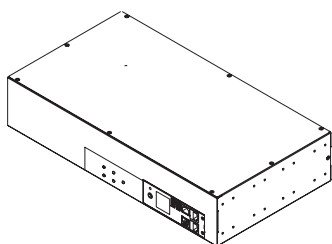


Power Cord 10-ft
IEC-320 C19/C20 x 2

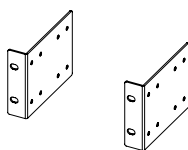
PDU84005G
PDU74005G
PDU44005G
PDU34005G
Models Only

INTRODUCTION

Package Contents, 2U Models



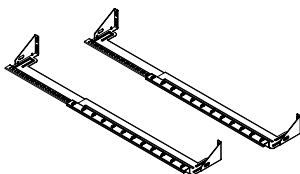
1



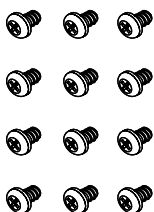
2



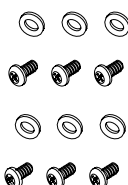
3



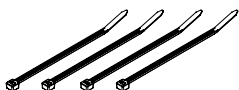
4



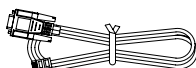
5



6



7



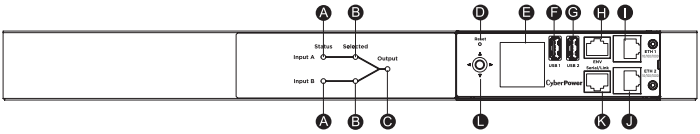
8

1. ATS PDU
2. Mounting Brackets x 2
3. 24 (M4x8) Bracket Mounting Screws
(includes eight spares)
4. Cord Retention Tray x 2
5. 12 (M3x6) Cord Retention Tray Mounting Screws
(includes two spares for each)
6. 6 (M5x12) Rack Mounting Screws/6 Washers
(includes two spares for each)
7. 30 Cable Ties (NEMA outlet) or
50 Cable Ties (IEC outlet)
8. RJ45 / DB9 Serial Port Connection Cable
9. User's Manual, Software Download Card (not pictured)

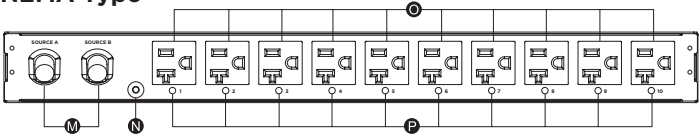
PRODUCT FEATURES - 1U 15A MODELS

Front / Rear Panel Description

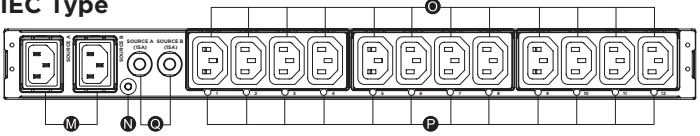
Switched Metered by Outlet / Metered by Outlet /
Switched / Monitor Series



NEMA Type



IEC Type



A. Source Status Indicator -

Indicates the status of Source A and B.

B. Source Selected Indicator -

Indicates Source A or B is in use.

C. Output Indicator -

Indicates the output is available or not.

D. Reset Button -

Used to reset the PDU to default settings.

E. Multifunction LCD Readout -

Displays various ATS PDU information such as power and load condition.

F. USB Port (USB 1) -

Used to upgrade the firmware via a flash drive.

G. USB Port (USB 2) -

Saved for future expansion.

H. ENV Port (RJ45 modular port) -

Used for connecting with environmental sensor.

I. Ethernet Port (ETH 1) -

Used to connect PDU to the network or daisy-chain to another PDU.

J. Ethernet Port (ETH 2) -

Used to connect PDU to the network or daisy-chain to another PDU.

K. Serial/Link Port (RJ45 modular port) -

Used to connect to a PC and control the PDU locally or chain to another PDU for power sharing.

L. Multi-function Button -

Used to choose selected items and toggle through available information options.

M. AC Inlet/AC Power Cord -

Use to connect ATS PDU to utility or UPS.

N. Ground Stud -

Use to ground the ATS PDU.

O. AC Output Receptacles -

Provides power distribution for connected equipment.

P. Outlet Indicator (switched series only) -

When the LED is on, the outlet is providing power to connected equipment.

Q. Circuit Breaker -

Provides output overload protection.

TECHNICAL SPECIFICATIONS - 1U 15A MODELS

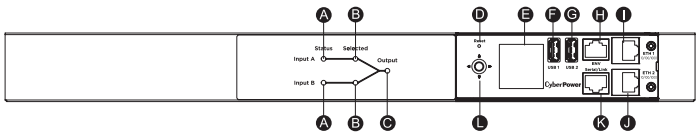
Model Name	PDU84001G PDU74001G PDU44001G PDU34001G	PDU84004G PDU74004G PDU44004G PDU34004G
Input		
Nominal Voltage	100 - 120 V	200 - 240 V
Frequency	50 / 60Hz	
Derated Input Current	12A	12A UL / 10 A CE
Plug Type	2 x NEMA 5-15P	2 x IEC 320 C14
Power Cord Type	SR (14 AWG)	Socket
Power Cord Length	10 ft / 3.05 m	
Circuit Breaker	No	Yes
Output		
Nominal Voltage	100 - 120 V	200 - 240 V
Derated Output Current	12A	12A UL / 10 A CE
Outlet Type	10 x NEMA 5-15R	12 x IEC 320 C13
Management and Communications		
Multifunction LCD Readout	Voltage, Frequency, Load, Current, HW/FW Version, Network Information	
Software	PowerPanel® Business PowerPanel® Enterprise	
Networking	Yes	
Serial Port	RJ45	
Sensor Capable	Optional	
Physical		
Dimensions (Height x Width x Depth)	1.75 x 17.05 x 8.45 in. 44 x 433 x 215 mm	
Environmental		
Humidity	0 to 95% Non-condensing	
Altitude	13,100 ft. / 4,000 m	
Temperature	32°F to 113° F / 0° C to 45° C	
Safety Approvals		
Certifications	UL 62368-1 FCC Class A	UL62368-1 CE EN55032/35 FCC Class A

All specifications are subject to change without notice.

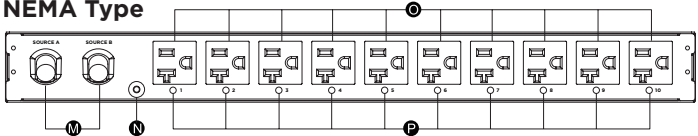
PRODUCT FEATURES - 1U 20A MODELS

Front / Rear Panel Description

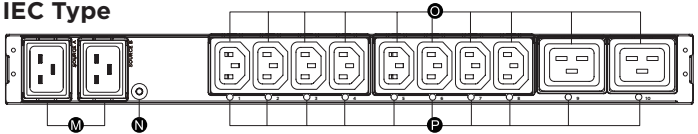
Switched Metered by Outlet / Metered by Outlet /
Switched / Monitor Series



NEMA Type



IEC Type



A. Source Status Indicator -

Indicates the status of Source A and B.

B. Source Selected Indicator -

Indicates Source A or B is in use.

C. Output Indicator -

Indicates the output is available or not.

D. Reset Button -

Used to reset the PDU to default settings.

E. Multifunction LCD Readout -

Displays various ATS PDU information such as power and load condition.

F. USB Port (USB 1) -

Used to upgrade the firmware via a flash drive.

G. USB Port (USB 2) -

Saved for future expansion.

H. ENV Port (RJ45 modular port) -

Used for connecting with environmental sensor.

I. Ethernet Port (ETH 1) -

Used to connect PDU to the network or daisy-chain to another PDU.

J. Ethernet Port (ETH 2) -

Used to connect PDU to the network or daisy-chain to another PDU.

K. Serial/Link Port (RJ45 modular port) -

Used to connect to a PC and control the PDU locally or chain to another PDU for power sharing.

L. Multi-function Button -

Used to choose selected items and toggle through available information options.

M. AC Inlet/AC Power Cord -

Use to connect ATS PDU to utility or UPS.

N. Ground Stud -

Use to ground the ATS PDU.

O. AC Output Receptacles -

Provides power distribution for connected equipment.

P. Outlet Indicator (switched series only) -

When the LED is on, the outlet is providing power to connected equipment.

TECHNICAL SPECIFICATIONS - 1U 20A MODELS

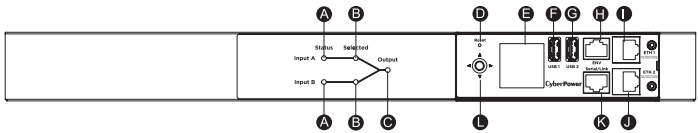
Model Name	PDU84002G PDU74002G PDU44002G PDU34002G	PDU84006G PDU74006G PDU44006G PDU34006G
Input		
Nominal Voltage	100 - 120 V	200 - 240 V
Frequency	50 / 60Hz	
Derated Input Current	16A	
Plug Type	2 x NEMA (L)5-20P (Adapter)	2 x NEMA L6-20P
Power Cord Type	SR (12 AWG)	Socket
Power Cord Length	10 ft / 3.05 m	
Output		
Nominal Voltage	100 - 120 V	200 - 240 V
Derated Output Current	16A	C13: 12A / C19: 16A
Outlet Type	10 x NEMA 5-20R	8 x IEC C13 / 2 x IEC C19
Management and Communications		
Multifunction LCD Readout	Voltage, Frequency, Load, Current, HW/FW Version, Network Information	
Software	PowerPanel® Business PowerPanel® Enterprise	
Networking	Yes	
Serial Port	RJ45	
Sensor Capable	Optional	
Physical		
Dimensions (Height x Width x Depth)	1.75 x 17.05 x 8.45 in. 44 x 433 x 215 mm	
Environmental		
Humidity	0 to 95% Non-condensing	
Altitude	13,100 ft. / 4,000 m	
Temperature	32°F to 113° F / 0° C to 45° C	
Safety Approvals		
Certifications	UL 62368-1 / FCC Class A	

All specifications are subject to change without notice.

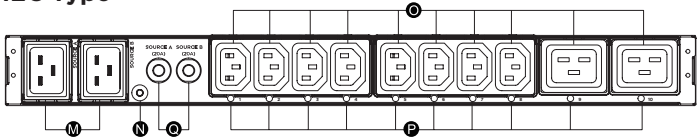
PRODUCT FEATURES - 1U 20A MODELS

Front / Rear Panel Description

Switched Metered by Outlet / Metered by Outlet /
Switched / Monitor Series



IEC Type



A. Source Status Indicator -

Indicates the status of Source A and B.

B. Source Selected Indicator -

Indicates Source A or B is in use.

C. Output Indicator -

Indicates the output is available or not.

D. Reset Button -

Used to reset the PDU to default settings.

