CyberPower

Automatic Transfer Switch

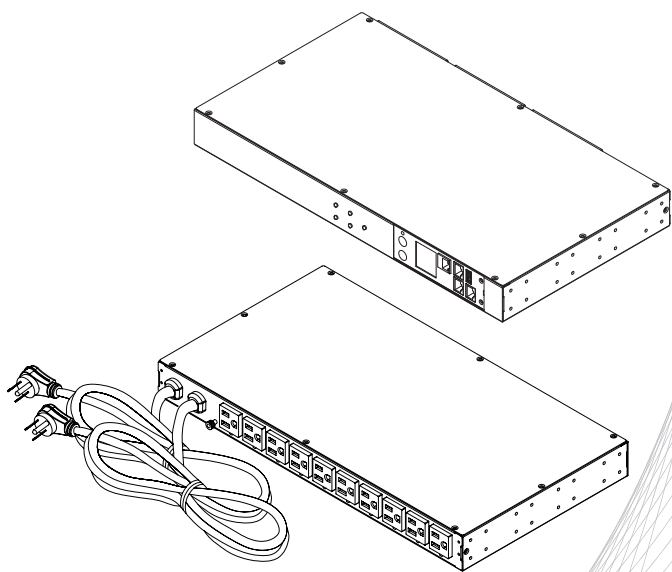## USER'S MANUAL

Table of Contents

Overview

CyberPower Automatic Transfer Switches 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		Metered by Outlet Series	
1U	2U	1U	2U
PDU84001 PDU84002 PDU84004 PDU84005 PDU84006 PDU84301	PDU84003 PDU84007 PDU84302	PDU74001 PDU74002 PDU74004 PDU74005 PDU74006 PDU74301	PDU74003 PDU74007 PDU74302

Switched Series		Monitored Series	
1U	2U	1U	2U
PDU44001 PDU44002 PDU44004 PDU44005 PDU44006 PDU44301	PDU44003 PDU44007 PDU44302	PDU34001 PDU34002 PDU34004 PDU34005 PDU34006 PDU34301	PDU34003 PDU34007 PDU34302

Metered Series	
1U	2U
PDU24001 PDU24002 PDU24004 PDU24005 PDU24006 PDU24301	PDU24003 PDU24007 PDU24302

*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, please use a 15A circuit protector. For 20A PDU series, please use a 20A circuit protector. For 30A PDU series, please use a 30A circuit protector. Connection to any other type of power outlet may result in a 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 be noted that all ATS PDUs with an input current rating greater than 20A are equipped with two flush-mount branch circuit breakers.

Safety Precautions

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 Earthing - 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.

CAUTION!! 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, veuillez utiliser disjondteur de 15A. Pour la série PDU 20A, veuillez utiliser un disjoncteur de 20A. Pour la série PDU 30A, veuillez 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.
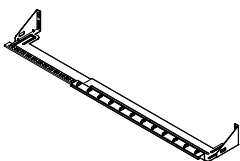
Product Contents

For 1U Models
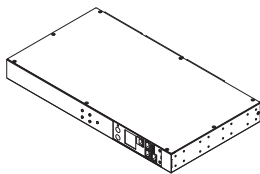
ATS PDU
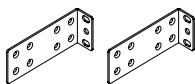
Mounting Bracket x 2

24 (M4x8) Bracket Mounting Screws
(Includes eight spares)

Cord Retention Tray

6 (M3x6) Cord Retention
Tray Mounting Screws
(Includes two spares)

6 (M5x12) Rack Mounting Screws/
6 Washers (Includes two spares for each)

Cable Ties
Qty.: 18 (NEMA Outlet)
Qty.: 30 (IEC Outlet)

RJ45/DB9 Serial Port
Connection Cable

User's Manual and
Software Download Card

Below items only provided with IEC type ATS PDU

Power Cord 10 feet
IEC-320 C13/C14 x 2
(PDU84004/PDU74004/
PDU44004/PDU34004/
PDU24004 Model Only)

Power Cord 10 feet
IEC-320 C19/C20 x 2
(PDU84005/PDU74005/
PDU44005/PDU34005/
PDU24005 Model Only)

Product Contents

For 2U Models
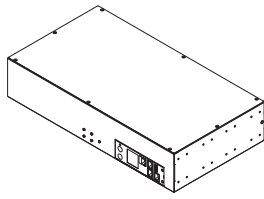
ATS PDU
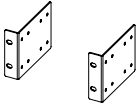
Mounting Bracket x 2

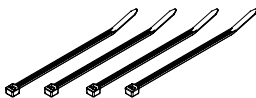24 (M4x8) Bracket Mounting Screws
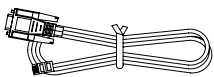(Includes eight spares)
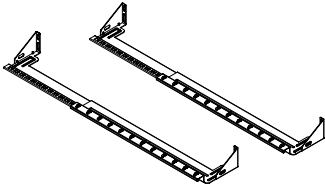
Cord Retention Tray X 2

12 (M3x6) Cord Retention
Tray Mounting Screws
(Includes two spares for each)

6 (M5x12) Rack Mounting Screws/
6 Washers (Includes two spares for each)
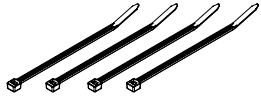
Cable Ties
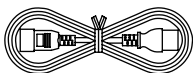Qty.: 30 (NEMA Outlet)
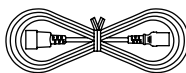Qty.: 50 (IEC Outlet)
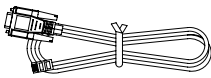
RJ45/DB9 Serial Port
Connection Cable

User's Manual and
Software Download Card

PowerPanel
Management Software

Product Features

Front/Rear Panel Description (1U 15A Models)

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

Metered 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. Status Indicator - Indicates the condition of the ATS PDU (eg. load or environment status).
E. Multifunction LCD Readout - Displays various ATS PDU information such as power and load condition.
F. Ethernet Port – Used to connect ATS PDU to the network.
G. ENVIROSENSOR/ Daisy Chain (In) Port (RJ45 modular port) – Used for ENVIROSENSOR or chaining to previous ATS PDU.
H. USB Port - Used to upgrade the firmware via a flash drive.
I. Serial Port (RJ45 modular port) - Used to connect to a PC and control the ATS PDU locally via SSH/Telnet.
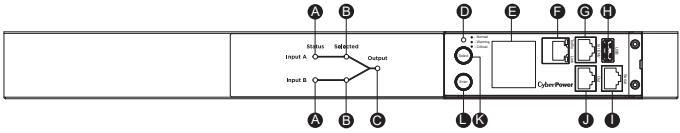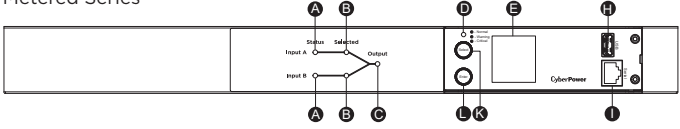J. Daisy Chain (Out) Port – Used for chaining to next ATS PDU.
K. Select Button - Used to control the LCD screen and toggle through the available information options.
L. Enter Button - Used to choose selected items, enter to next level menu or return to previous menu.
M. AC Inlet/AC Power Cord - Use to connnect 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