E. Multifunction LCD Readout -

Displays various ATS PDU information such as power and load condition.

F. USB Port (USB 1) -

Used to upgrade the firmware via a flash drive.

G. USB Port (USB 2) -

Saved for future expansion.

H. ENV Port (RJ45 modular port) -

Used for connecting with environmental sensor.

I. Ethernet Port (ETH 1) -

Used to connect PDU to the network or daisy-chain to another PDU.

J. Ethernet Port (ETH 2) -

Used to connect PDU to the network or daisy-chain to another PDU.

K. Serial/Link Port (RJ45 modular port) -

Used to connect to a PC and control the PDU locally or chain to another PDU for power sharing.

L. Multi-function Button -

Used to choose selected items and toggle through available information options.

M. AC Inlet/AC Power Cord -

Use to connect ATS PDU to utility or UPS.

N. Ground Stud -

Use to ground the ATS PDU.

O. AC Output Receptacles -

Provides power distribution for connected equipment.

P. Outlet Indicator (switched series only) -

When the LED is on, the outlet is providing power to connected equipment.

Q. Circuit Breaker -

Provides output overload protection.

TECHNICAL SPECIFICATIONS - 1U 20A MODELS

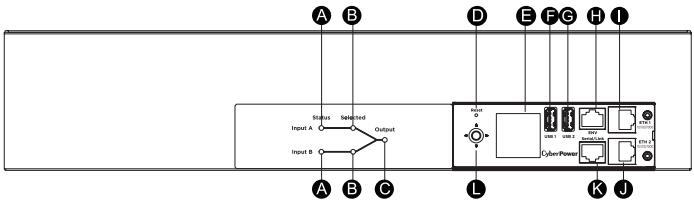
Model Name	PDU84005G PDU74005G PDU44005G PDU34005G	PDU84301G PDU74301G PDU44301G PDU34301G
Input		
Nominal Voltage	200 - 240 V	
Frequency	50 / 60Hz	
Derated Input Current	16A	
Plug Type	2 x IEC-320 C20	2 x IEC 309 16A
Power Cord Type	Socket	
Power Cord Length	10 ft / 3.05 m	
Circuit Breaker	Yes	No
Output		
Nominal Voltage	200 - 240 V	
Derated Output Current	C13: 12A (UL) / 10A (CE) C19: 16A	C13: 10A (CE) C19: 16A
Outlet Type	8 x IEC C13 / 2 x IEC C19	
Management and Communications		
Multifunction LCD Readout	Voltage, Frequency, Load, Current, HW/FW Version, Network Information	
Software	PowerPanel® Business PowerPanel® Enterprise	
Networking	Yes	
Serial Port	RJ45	
Sensor Capable	Optional	
Physical		
Dimensions (Height x Width x Depth)	1.75 x 17.05 x 8.45 in. 44 x 433 x 215 mm	
Environmental		
Humidity	0 to 95% Non-condensing	
Altitude	13,100 ft. / 4,000 m	
Temperature	32°F to 113° F / 0° C to 45° C	
Safety Approvals		
Certifications	UL62368-1 CE EN55032/35 FCC Class A	CB CE EN55032/35 Class A

All specifications are subject to change without notice.

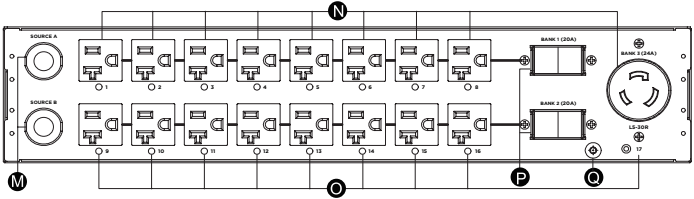
PRODUCT FEATURES - 2U 30A MODELS

Front / Rear Panel Description

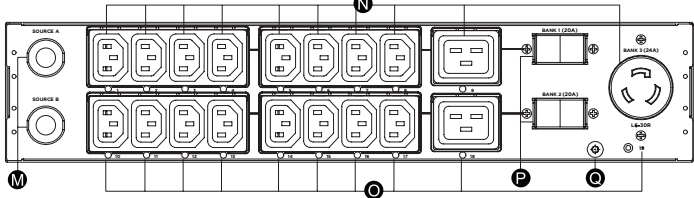
Switched Metered by Outlet / Metered by Outlet /
Switched / Monitor Series



NEMA Type



IEC Type



- A. Source Status Indicator** - Indicates the status of Source A and B.
- B. Source Selected Indicator** - Indicates Source A or B is in use.
- C. Output Indicator** - Indicates the output is available or not.
- D. Reset Button** - Used to reset the PDU to default settings.
- E. Multifunction LCD Readout** - Displays various ATS PDU information such as power and load condition.
- F. USB Port (USB 1)** - Used to upgrade the firmware via a flash drive.
- G. USB Port (USB 2)** - Saved for future expansion.
- H. ENV Port (RJ45 modular port)** - Used for connecting with environmental sensor.
- I. Ethernet Port (ETH 1)** - Used to connect PDU to the network or daisy-chain to another PDU.
- J. Ethernet Port (ETH 2)** - Used to connect PDU to the network or daisy-chain to another PDU.
- K. Serial/Link Port (RJ45 modular port)** - Used to connect to a PC and control the PDU locally or chain to another PDU for power sharing.
- L. Multi-function Button** - Used to choose selected items and toggle through available information options.
- M. AC Inlet/AC Power Cord** - Use to connect ATS PDU to utility or UPS.
- N. AC Output Receptacles** - Provides power distribution for connected equipment.
- O. Outlet Indicator (switched series only)** - When the LED is on, the outlet is providing power to connected equipment.
- P. Circuit Breaker** - Provides output overload protection.
- Q. Ground Stud** - Use to ground the ATS PDU

TECHNICAL SPECIFICATIONS - 2U 30A MODELS

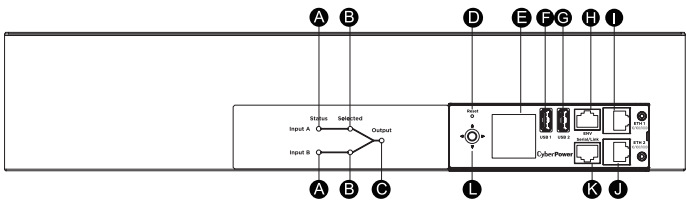
Model Name	PDU84003G PDU74003G PDU44003G PDU34003G	PDU84007G PDU74007G PDU44007G PDU34007G
Input		
Nominal Voltage	100 - 120 V	200 - 240 V
Frequency	50 / 60Hz	
Derated Input Current	24A	
Plug Type	2 x NEMA L5-30P	2 x NEMA L6-30P
Power Cord Type	SR (10 AWG)	
Power Cord Length	10 ft / 3.05 m	
Output		
Nominal Voltage	100 - 120 V	200 - 240 V
Derated Output Current	5-20R: 16A L5-30R: 24A	C13: 12A / C19: 16A L6-30R: 24A
Derated Output Current	20A (per bank)	
Bank Number	2	
Outlet Type	16 x NEMA 5-20R 1 x NEMA L5-30R	16 x IEC C13 2 x IEC C19 1 x NEMA L6-30R
Circuit Breaker	Yes	
Management and Communications		
Multifunction LCD Readout	Voltage, Frequency, Load, Current, HW/FW Version, Network Information	
Software	PowerPanel® Business PowerPanel® Enterprise	
Networking	Yes	
Serial Port	RJ45	
Sensor Capable	Optional	
Physical		
Dimensions (Height x Width x Depth)	3.5 x 17.05 x 8.45 in. 88 x 433 x 215 mm	
Environmental		
Humidity	0 to 95% Non-condensing	
Altitude	13,100 ft. / 4,000 m	
Temperature	32°F to 113° F / 0° C to 45° C	
Safety Approvals		
Certifications	UL 62368-1, FCC Class A	

All specifications are subject to change without notice.

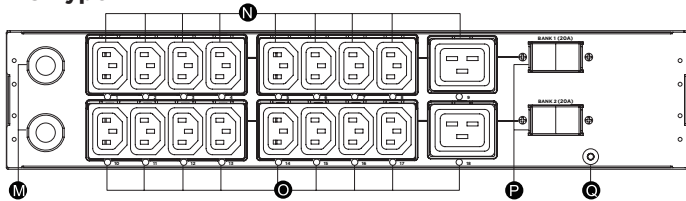
PRODUCT FEATURES - 2U 32A MODELS

Front / Rear Panel Description

Switched Metered by Outlet / Metered by Outlet /
Switched / Monitor Series



IEC Type



- A. Source Status Indicator -**
Indicates the status of Source A and B.
- B. Source Selected Indicator -**
Indicates Source A or B is in use.
- C. Output Indicator -**
Indicates the output is available or not.
- D. Reset Button -**
Used to reset the PDU to default settings.
- E. Multifunction LCD Readout -**
Displays various ATS PDU information such as power and load condition.
- F. USB Port (USB 1) -**
Used to upgrade the firmware via a flash drive.
- G. USB Port (USB 2) -**
Saved for future expansion.
- H. ENV Port (RJ45 modular port) -**
Used for connecting with environmental sensor.
- I. Ethernet Port (ETH 1) -**
Used to connect PDU to the network or daisy-chain to another PDU.
- J. Ethernet Port (ETH 2) -**
Used to connect PDU to the network or daisy-chain to another PDU.
- K. Serial/Link Port (RJ45 modular port) -**
Used to connect to a PC and control the PDU locally or chain to another PDU for power sharing.
- L. Multi-function Button -**
Used to choose selected items and toggle through available information options.
- M. AC Inlet/AC Power Cord -**
Use to connect ATS PDU to utility or UPS.
- N. AC Output Receptacles -**
Provides power distribution for connected equipment.
- O. Outlet Indicator (switched series only) -**
When the LED is on, the outlet is providing power to connected equipment.
- P. Circuit Breaker -**
Provides output overload protection.
- Q. Ground Stud -**
Use to ground the ATS PDU

TECHNICAL SPECIFICATIONS - 2U 32A MODELS

Model Name	PDU84302G PDU74302G PDU44302G PDU34302G
Input	
Nominal Voltage	200 - 240 V
Frequency	50 / 60Hz
Derated Input Current	32A
Plug Type	2 x IEC 309 32A
Power Cord Type	SR (10 AWG)
Power Cord Length	10 ft / 3.05 m
Output	
Nominal Voltage	200 - 240 V
Derated Output Current	C13: 10A / C19: 16A
Derated Output Current	20A (per bank)
Bank Number	2
Outlet Type	16 x IEC C13 / 2 x IEC C19
Circuit Breaker	Yes
Management and Communications	
Multifunction LCD Readout	Voltage, Frequency, Load, Current, HW/FW Version, Network Information
Software	PowerPanel® Business PowerPanel® Enterprise
Networking	Yes
Serial Port	RJ45
Sensor Capable	Optional
Physical	
Dimensions (Height x Width x Depth)	3.5 x 17.05 x 8.45 in. 88 x 433 x 215 mm
Environmental	
Humidity	0 to 95% Non-condensing
Altitude	13,100 ft. / 4,000 m
Temperature	32°F to 113° F 0° C to 45° C
Safety Approvals	
Certifications	CB / CE EN55032 35 Class A

All specifications are subject to change without notice.