Model Name	PDU84001 PDU74001 PDU44001 PDU34001	PDU84004 PDU74004 PDU44004 PDU34004	PDU24001	PDU24004
Input				
Nominal Voltage	100-120V	200-240V	100-120V	200-240V
Frequency	50/60Hz			
Derated Input Current	12A	12A(UL)/10A(CE)	12A	12A(UL)/10A(CE)
Plug Type	(2) NEMA 5-15P	(2) IEC-320 C14	(2) NEMA 5-15P	(2) IEC-320 C14
Power Cord Type	SR (14 AWG)	Socket	SR (14 AWG)	Socket
Power Cord Length	10 ft/3.05 m			
Circuit Breaker	No	Yes	No	Yes
Output				
Nominal Voltage	100-120V	200-240V	100-120V	200-240V
Derated Output Current	12A	12A(UL)/10A(CE)	12A	12A(UL)/10A(CE)
Outlet Type	NEMA 5-15R	IEC-320 C13	NEMA 5-15R	IEC-320 C13
Outlet Number	10	12	10	12
Management and Communications				
Multifunction LCD Readout	Voltage, Frequency, Load, Current, HW/FW Version, Network Information		Voltage, Frequency, Load, Current, HW Version	
Software	PowerPanel® Business PowerPanel® Enterprise		No	
Networking	Yes		No	
Serial Port	RJ45			
Sensor Capable	Optional		No	
Physical				
Dimension (H x W x D)	1.75" x 17.05" x 8.45"/ 44mm x 433mm x 215mm			
Environmental				
Humidity	0 to 95% Non-condensing			
Altitude	13100 ft/4000 m			
Temperature	32°F to 113°F/0°C to 45°C			
Safety Approvals				
Certifications	UL62368-1, FCC Class A	UL62368-1, CE EN55032/24, FCC Class A	UL62368-1, FCC Class A	UL62368-1, CE EN55032/24, FCC Class A

* All specifications are subject to change without notice.

Product Features

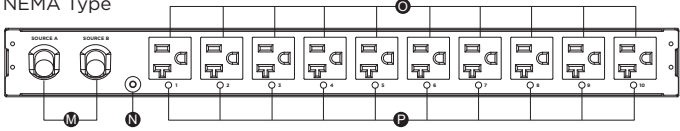## Front/Rear Panel Description (1U 20A Models)

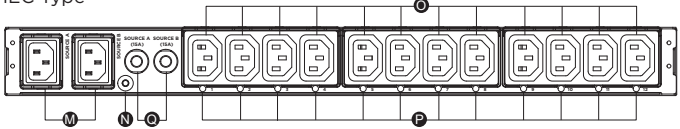Switched Metered by Outlet/ Metered by Outlet/ Switched/ Monitor Series

Metered 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. Status Indicator - Indicates the condition of the ATS PDU (eg. load or environment status).
E. Multifunction LCD Readout - Displays various ATS PDU information such as power and load condition.
F. Ethernet Port – Used to connect ATS PDU to the network.
G. ENVIROSENSOR/ Daisy Chain (In) Port (RJ45 modular port) – Used for ENVIROSENSOR or chaining to previous ATS PDU.
H. USB Port - Used to upgrade the firmware via a flash drive.
I. Serial Port (RJ45 modular port) - Used to connect to a PC and control the ATS PDU locally via SSH/Telnet.
J. Daisy Chain (Out) Port – Used for chaining to next ATS PDU.
K. Select Button - Used to control the LCD screen and toggle through the available information options.
L. Enter Button - Used to choose selected items, enter to next level menu or return to previous menu.
M. AC Inlet/AC Power Cord - Use to connnect 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

Model Name	PDU84002 PDU74002 PDU44002 PDU34002	PDU84006 PDU74006 PDU44006 PDU34006	PDU24002	PDU24006
Input				
Nominal Voltage	100-120V	200-240V	100-120V	200-240V
Frequency	50/60Hz			
Derated Input Current	16A			
Plug Type	(2) NEMA (L)5-20P (Adapter)	(2) NEMA L6-20P	(2) NEMA (L)5-20P (Adapter)	(2) NEMA L6-20P
Power Cord Type	SR (12AWG)	Socket	SR (12 AWG)	Socket
Power Cord Length	10 ft/3.05 m			
Output				
Nominal Voltage	100-120V	200-240V	100-120V	200-240V
Derated Output Current	16A	C13: 12A C19: 16A	16A	C13: 12A C19: 16A
Outlet Type	NEMA 5-20R	(8) IEC C13 (2) IEC C19	NEMA 5-20R	(8) IEC C13 (2) IEC C19
Outlet Number	10	8+2	10	8+2
Management and Communications				
Multifunction LCD Readout	Voltage, Frequency, Load, Current, HW/FW Version, Network Information		Voltage, Frequency, Load, Current, HW Version	
Software	PowerPanel® Business PowerPanel® Enterprise		No	
Networking	Yes		No	
Serial Port	RJ45			
Sensor Capable	Optional		No	
Physical				
Dimension (H x W x D)	1.75" x 17.05" x 8.45"/ 44mm x 433mm x 215mm			
Environmental				
Humidity	0 to 95% Non-condensing			
Altitude	13100 ft/4000 m			
Temperature	32°F to 113°F/0°C to 45°C			
Safety Approvals				
Certifications	UL62368-1, FCC Class A			

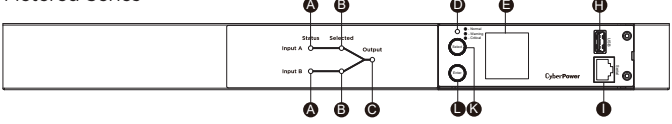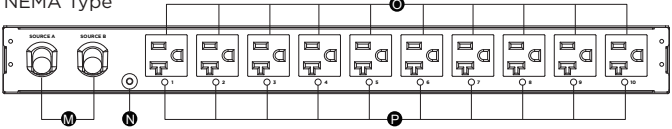* All specifications are subject to change without notice.

Product Features

Front/Rear Panel Description (1U 20A Models)

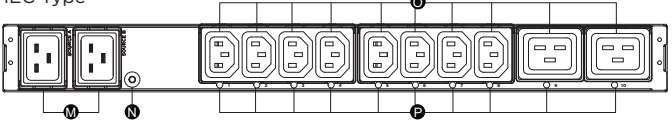Switched Metered by Outlet/ Metered by Outlet/ Switched/ Monitor Series

Metered 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. Status Indicator - Indicates the condition of the ATS PDU (eg. load or environment status).
E. Multifunction LCD Readout - Displays various ATS PDU information such as power and load condition.
F. Ethernet Port – Used to connect ATS PDU to the network.
G. ENVIROSENSOR/ Daisy Chain (In) Port (RJ45 modular port) – Used for ENVIROSENSOR or chaining to previous ATS PDU.
H. USB Port - Used to upgrade the firmware via a flash drive.
I. Serial Port (RJ45 modular port) - Used to connect to a PC and control the ATS PDU locally via SSH/Telnet.
J. Daisy Chain (Out) Port – Used for chaining to next ATS PDU.
K. Select Button - Used to control the LCD screen and toggle through the available information options.
L. Enter Button - Used to choose selected items, enter to next level menu or return to previous menu.
M. AC Inlet/AC Power Cord - Use to connnect 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
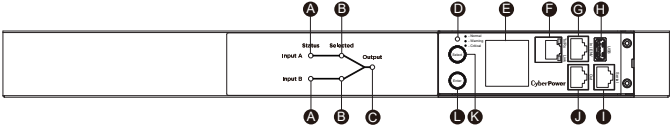Q. Circuit Breaker – Provides output overload protection.

Technical Specifications

Model Name	PDU84005 PDU74005 PDU44005 PDU34005	PDU84301 PDU74301 PDU44301 PDU34301	PDU24005	PDU24301
Input				
Nominal Voltage	200-240V			
Frequency	50/60Hz			
Derated Input Current	16A			
Plug TypePlug Type	(2) IEC-320 C20	(2) IEC 309 16A	(2) IEC-320 C20	(2) IEC 309 16A
Power Cord Type	Socket			
Power Cord Length	10 ft/3.05 m			
Circuit Breaker	Yes	No	Yes	No
Output				
Nominal Voltage	200-240V			
Derated Output Current	C13: 12A (UL) 10A (CE) C19: 16A	C13: 10A (CE) C19: 16A	C13: 12A (UL) 10A (CE) C19: 16A	C13: 10A (CE) C19: 16A
Outlet Type	(8) IEC C13 (2) IEC C19			
Outlet Number	8+2			
Management and Communications				
Multifunction LCD Readout	Voltage, Frequency, Load, Current, HW/FW Version, Network Information		Voltage, Frequency, Load, Current, HW Version	
Software	PowerPanel® Business PowerPanel® Enterprise		No	
Networking	Yes		No	
Serial Port	RJ45			
Sensor Capable	Optional		No	
Physical				
Dimension (H x W x D)	1.75" x 17.05" x 8.45"/ 44mm x 433mm x 215mm			
Environmental				
Humidity	0 to 95% Non-condensing			
Altitude	13100 ft/4000 m			
Temperature	32°F to 113°F/0°C to 45°C			
Safety Approvals				
Certifications	UL62368-1, CE EN55032/24, FCC Class A	CB, CE EN55032/24 Class A	UL62368-1, CE EN55032/24, FCC Class A	CB, CE EN55032/24 Class A

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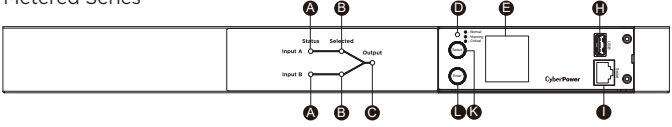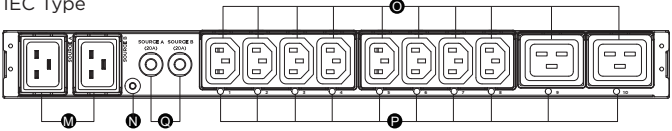
Product Features

Front/Rear Panel Description (2U 30A Models)

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

Metered 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. Status Indicator - Indicates the condition of the ATS PDU (eg. load or environment status).
E. Multifunction LCD Readout - Displays various ATS PDU information such as power and load condition.
F. Ethernet Port – Used to connect ATS PDU to the network.
G. ENVIROSENSOR/ Daisy Chain (In) Port (RJ45 modular port) – Used for ENVIROSENSOR or chaining to previous ATS PDU.
H. USB Port - Used to upgrade the firmware via a flash drive.
I. Serial Port (RJ45 modular port) - Used to connect to a PC and control the ATS PDU locally via SSH/Telnet.
J. Daisy Chain (Out) Port – Used for chaining to next ATS PDU.
K. Select Button - Used to control the LCD screen and toggle through the available information options.
L. Enter Button - Used to choose selected items, enter to next level menu or return to previous menu.
M. AC Inlet/AC Power Cord - Use to connnect 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 providind power to connected equipment.
P. Circuit Breaker - Provides output overload protection.
Q. Ground Stud - Use to ground the ATS PDU
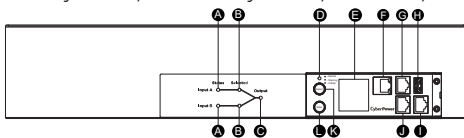
Technical Specifications

Model Name	PDU84003 PDU74003 PDU44003 PDU34003	PDU84007 PDU74007 PDU44007 PDU34007	PDU24003	PDU24007
Input				
Nominal Voltage	100-120V	200-240V	100-120V	200-240V
Frequency	50/60Hz			
Derated Input Current	24A			
Plug Type	(2) NEMA L5-30P	(2) NEMA L6-30P	(2) NEMA L5-30P	(2) NEMA L6-30P
Power Cord Type	SR (10 AWG)			
Power Cord Length	10 ft/3.05 m			
Output				
Nominal Voltage	100-120V	200-240V	100-120V	200-240V
Derated Output Current	5-20R: 16A L5-30R: 24A	C13: 12A C19: 16A L6-30R: 24A	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) NEMA 5-20R (1) NEMA L5-30R	(16) IEC C13 (2) IEC C19 (1) NEMA L6-30R	(16) NEMA 5-20R (1) NEMA L5-30R	(16) IEC C13 (2) IEC C19 (1) NEMA L6-30R
Outlet Number	16+1	16+2+1	16+1	16+2+1
Circuit Breaker	Yes			
Management and Communications				
Multifunction LCD Readout	Voltage, Frequency, Load, Current, HW/FW Version, Network Information		Voltage, Frequency, Load, Current, HW Version	
Software	PowerPanel® Business PowerPanel® Enterprise		No	
Networking	Yes		No	
Serial Port	RJ45			
Sensor Capable	Optional		No	
Physical				
Dimension (H x W x D)	3.5" x 17.05" x 8.45" / 88mm x 433mm x 215mm			
Environmental				
Humidity	0 to 95% Non-condensing			
Altitude	13100 ft/4000 m			
Temperature	32°F to 113°F/0°C to 45°C			
Safety Approvals				
Certifications	UL 62368-1, FCC Class A			

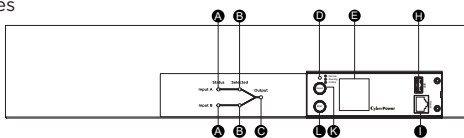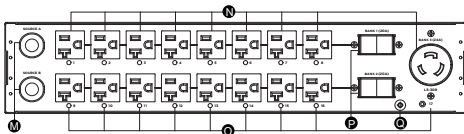* All specifications are subject to change without notice.