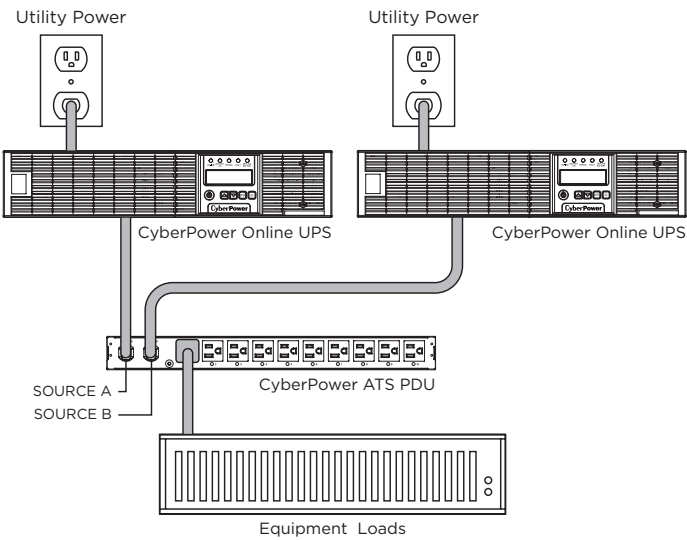
INSTALLATION GUIDE

ATS PDU Configuration

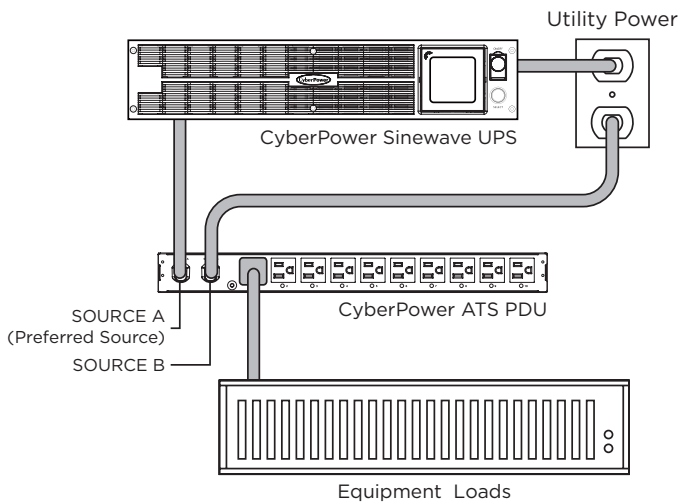
WARNING: This automatic transfer switch has dual power cords (A & B) to provide redundant power sources to devices with single power supplies and can be plugged into separate compatible sources* to ensure continuous access. Users select the preferred source as the primary input. CyberPower Smart App Online and Sinewave series UPS are highly recommended for use as the power source.

*Note: Only sine wave AC power sources are compatible with this ATS PDU. Simulated sine wave AC power sources are NOT compatible.

Best Configuration



Mimumum Acceptable Configuration



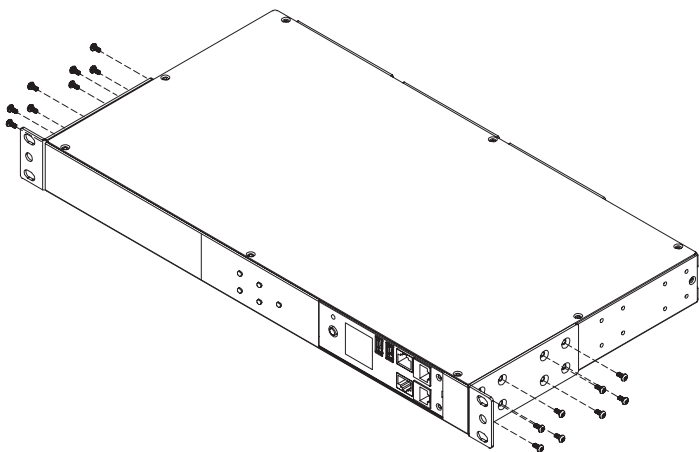
INSTALLATION GUIDE

Front Mounting - 1U Models

 CAUTION!	CAUTION! Please use only the provided screws through the entire installation process.
--	--

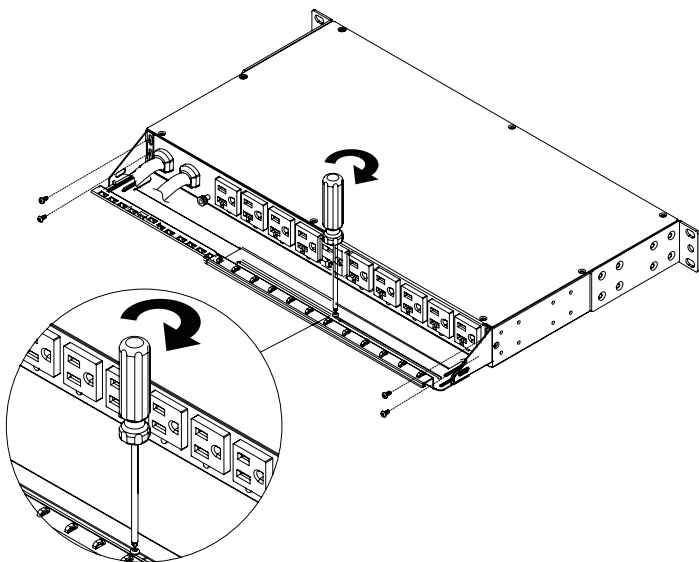
Step 1. Mounting Bracket Installation

Use the provided Mounting Bracket Screws (16) to attach the Mounting Brackets (2) to the ATS PDU.



Step 2. Cord Retention Tray Installation (optional)

Adjust the length of the Cord Retention Tray until the screw hole on the Tray and ATS PDU are aligned. Attach the Cord Retention Tray to the ATS PDU with the 4 supplied Cord Retention Tray Mounting Screws. Tighten the Cord Retention Tray with the screw on it.



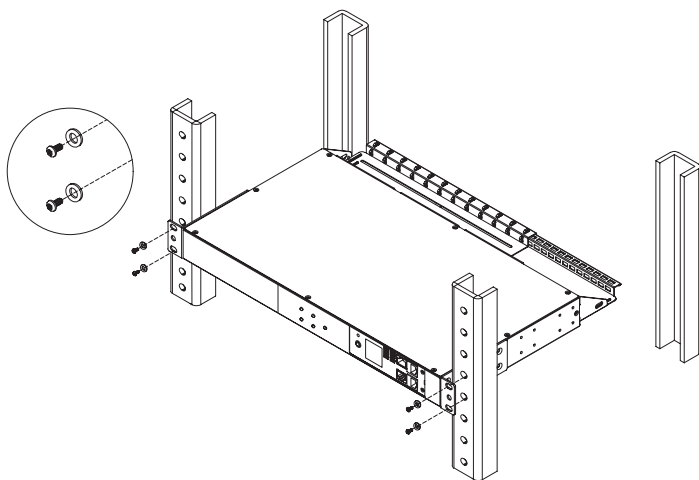
INSTALLATION GUIDE

Front Mounting - 1U Models

Step 3. ATS PDU Mounting

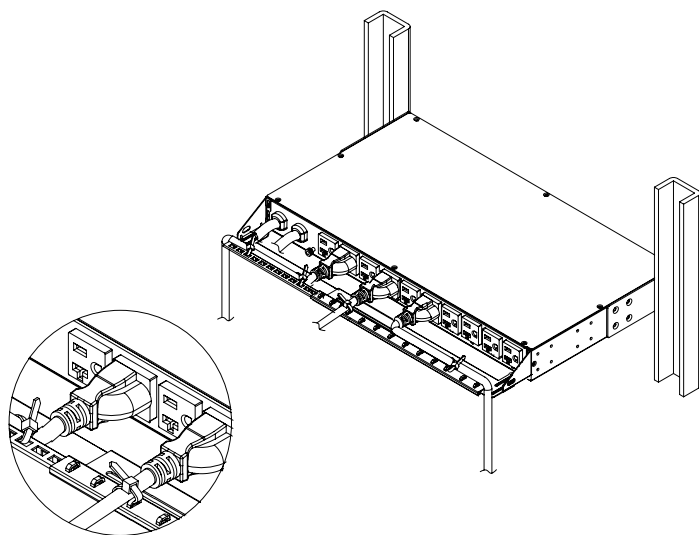
Use the provided Washers (4) and Screws (4) to secure the ATS PDU to your existing rack system.

Note: You may also use the screw sets provided by the rack to secure the ATS PDU.



Step 4. Cable Ties (Optional)

Use the provided Cable Ties to fasten each cord to the Cord Retention Tray.

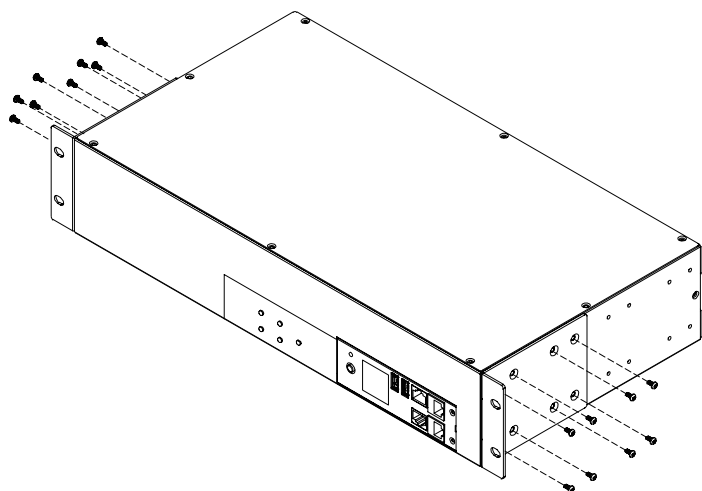


INSTALLATION GUIDE

Front Mounting - 2U Models

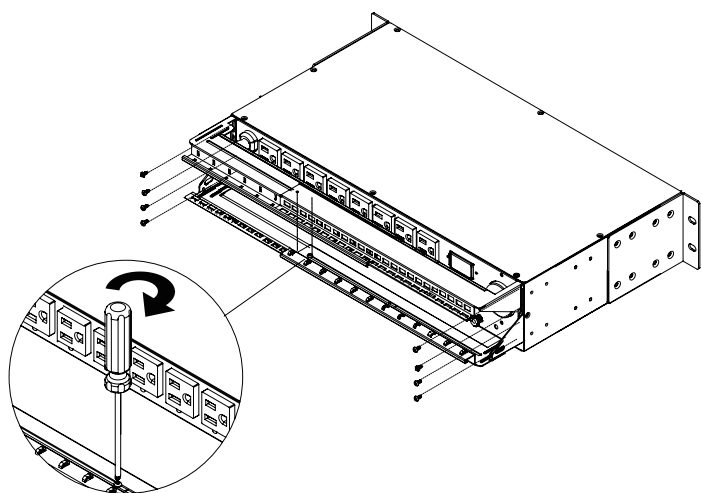
Step 1. Mounting Bracket Installation

Use the provided Mounting Bracket Screws (16) to attach the Mounting Brackets (2) to the ATS PDU.