Product Features

Front/Rear Panel Description (2U 32A Models)

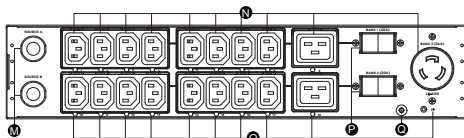Switched Metered by Outlet/ Metered by Outlet/ Switched/ Monitor Series

Metered 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. Status Indicator - Indicates the condition of the ATS PDU (eg. load or environment status).
E. Multifunction LCD Readout - Displays various ATS PDU information such as power and load condition.
F. Ethernet Port – Used to connect ATS PDU to the network.
G. ENVIROSENSOR/ Daisy Chain (In) Port (RJ45 modular port) – Used for ENVIROSENSOR or chaining to previous ATS PDU.
H. USB Port - Used to upgrade the firmware via a flash drive.
I. Serial Port (RJ45 modular port) - Used to connect to a PC and control the ATS PDU locally via SSH/Telnet.
J. Daisy Chain (Out) Port – Used for chaining to next ATS PDU.
K. Select Button - Used to control the LCD screen and toggle through the available information options.
L. Enter Button - Used to choose selected items, enter to next level menu or return to previous menu.
M. AC Inlet/AC Power Cord - Use to connnect 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 providind power to connected equipment.
P. Circuit Breaker - Provides output overload protection.
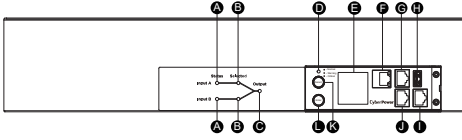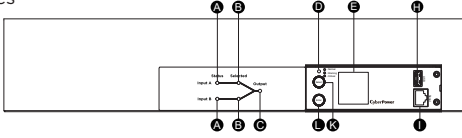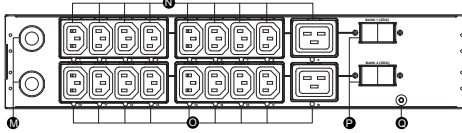Q. Ground Stud - Use to ground the ATS PDU

Technical Specifications

Model Name	PDU84302 PDU74302 PDU44302 PDU34302	PDU24302
Input		
Nominal Voltage	200-240V	
Frequency	50/60Hz	
Max. Input Current	32A	
Plug Type	(2) IEC 309 32A	
Power Cord Type	SR (10 AWG)	
Power Cord Length	10 ft/3.05 m	
Output		
Nominal Voltage	200-240V	
Derated Output Current	C13: 10A C19: 16A	
Derated Output Current	20A (per bank)	
Bank Number	2	
Outlet Type	(16) IEC C13 (2) IEC C19	
Outlet Number	16+2	
Circuit Breaker	Yes	
Management and Communications		
Multifunction LCD Readout	Voltage, Frequency, Load, Current, HW/FW Version, Network Information	Voltage, Frequency, Load, Current, HW Version
Software	PowerPanel Business, PowerPanel Enterprise	No
Networking	Yes	No
Serial Port	RJ45	
Sensor Capable	Optional	No
Physical		
Dimension (H x W x D)	3.5" x 17.05" x 8.45"/ 88mm x 433mm x 215mm	
Environmental		
Humidity	0 to 95% Non-condensing	
Altitude	13100 ft/4000 m	
Temperature	32°F to 113°F/0°C to 45°C	
Safety Approvals		
Certifications	CB, CE EN55032/24 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

Utility Power   Utility Power

CyberPower Online UPS   CyberPower Online UPS

SOURCE A
SOURCE B   CyberPower ATS PDU

Equipment Loads
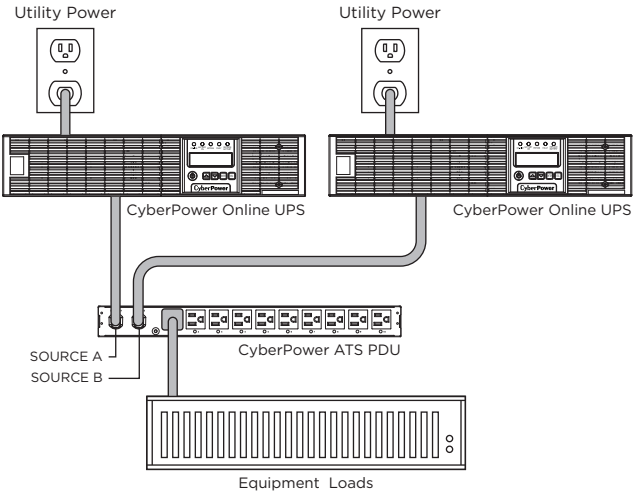
Minimum Acceptable Configuration

Utility Power

CyberPower Sinewave UPS

SOURCE A
(Preferred Source)
SOURCE B   CyberPower ATS PDU

Equipment Loads
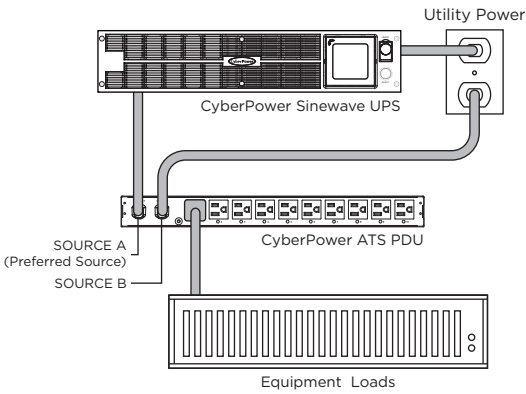
Installation Guide

⚠ **CAUTION!!** Please only use the provided screws for the entire installation process.

Front Mounting

For 1U 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 Tray till 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

Front Mounting

Step 4. Cable Ties (Optional)

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

For 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 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

Front Mounting

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.
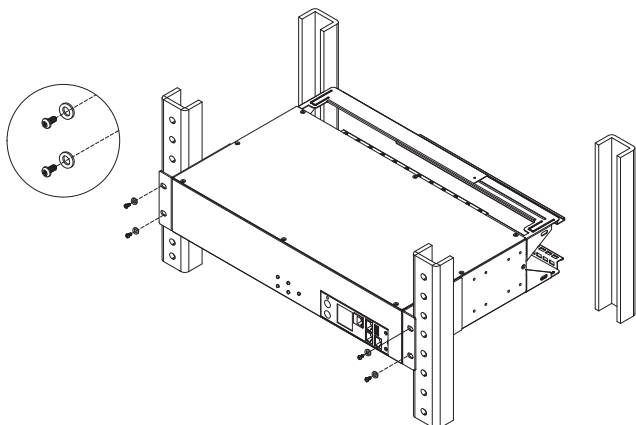
Step 4. Cable Ties (Optional)