Step 2. Cord Retention Tray Installation (optional)

Adjust the length of the Cord Retention Trays until the screw hole on the Trays and ATS PDU are aligned. Attach the Cord Retention Trays to the ATS PDU with the 8 supplied Cord Retention Tray Mounting Screws. Tighten the Cord Retention Trays with the screw on it.



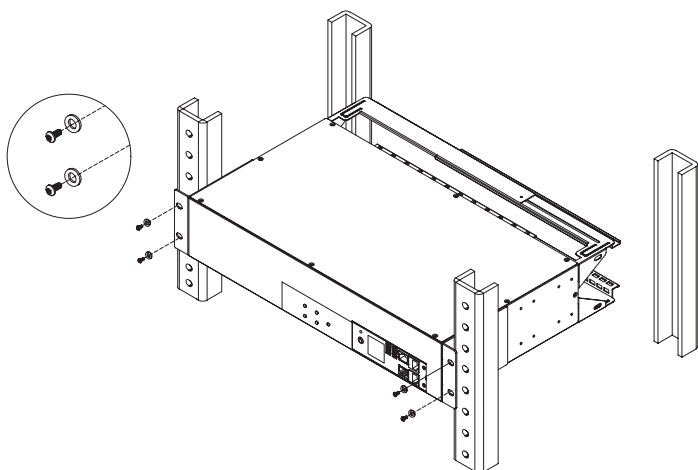
INSTALLATION GUIDE

Front Mounting - 2U Models

Step 3. ATS PDU Mounting

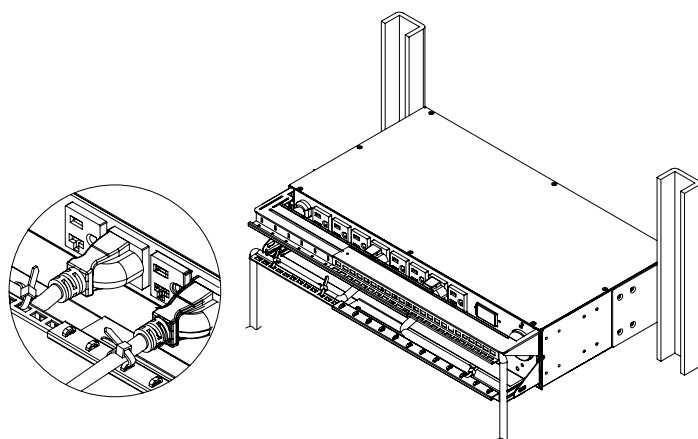
Use the provided Washers (4) and Screws (4) to secure the ATS PDU to your existing rack system.

Note: You may also use the screw sets provided by the rack to secure the ATS PDU.



Step 4. Cable Ties (Optional)

Use the provided Cable Ties to fasten each cord to the Cord Retention Tray.

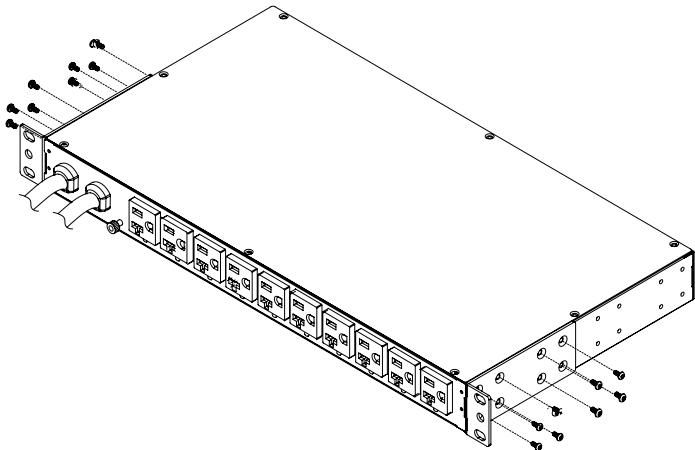


INSTALLATION GUIDE

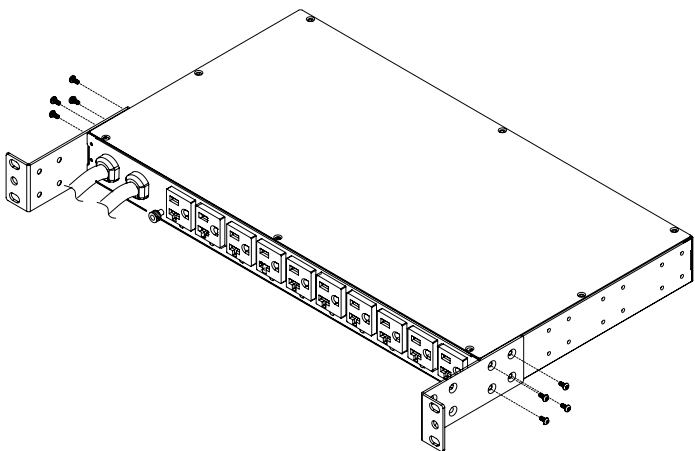
Rear Mounting - 1U Models

Step 1. Mounting Bracket Installation

Use the provided Mounting Bracket Screws (16) to attach the Mounting Brackets (2) to the ATS PDU.



If you plan on attaching the Cord Retention Tray to the ATS PDU, use the provided Mounting Bracket Screws (8) to attach the Mounting Brackets (2) to the ATS PDU.

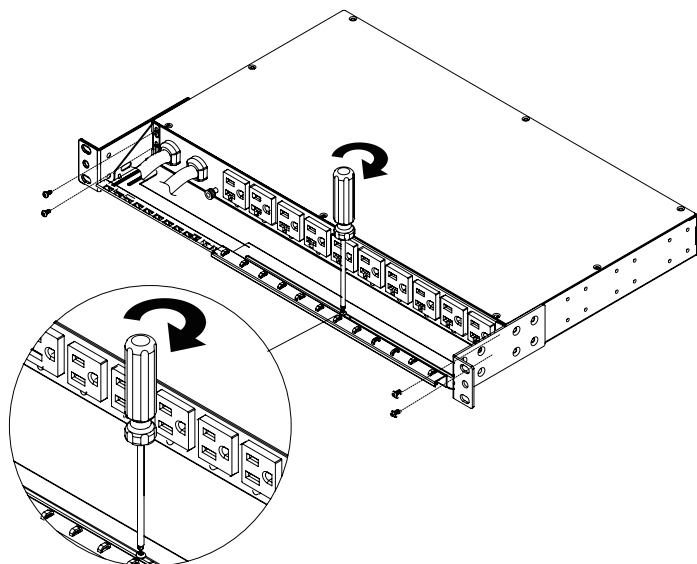


INSTALLATION GUIDE

Rear Mounting - 1U Models

Step 2. Cord Retention Tray Installation (optional)

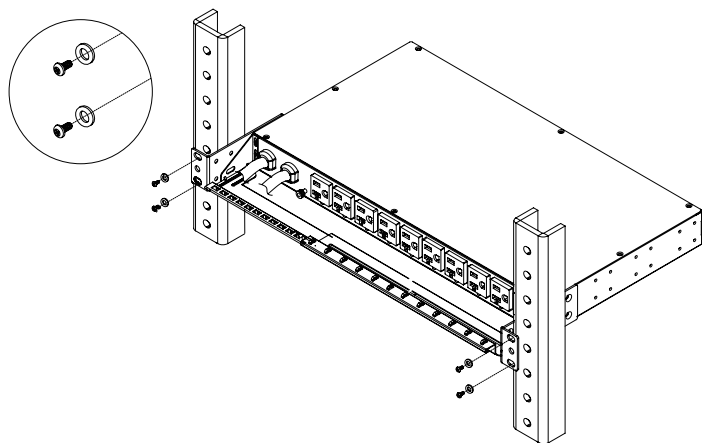
Adjust the length of the Cord Retention Tray until the screw hole on the Tray and ATS PDU are aligned. Attach the Cord Retention Tray to the ATS PDU with the 4 supplied Cord Retention Tray Mounting Screws. Tighten the Cord Retention Tray with the screw on it.



Step 3. ATS PDU Mounting

Use the provided Washers (4) and Screws (4) to secure the ATS PDU to your existing rack system.

Note: You may also use the screw sets provided by the rack to secure the ATS PDU.

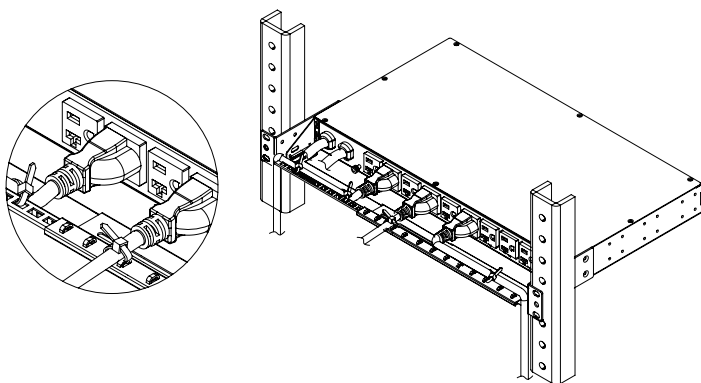


INSTALLATION GUIDE

Rear Mounting - 1U Models

Step 4. Cable Ties (Optional)

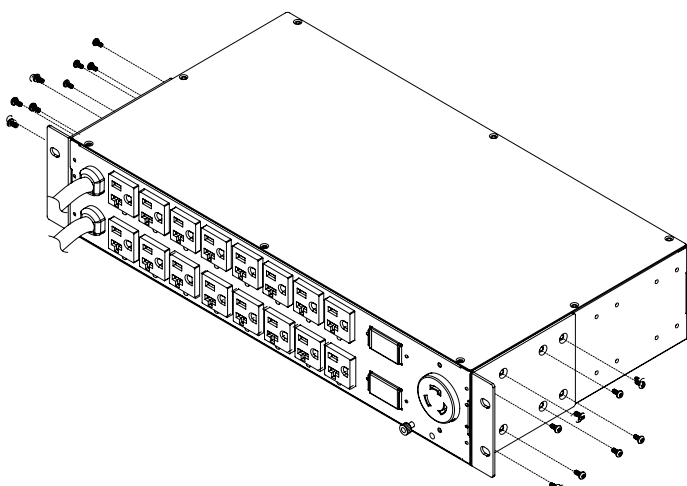
Use the provided Cable Ties to fasten each cord to the Cord Retention Tray.



Rear Mounting - 2U Models

Step 1. Mounting Bracket Installation

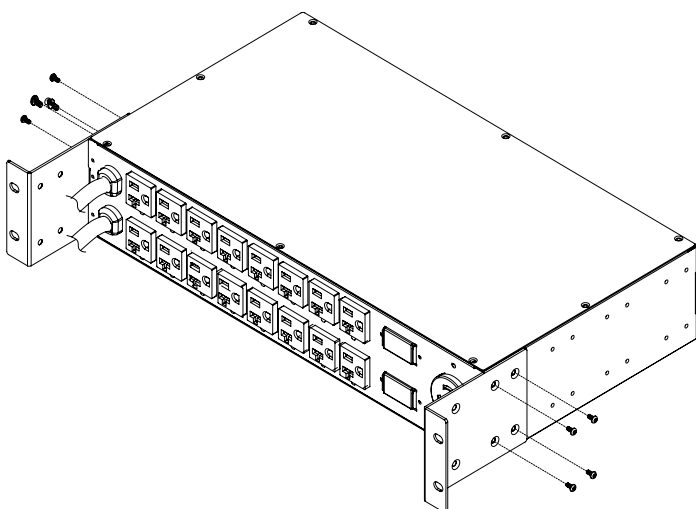
Use the provided Mounting Bracket Screws (16) to attach the Mounting Brackets (2) to the ATS PDU.



INSTALLATION GUIDE

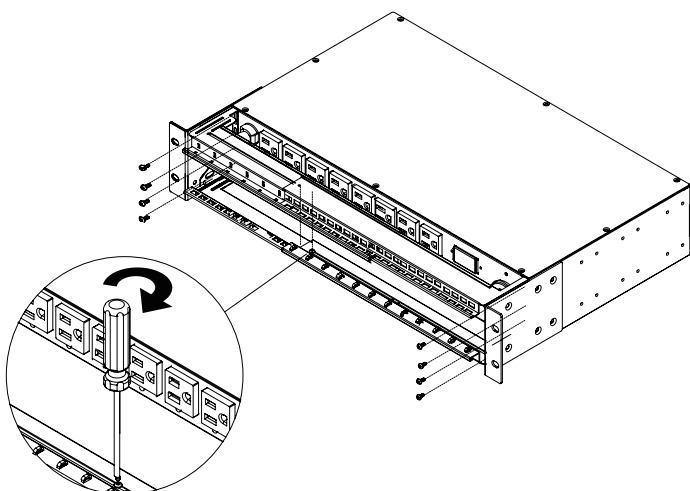
Rear Mounting - 2U Models

If you plan on attaching the Cord Retention Tray to the ATS PDU, use the provided Mounting Bracket Screws (8) to attach the Mounting Brackets (2) to the ATS PDU.



Step 2. Cord Retention Tray Installation (optional)

Adjust the length of the Cord Retention Trays till the screw hole on the Trays and ATS PDU are aligned. Attach the Cord Retention Trays to the ATS PDU with the 8 supplied Cord Retention Tray Mounting Screws. Tighten the Cord Retention Trays with the screw on it.



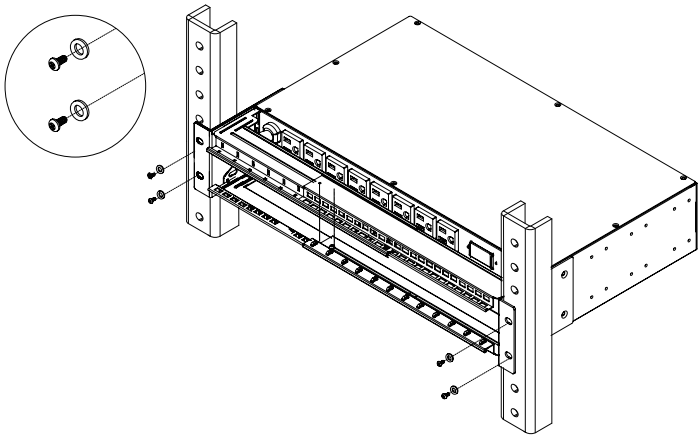
INSTALLATION GUIDE

Rear Mounting - 2U Models

Step 3. ATS PDU Mounting

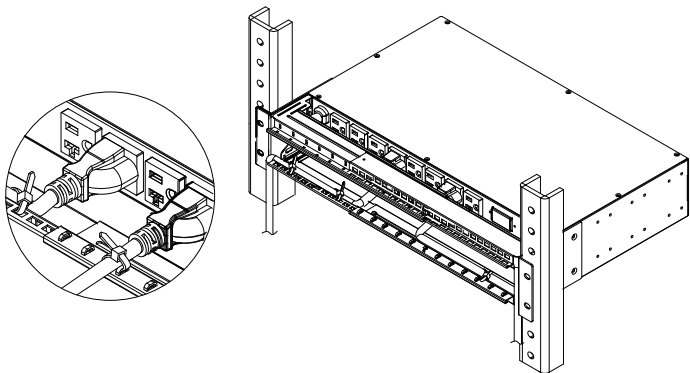
Use the provided Washers (4) and Screws (4) to secure the ATS PDU to your existing rack system.

Note: You may also use the screw sets provided by the rack to secure the ATS PDU.



Step 4. Cable Ties (Optional)

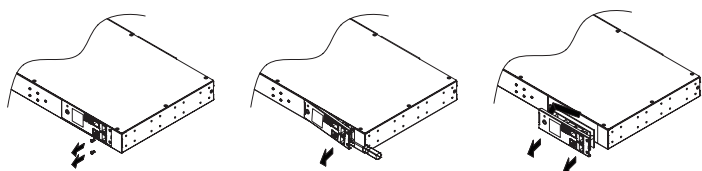
Use the provided Cable Ties to fasten each cord to the Cord Retention Tray.



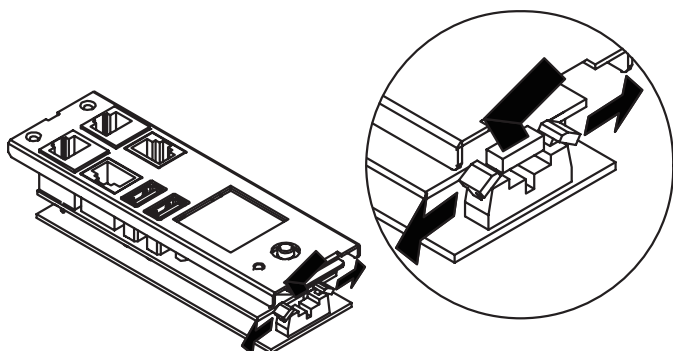
INSTALLATION GUIDE

Replacing the LCD Panel

Step 1. Use a slotted screwdriver to gently lift out the LCD panel.



Step 2. Disconnect the cable connector.



Electrical Installation



CAUTION!

The ATS PDU must be plugged into a three-wire, grounded utility receptacle or a UPS that is connected to a grounded utility receptacle. The utility receptacle must also be connected to an appropriate branch circuit/main with fuse or circuit breaker protection. Connection to any other type of receptacle may result in an electrocution hazard.

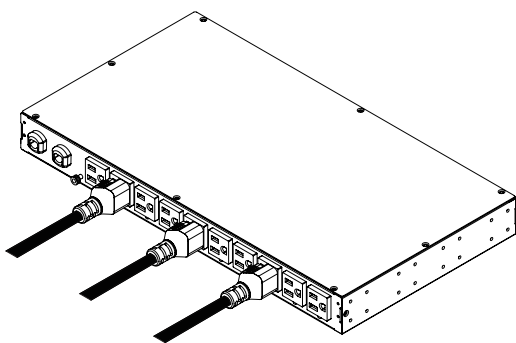
Step 1. Receptacle evaluation

Ensure that the plug type of your ATS PDU unit matches the receptacles that you are using.

Step 2. Plug the ATS PDU into the utility receptacle and/or UPS. For configuration details, refer to ATS PDU Configuration on page 17.

Step 3. Attach equipment

It is extremely important not to exceed the ATS PDU's maximum current load (as outlined in the Specifications section). In order to determine total load, use the LCD screen on the front of the ATS PDU to monitor the load being attached.

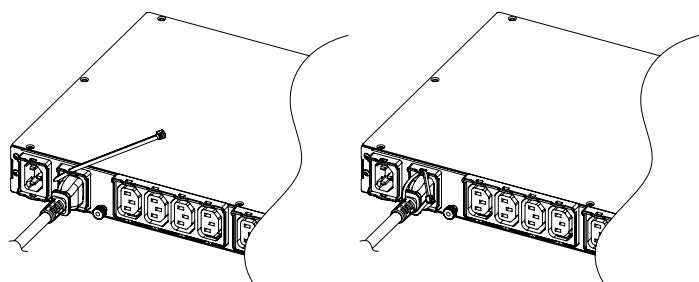


INSTALLATION GUIDE

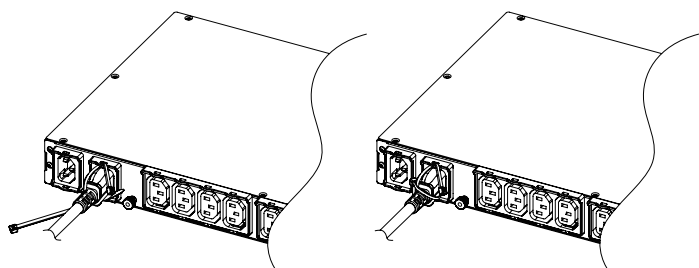
Locking Power Cord - For IEC Type ATS PDU

Input Power Cord

Step 1. Align and insert the Cable Tie from the upper side of the Fixed Stand and fasten it as shown below.

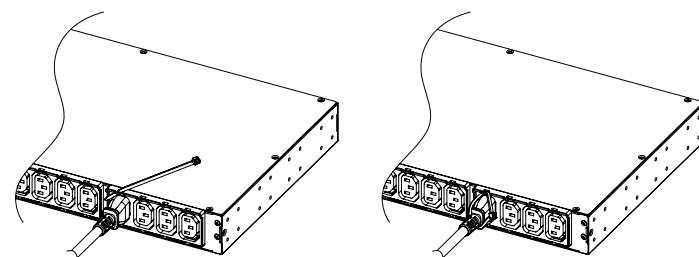


Step 2. Align and insert the Cable Tie from the bottom side of the Fixed Stand and fasten it as shown below.