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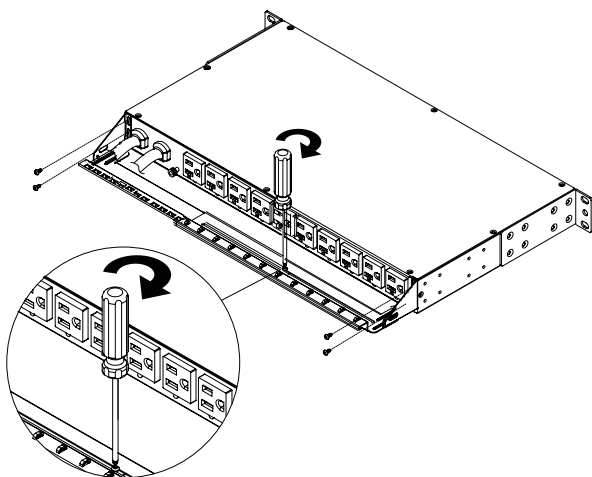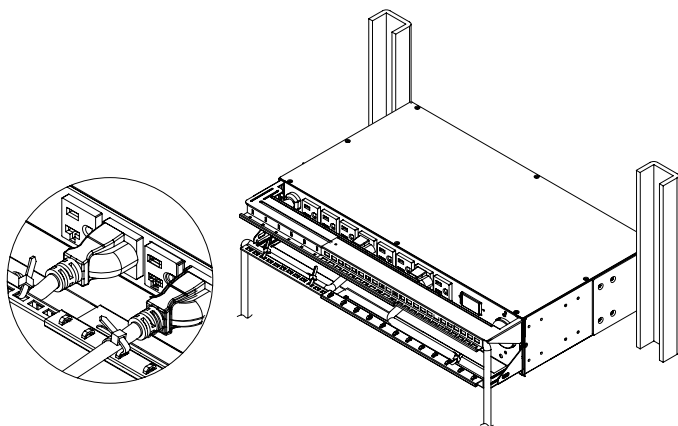

Rear Mounting

For 1U 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

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.
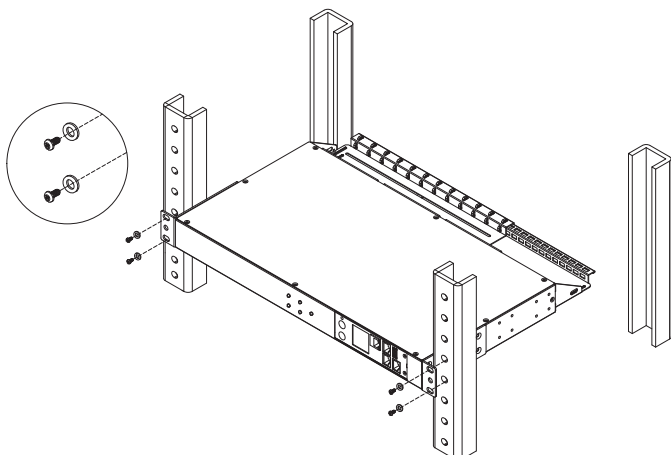

Step 2. Cord Retention Tray Installation (optional)

Adjust the length of the Cord Retention Tray till 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.
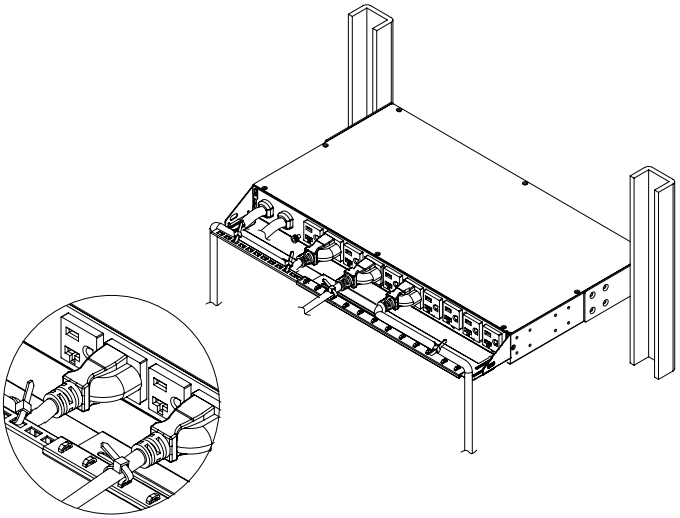
Installation Guide

Rear Mounting

Step 4. Cable Ties (Optional)
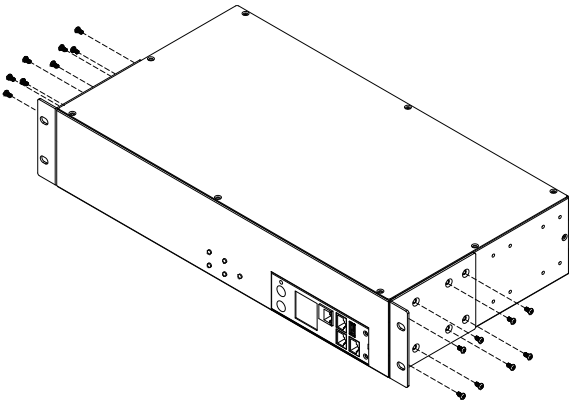> Use the provided Cable Ties to fasten each cord to the Cord
> Retention Tray.

For 2U Models
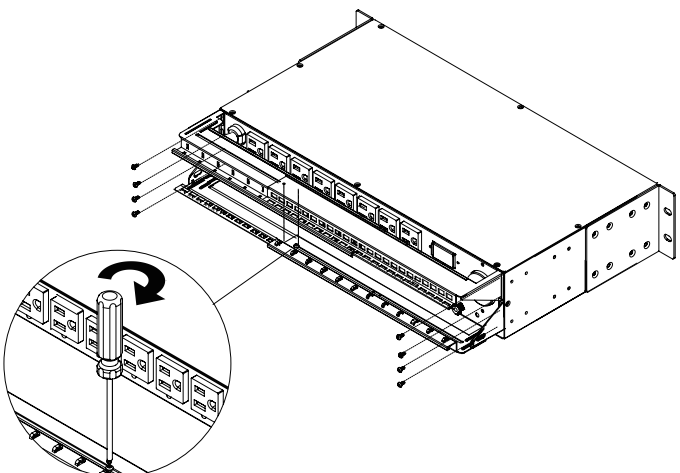
Step 1. Mounting Bracket Installation
> Use the provided Mounting Bracket Screws (16) to attach the
> Mounting Brackets (2) to the ATS PDU.