Output Power Cord

Step 1. Align and insert the Cable Tie from the upper side of the Fixed Stand and fasten it as shown below.



INSTALLATION GUIDE

Network Installation

Step 1 – Network Connection

Using an Ethernet cable, attach one end to the Ethernet port on the front of the ATS PDU, and the other end to a network port.

Step 2 – Establish the ATS PDU IP address

Assigning an IP address to the CyberPower ATS PDU requires the user to have an available IP address that is valid on the respective network. If an available IP address is unknown, contact the network administrator to obtain one.

DHCP is enabled by factory default. If the ATS PDU does not receive an IP address from the network's DHCP server, it will default to 192.168.20.177.

There are multiple methods for setting up the IP address on the ATS PDU. Please follow the instructions below for the method that is appropriate for your application. Please make sure the ATS PDU is powered on during this process.

Option 1: Power Device Network Utility (recommended)

1. Download and install the Power Device Network Utility software from www.cyberpower.com.
2. Open the Power Device Network Utility and select the ATS PDU device from the list and select Tools > Device Setup from the menu.
3. Configure the IP Address, Subnet Mask, and Gateway Address to match your network settings.
4. Enter the user name and password of the ATS PDU device at the Authentication menu.

Note: The default username is “**cyber**” and the default password is “**cyber**”. For further information and installation instructions, see Appendix B.

Option 2: DHCP Server

1. Ask your administrator if there is DHCP server on the LAN.
2. Make sure the DHCP is Enabled.
3. Make sure the network connection is ready and power on the ATS PDU.
4. The ATS PDU will obtain an IP address from the DHCP server automatically.

INSTALLATION GUIDE

Network Installation

Option 3: Address Resolution Protocol (ARP) Command

1. Obtain the MAC address from the sticker on the ATS PDU.
2. Open a command prompt as an administrator and type the following:
“arp -s [available IP address] [MAC address of ATS PDU]”.
Example:
IP Address : **arp -s 192.168.20.240**
MAC Address: **00-0C-15-00-00-01**
3. Use the Ping command to assign a size of 123 bytes to the IP.
 - Type in “**ping 192.168.20.240 -l 123**” then press **Enter**.
 - If the replies are received, your computer can communicate with the IP address.

Option 4: Hyper Terminal or Terminal Emulator

1. Use the included RJ45/DB9 serial port connection cable, attach one end to the serial port on the front of the ATS PDU, and the other end to the PC/server.
2. Open the Hyper Terminal software on your PC and select a name and icon for the connection.
3. Setup the COM port settings using the values indicated in Appendix A.
4. Press **Enter** to enter the Authentication menu.
5. Enter the user name and password of the ATS PDU device at the Authentication menu.
6. Press **4** and **Enter** to access Network Settings to view the IP address.

Note: The default username is “**cyber**” and the default password is “**cyber**”. For further information and configuration via Hyper Terminal, see Appendix A-Hyper Terminal.

OPERATION

Remote Management

The remote management function provides for monitoring of the ATS PDU operational information, controlling outlets and utilizing SNMP functionality.

Web

Remote management can be performed via web interface. To access the web interface, please follow the instructions below:

1. Enter the IP address of the ATS PDU into a web browser.
2. Enter the user name and password of the ATS PDU device at the authentication screen.

Note: The default username is “**cyber**” and the default password is “**cyber**”.

Telnet and SSH

The CyberPower ATS PDU provides Telnet and Secure Shell (SSH) as Remote Management methods. Telnet uses user name and password as basic security while SSH has a higher security level with encryption of the transmitted packets including user name, password, and data. Configure the Setting of Telnet and SSH on the Web Interface. The default user name and password is **cyber/cyber**.

SNMP

The CyberPower ATS PDU supports SNMPv1 and SNMPv3 protocols. Download the CyberPower MIB file from www.cyberpower.com and add it to a SNMP-supported management software. Default read/write community is public/private for SNMPv1. SNMPv3 provides a higher security level than SNMPv1 by encrypting the transmitted packet. Configure the settings of the SNMPv1/SNMPv3 on Web Interface.

OPERATION

Local Management

LCD Operation

The LCD screen provides instant information, such as source condition, voltage and current, for the ATS PDU. In addition, users can use the interface to configure each ATS PDU parameters and control each outlet on the switched ATS PDU.

A. Scroll Mode:

The ATS PDU information will display in following order automatically when **Scroll Mode On** is configured.

Source A Information
Source B Information
Device Load
Alert Number

B. Main Menu Map

Meter	Source		
	Device		
	Outlet		
Control	All	Immediate On	
		Delay On	
	Bank 1/2	Immediate Off	
		Delay Off	
	Outlet 1-N	Reboot	
		Delay Reboot	
Setting	Source	Preferred Source	A/B/None
		Voltage	Nominal Voltage
			Voltage Range
			Sensitivity
		Frequency Deviation	1/2/3 Hz
	LCD	Color	
		Brightness	
		Direction	
		Screen Off	
	Reboot/Reset	Reboot	
		Except TCP	
		To Default	
	Reboot		
About	Model Name		
	Serial Number		
	Network		
	Hardware Version		
	Firmware Version		
Alert	Current		
	Log		

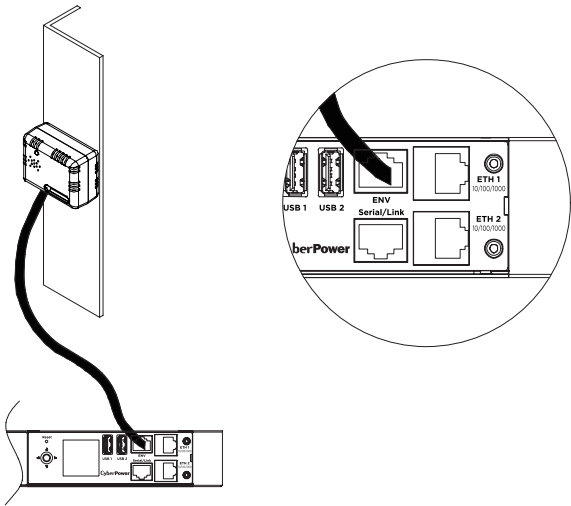
OPERATION

LED Indicators

Indicator	Status	Description
Source	Green	Power condition of the source is normal.
	Red	Power condition of the source is abnormal.
Tx/Rx	Off	The ATS PDU power is off.
	On (Green)	The ATS PDU power is on.
	Flashing	Receiving/transmitting data packet
		Reset Finished
LINK	On	Indicates the ATS PDU is connected to the LAN
	Off	Indicates the ATS PDU is not connected to the LAN
Outlet * for metered by outlet series only	On (Green)	The outlet is on and status is ok.
	Off	The outlet is off.
	Yellow *	Low load
	Orange *	Near overload
	Red *	Overload

Environmental Monitoring (optional)

CyberPower ATS PDUs along with the environmental sensor (ENVIROSENSOR) provide temperature and humidity monitoring in a server closet and/or datacenter remotely. To connect the ATS PDU with ENVIROSENSOR, use the RJ45 Ethernet Cable included with the ENVIROSENSOR. Plug one end into the Daisy Chain (In)/ENVIROSENSOR port on the ATS PDU and the other end into the RJ45 port on the ENVIROSENSOR (as shown in figure below). When the ATS PDU correctly connects to the ENVIROSENSOR, users can see the temperature and humidity data via the Web Interface. For further information regarding ENVIROSENSOR configuration, please refer to the Intelligent ATS PDU Web Interface User’s Manual.



OPERATION

Device Reset

- To locally reset all the settings to default, use the Reset button on the Ethernet module.
- To remotely reset all the settings to default, log in to the Web interface, enter the Reset page and apply the function.

Unattended/Automatic Shutdown

PowerPanel® Business (Remote) software automatically initiates a graceful shutdown on the connected computer's operating system.

PowerPanel must be installed on every computer or server for which the shutdown is to take place. The computer will receive a device status message from the ATS PDU and will perform the shutdown according to the instructions provided, including shutdowns at exact times and dates.

Follow the directions below for setting up Unattended/Automatic Shutdown.

Step 1. Computer Configuration

1. Install PowerPanel® Business (Remote) on every computer/server that will be part of the shutdown process (Follow the instructions in the PowerPanel® Business User Manual).
2. Configure the settings in PowerPanel® Business (Remote). See the PowerPanel® Business User Manual for detailed instructions.

Step 2. ATS PDU Configuration

Verify that the IP address of all computers, that will be part of the shutdown process, are included in the Client List on the web interface (Follow the instructions in the PowerPanel® Business User Manual).

Step 3. Notification

Notifying the computers of potential outlet shutdowns can be accomplished using the following functions:

- Outlets Control Menu: Performing the task of turning off or rebooting outlets
- Scheduling Menu: Setting the ATS PDU to perform the task of turning off or rebooting outlets. The notification will occur prior to the scheduled date/time.
- Outlet Overload: In the event of ATS PDU overload, notification will be sent prior to the ATS PDU shutting down.

FIRMWARE UPGRADE

By upgrading the Firmware, you can obtain new features and updates/improvements to existing functionality. To ensure the firmware is kept up to date, please regularly visit our website to see if there is any updated firmware version available.

- There are four methods for upgrading the ATS PDU firmware. Please follow the instructions below for the method that is appropriate for your application. There are two files to update in order to upgrade the firmware version:

* cpsgpdumafw_XXX_x_xx

Note that the XXX is not part of the file name but is where the version number in the filename is given.

Prior to performing a firmware update, please:

- Download the latest firmware from www.cyberpower.com.
- Extract the downloaded firmware file to your local "C:\\" drive.

Note:

1. The FTP service needs to be enabled before attempting to execute a firmware upgrade.
2. Please do not turn the ATS PDU off when performing the firmware upgrade. ATS PDU outlets will remain powered on while the firmware update takes place. Only the ATS PDU LCD screen will reboot.
3. The ATS PDU LCD screen will reboot during the firmware update process. This DOES NOT cause the ATS PDU outlets to reboot.

Option 1: Single Device Upgrade

Use the following steps to upgrade the firmware.

1. Open a command prompt window and navigate to "C:\\".
2. Login to the ATS PDU with FTP command, type
 - C:\>ftp
 - ftp> open 192.168.22.126 21
(for example: 192.168.22.126 is the current IP of the ATS PDU and 21 is the default ftp port for the ATS PDU)
 - Connected to 192.168.22.126.
 - 220 CyberPower FTP Server Ready.
 - User (192.168.22.126:(none)):cyber
 - 331 User name okay, need password.
 - Password:
 - 230 User logged in, proceed.
 - ftp>
3. Upload the cpsm cpsgpdumafw_XXX_x_xx, type
 - ftp > bin
 - ftp > put cpsmpdumafw_XXX.bin
4. Upgrade complete, type
 - ftp > quit
5. The system will reboot after you type "quit".