> 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.
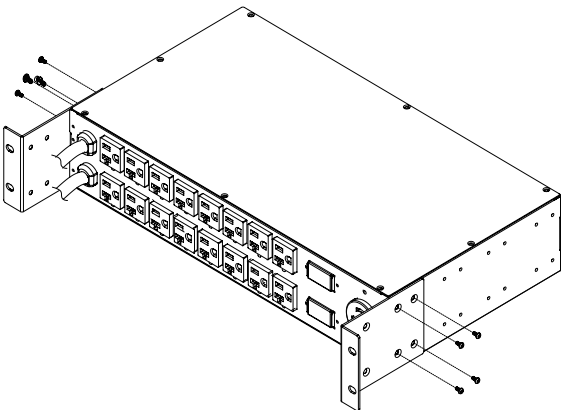
Installation Guide

Rear Mounting

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.
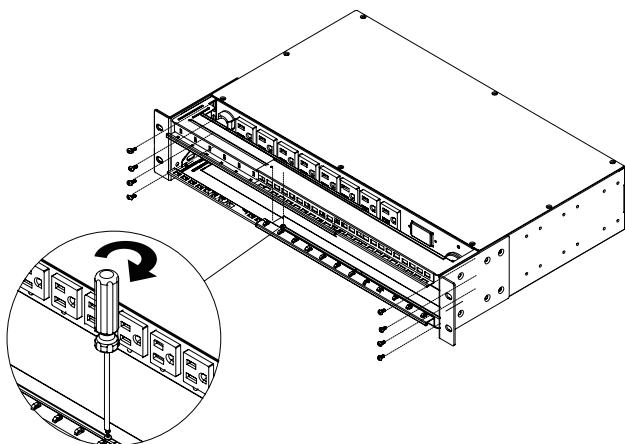
Step 3. ATS PDU Mounting

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.
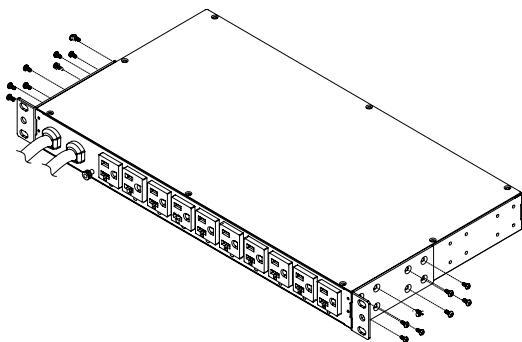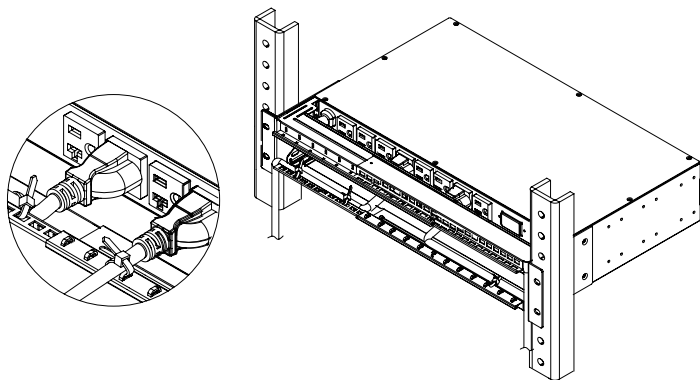
Installation Guide

Replacing the LCD Panel

Step 1. Use a slotted screwdriver to gently lift out the LCD panel.
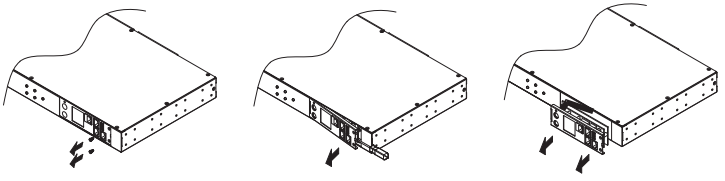
Step 2. Disconnect the cable connector.
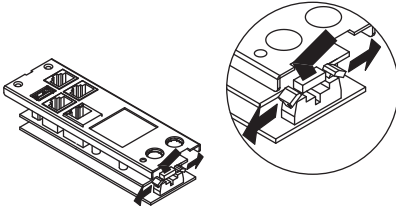
Electrical Installation

Step 1. Receptacle evaluation

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

⚠ **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 2. Plug the ATS PDU into the utility receptacle and/or UPS.

For configuration details, refer to ATS PDU Configuration on page 8.

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 of 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.

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: `arp -s 192.168.20.240     00-0C-15-00-00-01`
        IP Address   MAC Address

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.

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
Environment Status (Displays when the ENVIROSENSOR is connected)
Alert Number

B. Main Menu Map

Alert	Current		
	Log		
Meter	Source		
	Device		
	Outlet		
Control	Outlet	All	Immediate On
			Delay On
		Bank 1/2	Immediate Off
			Delay Off
		Outlet 1-N	Reboot
			Delay Reboot
Sensor			
Setting	Source	Preferred Source	A/B/None
		Voltage	Nominal Voltage
			Voltage Range
			Sensitivity
		Frequency Deviation	1/2/3 Hz
	LCD	Color	
		Brightness	
		Direction	
		Scren off	
	Reset	Account (User Name and Password)	
		Except TCP	
		To Defautl	
	Reboot		
About	Model Name		
	Serial Number		
	Network		
	Daisy Chain		
	Hardware Version		
	Filmware Version		

Operation

LED Indicators

Indicator	Status	Description
Source	Green	Power condition of the source is normal.
	Red	Power condition of the source is abnormal.
Status	Green	The ATS PDU status is normal.
	Orange	Warning.
	Red	Critical.
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	On	The outlet is on and providing power.
	Off	The outlet is off.

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.
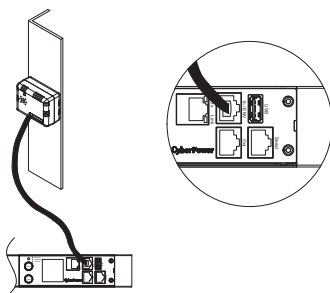
Device Reset

● To locally reset all the settings to default, use Reset function in the LCD screen.
● 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 Network 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.

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

  * cpsmpdumafw_XXX.bin

  * cpsmpdumadata_XXX.bin

- **Metered Series:**
  You can use a USB Flash Drive to upgrade the ATS PDU firmware. Please follow the instructions below for using a USB Flash Drive. There is one file to update in order to upgrade the firmware version:

  * cpsmpdumcfw_XXX.bin

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 cpsmpdumafw_XXX.bin, type

   - ftp > bin
   - ftp > put cpsmpdumafw_XXX.bin

4. Upgrade complete, type

   - ftp > quit

5. The system will reboot after you type "quit". This reboot will take approx. 30 seconds.

6. Login to the ATS PDU via FTP again, 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>

7. Upload cpsmpdumadata_XXX.bin, type

   - ftp > bin
   - ftp > put cpsmpdumadata_XXX.bin

Firmware Upgrade

8. Upgrade complete, type
   - ftp > quit
9. The system will reboot after you type "quit".

Option 2: Single or Multiple Device Upgrade (recommended)

Use the following steps to upgrade the firmware.