FIRMWARE UPGRADE

Option 2: Single or Multiple Device Upgrade (recommended)

Use the following steps to upgrade the firmware.

1. Install the CyberPower Power Device Network Utility 2 available for download at www.CyberPower.com.
2. After installation completes, run the **Power Device Network Utility 2**.
3. The main window of the Power Device Network Utility 2 program is shown in Figure 1. The configuration tool will display all CyberPower Remote Management devices present on the local network subnet. The **Scan** button is used to search the local network subnet again.

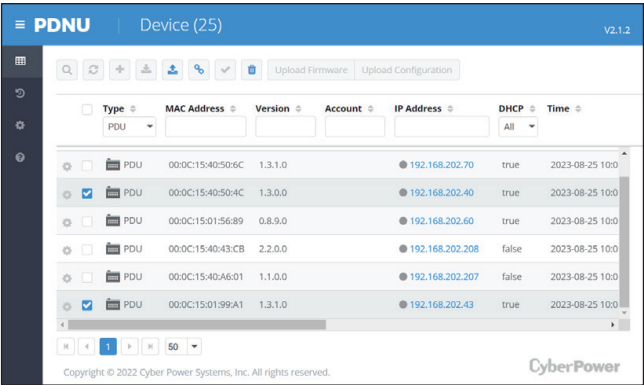


Figure 1

4. Check the boxes to select the devices you wish to upgrade, and click **Connection** on the top tools list to enter the device user account and password (shown in Figure 2). Once the connection is confirmed, the status icon next to the IP Address will change from grey to green.

Note: You must connect to the device by entering your user account and password credentials before the firmware upgrade.

Connection Information

Account

Password

Save

Cancel

Figure 2

FIRMWARE UPGRADE

5. Select the devices you wish to upgrade by checking their respective checkbox and select **Upload Firmware**. **Note:** You can upload the firmware of multiple devices that use the same firmware files.
6. Select the Firmware file and click **OK** to implement firmware upgrade, as shown in Figure 3.

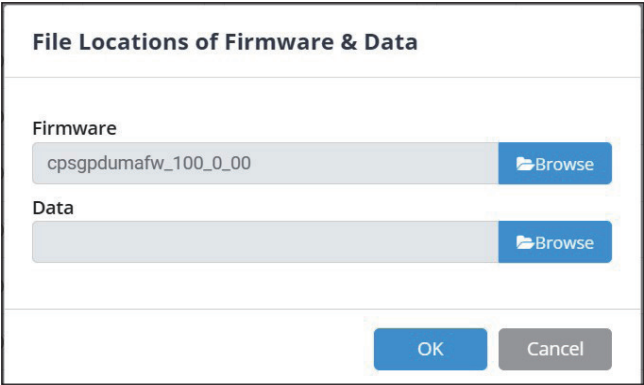


Figure 3

7. Once the firmware upgrade is implemented, you will see the Result in the main window, as shown in Figure 4.

Note: If you don’t want to wait for the firmware upgrade, you can stop action by choosing **Abort** in the **Action** menu. However, this is not recommended because the Abort action may cause the device to malfunction.

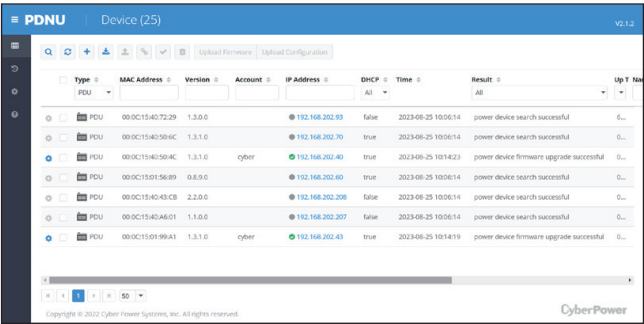


Figure 4

FIRMWARE UPGRADE

Option 3: Use a USB Flash Drive

Use the following steps to upgrade the firmware.

1. Download the latest firmware from www.cyberpower.com.
2. Extract the file to the root directory of a USB flash drive with **FAT32** format.

Switched Metered by Outlet / Metered by Outlet / Switched / Monitored Series:

Please note that the two files below should be available in order to complete the firmware upgrade process:

* cpsgpdumafw_xxx_x_xx

3. Plug the USB drive into the ATS PDU USB 1 port and use multifunction button to choose USB Storage in the main menu.
4. Select **USB** and press **Enter** button to enter **Firmware Upgrade** menu.
5. Select **Main** and **Yes** to start the upgrade process.
6. The ATS PDU will reboot after the process is completed.

Note: You can check to see if the firmware upgrade is successful by checking the “Firmware version” on the [System->About] screen via web UI. You can also check Firmware Version on LCD screen. Use multifunction button to enter main menu and select **About** to see PDU information.

Option 4: Use Secure Copy (SCP) command

Use the following steps to update the firmware via SCP.

Note: Only firmware version 1.10 and above supports the functionality to update firmware via SCP.

For Windows Users:

1. Download any PuTTY Secure Copy client (PSCP) utility.
2. Save the firmware files and the PSCP Utility in the same folder.
3. Open the Command Line Interface and change the path to where the firmware files and the PSCP Utility are saved.
4. Enter the following command to perform the firmware update: **pscp - scp <filename> <user>@<IP address of ATS PDU>:**

Note:

- a. The SSH setting on the ATS PDU must be Enabled.
 - b. <filename> is the filename of the firmware file.
There is one firmware file to upload:
cpsgpdumafw_xxx_x_xx.
 - c. <user> is the username of the SSH account on the ATS PDU.
 - d. Ensure to add “:” after the IP address.
5. After executing the command, a message may appear asking if you trust the host. To continue type “y” for yes within 10 seconds.
 6. On the next screen enter the ATS PDU password.
Please wait until the progress indicator displays 100%.
The system will automatically log out and reboot after the transfer is complete.
 7. If the firmware file transfer is unsuccessful you will see an error message. Attempt to retype the command and execute it again.

FIRMWARE UPGRADE

For Linux, MacOS and Unix Users:

1. Install the related distribution of an SSH or SCP client, for example: Openssh client.
2. Open the Terminal and change the path to where the firmware files are saved.
3. Enter the following command to perform the firmware update:
- **pscp - scp <filename> <user>@<IP address of ATS PDU>:**

Note:

- a. The SSH setting on the ATS PDU must be Enabled.
- b. <filename> is the filename of the firmware file.
There is one firmware file to upload:
cpsgpdumafw_xxx_x_xx.
- c. <user> is the username of the SSH account on the ATS PDU.
- d. Ensure to add “:” after the IP address.
For example:
scp cpsmpdumafw_XXX.bin cyber@192.168.1.100:

Note: cpsgpdumafw_xxx_x_xx is the firmware file of the version being updated.

4. After executing the command, a message may appear asking if you trust the host. To continue type “y” for yes within 10 seconds.
5. On the next screen enter the ATS PDU password.
The firmware file transfer may take a couple minutes to complete. Please wait until the progress indicator displays 100%. The system will automatically log out and reboot after the transfer is complete.
6. If the firmware file transfer is unsuccessful you will see an error message. Attempt to retype the command and execute it again.

TROUBLESHOOTING

Problem	Possible Cause	Solution
ATS PDU outlets do not provide power to connected equipment	1. Breaker tripped 2. Power cord is not properly plugged in	Reset Breaker, check the plug to ensure it is connected correctly. If the problem remains, contact technical support.
Amperage displayed on LCD screen exceeds the unit’s capability	Overload	The load indicator shows red when overload. Reduce the load on the ATS PDU until the overload is gone. If the problem remains, contact technical support.
Circuit breakers have tripped	1. Sustained overload 2. Excessive ambient or internal temperatures 3. Faulty breaker	Reset Breaker. If the problem remains, contact technical support.

CONFORMANCE APPROVALS



FCC Warning

WARNING!! This equipment has been tested and found to comply with the limits for a Class A Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in residential installation. 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 their own expense.

Any special accessories needed for compliance must be specified in the instruction.

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.

Notice: (1) An unshielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord is used. (2) Use only shielded cables to connect I/O devices to this equipment.

Note: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

The Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.

Cet appareil numérique de la class A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Union

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CUSTOMER SERVICE & WARRANTY

Product Registration

Thank you for purchasing a CyberPower product. Prompt product registration entitles coverage under the Limited Warranty and also allows the opportunity to be notified of product enhancements, upgrades, and other announcements.

Registration is quick and easy at
www.cyberpowersystems.com/registration
(for USA and Canada) or
www.cyberpower.com/registration (for all other regions).

Limited Warranty

Please visit www.CyberPowerSystems.com for a copy of the Limited Warranty.

Cyber Power International

Feel free to contact our Tech Support department with installation, troubleshooting, or general product questions.

Cyber Power Systems, Inc.

www.cyberpower.com

Europe, Northern Ireland

Cyber Power Systems B.V.

Flight Forum 3545, 5657DW Eindhoven, The Netherlands
Tel: +31 40 2348170
Fax: +31 40 2340314
Email: eu.service@cyberpower.com

Austria, Germany, Switzerland

Cyber Power Systems GmbH

Edisonstrasse 16, 85716 Unterschleissheim, Germany
Telefon: +49 89 1 222 166 0
Fax: +49 89 1 222 166 29
Email: de.service@cyberpower.com

France

Nitram S.A.

Z.I. Saint-Séverin, B.P. 36, 28220 CLOYES, FRANCE
Tél : +33 2 37 98 61 50
Fax: +33 2 37 98 60 04
E-mail: infos@nitram.fr

United States, Canada

Cyber Power Systems (USA), Inc.
4241 12th Avenue East, Suite 400, Shakopee, MN 55379
Toll-free: +1 877 297 6937
Email: sales@cpsww.com

Taiwan, United Kingdom

Cyber Power Systems, Inc.

11F., No.26, Jinzhuang Rd., Neihu Dist.,
Taipei City 114, Taiwan
Tel: +886 2 8792 9510
Fax: +886 2 8792 9621
Email: tw.service@cyberpower.com,
uk.service@cyberpower.com

All Other Regions

Please visit our website for local contact information.

APPENDIX A - HYPER TERMINAL

Hyper Terminal software can be used for basic ATS PDU configuration. In order for Hyper Terminal to interact with the ATS PDU, the PC/server must be connected directly to the ATS PDU via the serial port with the included RJ45/DB9 serial port connection cable. It utilizes a text-based interface and menu system. Navigation through the interface is done by typing the number of the menu option and pressing the **Enter** key. Setup the COM port settings using the following values:

- Bits per second: 9600
- Data bits: 8
- Parity: None
- Stop bits: 1
- Flow control: None

Note: The session will timeout and logout after 3 minutes of inactivity. Menu options are shown below:

[Main Menu]

1. Utility Configuration
2. Outlet Manager (Switched Series Only)
3. Load Configuration
4. Network Settings
5. System Configuration
6. Account Settings
7. Configure System to Default
8. Logout

[Utility Configuration]

1. Preferred Source: A
2. Sensitivity: High
3. Voltage Range: Medium
4. Frequency Deviation: 1 Hz
5. Nominal Voltage: 230 V
6. Wide Voltage Range: 30 V
7. Medium Voltage Range: 23 V
8. Narrow Voltage Range: 16 V
9. Set Load Restriction (Switched Series Only)

[Outlet Manager]

1. Outlet Control
2. Outlet Configuration

[Load Configuration]

1. Device Threshold Configuration
2. Bank 1 Threshold Configuration
3. Bank 2 Threshold Configuration
4. Bank 3 Threshold Configuration

[Network Setting]

Physical MAC Address: 00-0C-15-40-00-01

1. System IP: 192.168.20.240
2. Subnet Mask: 255.255.255.0
3. Default Gateway: 192.168.20.254
4. DHCP: Enabled
5. Http Port: 80
6. Http Access: Enabled

[System Configuration]

1. Name: PDU44005
2. Location: Server Room
3. Contact: Administrator

[Account Setting]

1. Administrator

[Configure System to Default]

Sure to Configure System to Default

1. Reset ATS PDU
2. Reset ATS PDU (TCP/IP Settings Reserved)

APPENDIX B - POWER DEVICE NETWORK UTILITY 2

Overview

The CyberPower Power Device Network Utility 2 is an easy-to-use interface which is used for establishing IP addresses on CyberPower ATS PDUs.

Installation

Step 1. Download the Power Device Network Utility 2 software from www.cyberpower.com.

Step 2. Select **Next** in the software wizard (Figure 1).



Figure 1

Step 3. Choose an installation directory. Select **Next** (Figure 2).

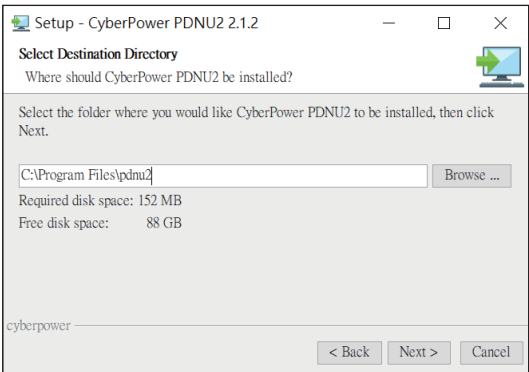


Figure 2

Step 4. Select **Next** to confirm the settings and install (Figure 3).

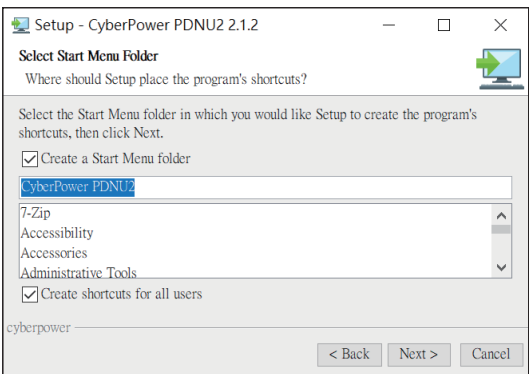


Figure 3

Step 5. Select **Finish** to finalize the installation (Figure 4).

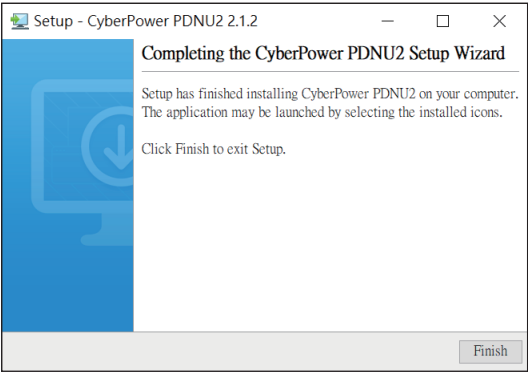


Figure 4

Launch Program

To launch the Power Device Network Utility 2 and get started, select **Programs** from the Start menu in Windows and locate the new folder and icons for Power Device Network Utility 2. Select Power Device Network Utility 2 from the program folder.

Getting Started

The Power Device Network Utility 2 scans the network for devices with MAC addresses that match CyberPower network hardware. Once found, the device(s) can then be figured with a specific IP address, subnet mask, and gateway address. This allows the device(s) to function properly on the network and interface with CyberPower Management Console.

Step 1. Select the appropriate ATS PDU device from the Equipment List and then click **Connection** button on the top tools list to set up.(Shown in Figure 5).

Note: If the ATS PDU does not appear on the list, click the **Refresh** button to rescan the network. If it still does not appear, ensure that the ATS PDU is turned on and was installed correctly.

Pressing **Stop** will cancel the scan/refresh process.

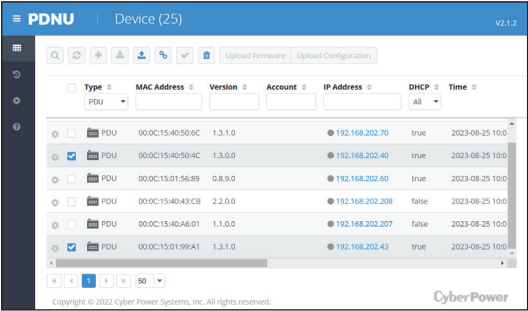


Figure 5. Equipment List

Step 2. Authentication

Enter the user name and password of the ATS PDU device at the Authentication menu (Shown in Figure 6).

Note: The default username is “**cyber**” and the default password is “**cyber**”.

Connection Information

Account

Password

Save

Cancel

Figure 6. Authentication Menu

Step 3. Assign a valid IP Address to the ATS PDU

With the appropriate device selected from the Equipment List, open the Device Network Settings menu by clicking on the tool button. In the Device Network Setting Menu, enter a valid IP address, subnet mask, and gateway address to setup the ATS PDU device. (Shown in Figure 7)

Note: The DHCP option is not available for all power devices.

Device Network Settings

Device MAC Address: 00:0C:15:40:50:4C

Using DHCP

☐ Yes

☒ No

IP Address

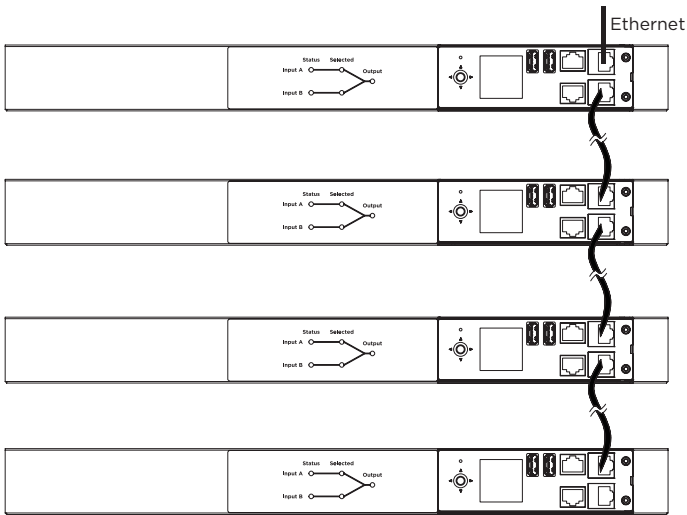
192.168.202.40

New IP Address

Figure 7. Device Network Settings

APPENDIX C - PDU DAISY-CHAIN FUNCTION

The daisy-chain function allows ATS PDUs to be connected together and every single ATS PDU in daisy chain has its own unique IP address.



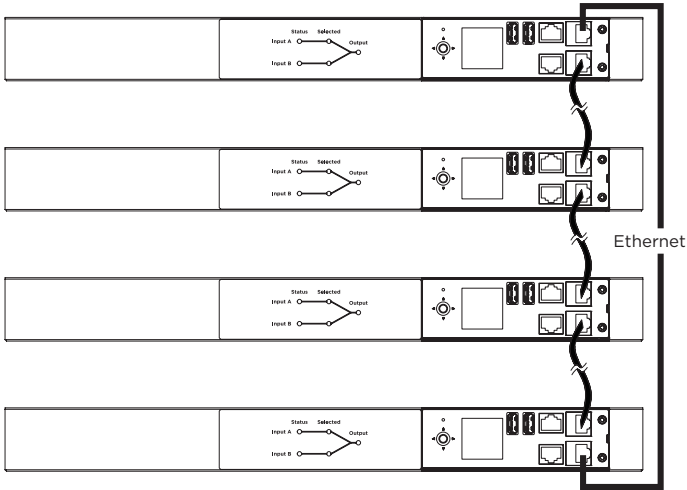
How to connect the ATS PDUs together

Use one Ethernet cable and connect the ATS PDUs via either ETH 1 port or ETH 2 port on the Ethernet module.

Note: Make sure to use straight through cables to perform the daisy-chain function.

Redundant Network Connection

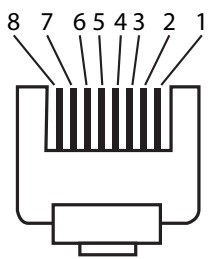
Network redundancy is achieved by simply connecting the last ATS PDUs in the chain back to network. By implementing Rapid Spanning Tree Protocol(RSTP), ATS PDUs can be chained in network loops, thus enhancing reliability.



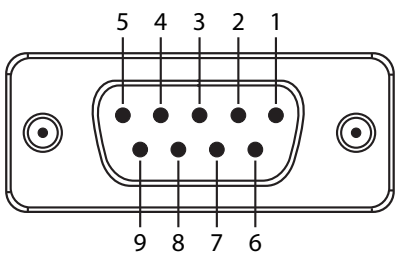
The maximum recommended length of the Ethernet cable to daisy-chain the ATS PDUs is 50 ft (15 m).

APPENDIX D - RJ45 / DB9 SERIAL PORT CONNECTION CABLE PINOUT

Pinout of RJ45 plug and DB9 socket provided in package are shown below.



RJ45 Plug
(Male)



DB9 Socket
(Female)

Pin1	N/A
Pin2	GND
Pin3	N/A
Pin4	N/A
Pin5	N/A
Pin6	RX
Pin7	N/A
Pin8	TX

APPENDIX E - POWER SHARING FUNCTION

The Power sharing function is implemented by connecting two ATS PDUs via the Serial/Link Port with one standard ethernet cable. When one ATS PDU loses power or experiences a malfunction that causes an AC/DC failure, the Ethernet module of the other ATS PDU can bring forth a proprietary 24V, allowing the affected module to maintain basic functionality. This enables the ATS PDU to notify users of abnormal events over the Internet.