1. Download the **Upgrade and Configuration Utility** from
   www.cyberpower.com.
2. Open **Upgrade and Configuration Utility** from Start > All Programs >
   CyberPower Upgrade and Configuration Utility.
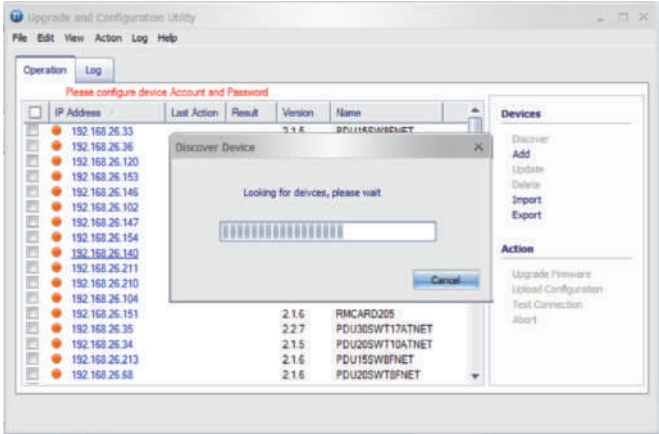3. Wait for search to finish (Shown in Figure 1).

Figure 1

4. Check the checkbox to select devices listed in the **Operation View** (Shown
   in Figure 2).
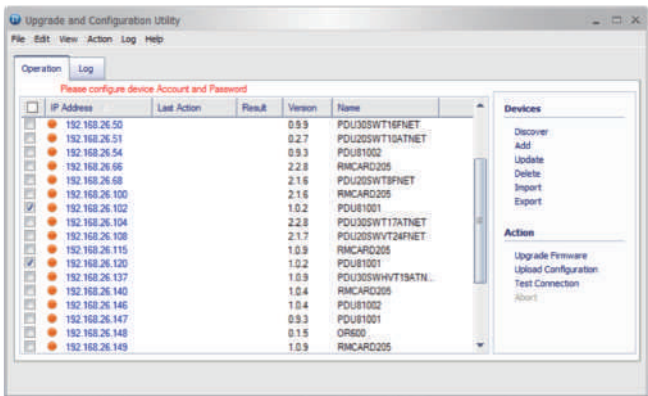
Figure 2

5. Make sure **Account** and **Password** are valid on selected devices (Shown in
   Figure 3).
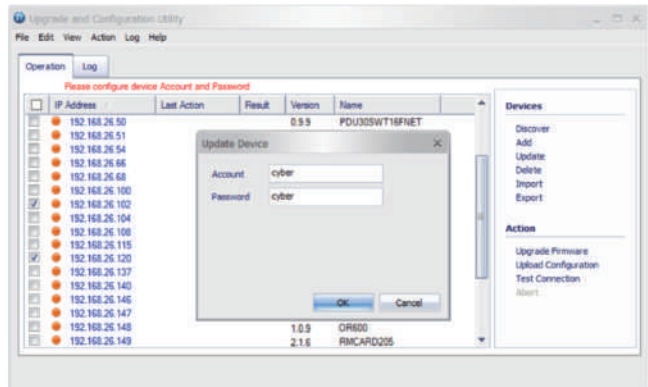
Figure 3

Firmware Upgrade

6. Select **Upgrade Firmware**.
7. Click **Browse** to locate and select the firmware and data file to be updated (Shown in Figure 4).

Figure 4

8. Click **OK** in the **Upgrade Firmware** confirmation window (Shown in Figure 5).

Figure 5

9. The upgrade progress bar will show in **Last Action** column (Shown in Figure 6).

Figure 6

10. The result of firmware upgrade will show in **Result** column (Shown in Figure 7).

Firmware Upgrade

Figure 7

Note: If you don't want to wait for the firmware upgrade, you can stop action by choosing **Abort** in the **Action** menu. However, it's not recommended because **Abort** action may cause the device to malfunction.
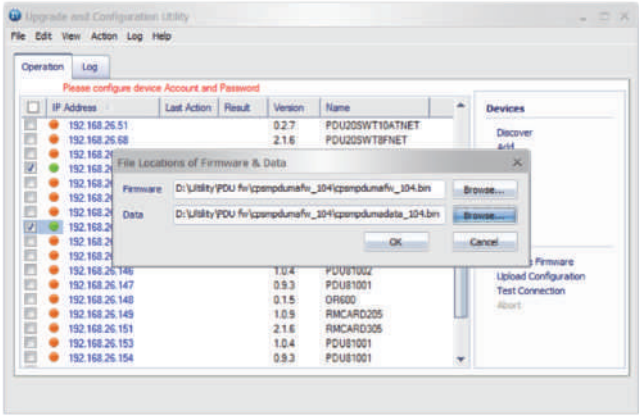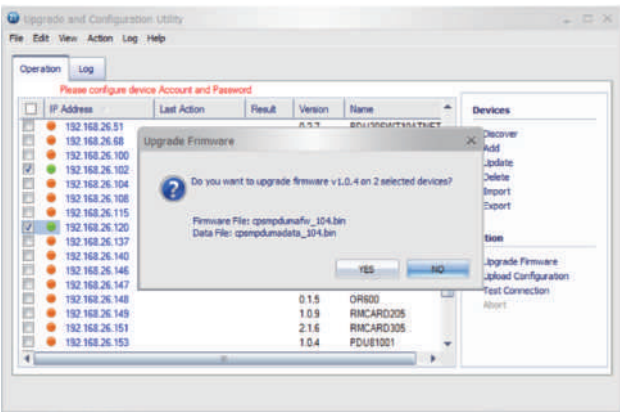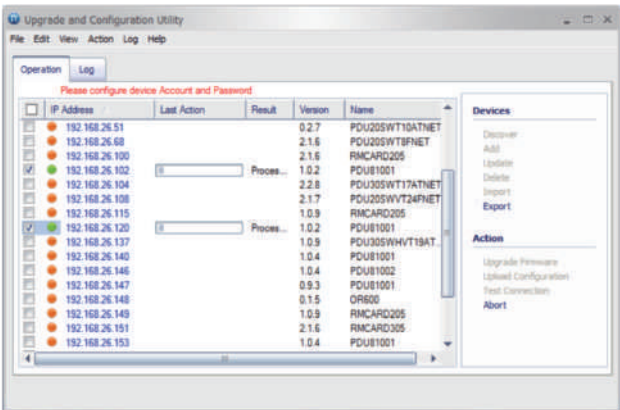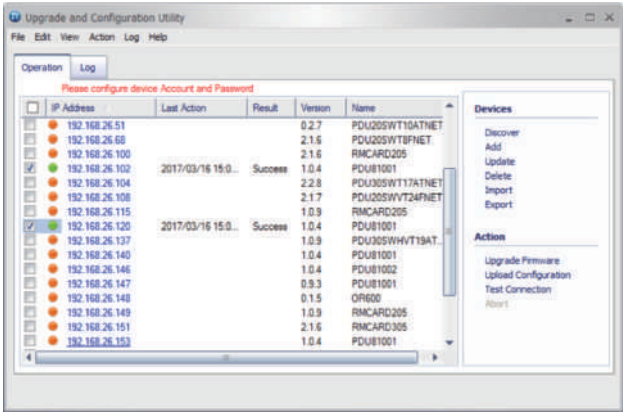
Option 3: Use a USB Flash Drive

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:

   * cpsmpdumafw_XXX.bin

   * cpsmpdumadata_XXX.bin

   • **Metered Series:**
   Please note that the file below should be available in order to complete the firmware upgrade process:

   * cpsmpdumcfw_XXX.bin

3. Plug the USB drive into the ATS PDU USB port and press **Enter** button on the ATS PDU LCD screen to enter **Main Menu**. The USB option will be displayed.

```
    Main Menu

     Alert
     Meter
    Control
    Sensor
    Setting
    About
     USB
```
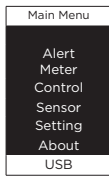
4. Select **USB** and press **Enter** button to enter **Firmware Upgrade** menu.

5. Select **Main** and **Yes** to start the upgrade process.

```
     USB                Main                USB                 USB

  Firmware           Firmware            Firmware            Firmware
  Upgrade            Upgrade             Upgrade             Upgrade
    Main             Confirm?           Processing           Success
   Return              Yes
                        No
```

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. Press **Enter** on the LCD screen to enter **Main** menu. Select **About** and press **Enter** to see the ATS PDU information. Select **Firmware Version** to check the ATS PDU Firmware Version.

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>:

Firmware Upgrade

Note: (1)   The SSH setting on the ATS PDU must be Enabled.

    (2) <filename> is the filename of the firmware file. There are two firmware files to upload: cpsmpdumafw_XXX.bin and cpsmpdumadata_XXX.bin. In order to upgrade the firmware version both files need to be uploaded. Only one firmware file can be uploaded at a time, it is recommended to upload the firmware file cpsmpdumafw_XXX.bin first followed by the data file cpsmpdumadata_XXX.bin.

    (3) <user> is the username of the SSH account on the ATS PDU.

    (4) 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. 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.

7. Repeat steps 4 through step 6 to upload the data file cpsmpdumadata_XXX.bin to complete the firmware update process.

8. If the firmware file transfer is unsuccessful you will see an error message. Attempt to retype the command and execute it again.

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: (1)   The SSH setting on the ATS PDU must be Enabled.

    (2) <filename> is the filename of the firmware file. There are two firmware files to upload: cpsmpdumafw_XXX.bin and cpsmpdumadata_XXX.bin. In order to upgrade the firmware version both files need to be uploaded. Only one firmware file can be uploaded at a time, it is recommended to upload the firmware file cpsmpdumafw_XXX.bin first followed by the data file cpsmpdumadata_XXX.bin.

    (3) <user> is the username of the SSH account on the ATS PDU.

    (4) Ensure to add ":" after the IP address.

    For example:

    scp cpsmpdumafw_XXX.bin cyber@192.168.1.100:

    Note: cpsmpdumafw_XXX.bin 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. Repeat steps 3 through step 5 to upload the data file cpsmpdumadata_XXX.bin to complete the firmware update process.

7. 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 insure its connected correctly. If the problem remains, contact technical support.
Amperage displayed on LCD screen exceeds the units 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 numerique de la class A respecte toutes les exigencies du Reglement sur le materiel 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).

CyberPower 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.

Customer Service & Warranty

Limited Warranty

Read the following terms and conditions carefully before using the CyberPower ATS PDU series. By using the Product, you consent to be bound by and become a party to the terms and conditions of this Limited Warranty. If you do not agree to the terms and conditions of this Warranty, you should return the Product for a full refund prior to using it.

Who Is Providing This Warranty?

Cyber Power Systems, Inc. provides this Limited Warranty.

What Does This Warranty Cover?

This warranty covers defects in materials and workmanship in the Product under normal use and conditions.

What Is The Period of Coverage?

For USA and Canada, CyberPower provides a 3-Year limited warranty to the original purchaser who owns the Product. For other regions, please contact your local CyberPower sales team for more information.

Who Is Covered?

This warranty only covers the original purchaser. Coverage ends if you sell or otherwise transfer the Product.

How Do You Get Service?

1. You can use the contact information mentioned above for instructions.
2. When you contact CyberPower, identify the Product, the Purchase Date, and the item(s) of Connected Equipment.
3. You must provide a purchase receipt (or other proof of the original purchase) and provide a description of the defect.

What Will We Do To Correct Problems?

CyberPower will inspect and examine the Product.

If the Product is defective in material or workmanship, CyberPower will repair or replace it at CyberPower's expense, or, if CyberPower is unable to or decides not to repair or replace the Product (if defective) within a reasonable time, CyberPower will refund to you the full purchase price you paid for the Product (purchase receipt showing price paid is required).

Who Pays for Shipping?

We pay when we send items to you; you pay when you send items to us.

What Are Some Things This Warranty Does Not Cover?

1. This Warranty does not cover any software that is damaged or needs to be replaced due to the failure of the Product or any data that is lost as a result of the failure or the restoration of data or records, or the reinstallation of software.
2. This Warranty does not cover or apply to: misuse, modification, operation or storage outside environmental limits of the Product or the equipment connected to it, nor for damage while in transit or in storage, nor if there has been improper operation or maintenance, or use with items not designed or intended for use with the Product, such as laser printers, appliances, aquariums, medical or life support devices, etc.

What Are The Limitations?

1. This Warranty does not apply unless the Product and the equipment that was connected to it were connected to properly wired and grounded outlets (including compliance with electrical and safety codes of the most current electrical code), without the use of any adapters or other connectors.
2. The Product must have been plugged directly into the power source and the equipment connected to the Product must be directly connected to the Product and not "daisy-chained" together in serial fashion with any extension cords, another Product or device similar to the Product, surge suppressor, or power tap. Any such installation voids the Limited Warranty.
3. The Product and equipment connected to it must have been used properly in a suitable and proper environment and in conformance with any license, instruction manual, or warnings provided with the Product and the equipment connected to it.
4. The Product must have been used at all times within the limitations on the Product's VA capacity.
5. The sole and exclusive remedies of the Initial Customer are those provided by this Warranty

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

Overview
The CyberPower Power Device Network Utility 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 software from www.cyberpower.com.

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

Figure 1

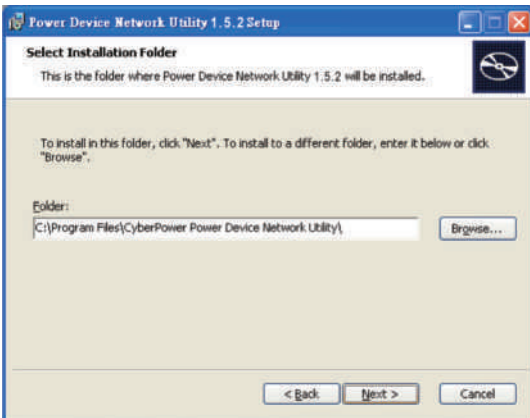Step 3. Choose an installation directory. Select **Next** (Shown in Figure 2).

Figure 2

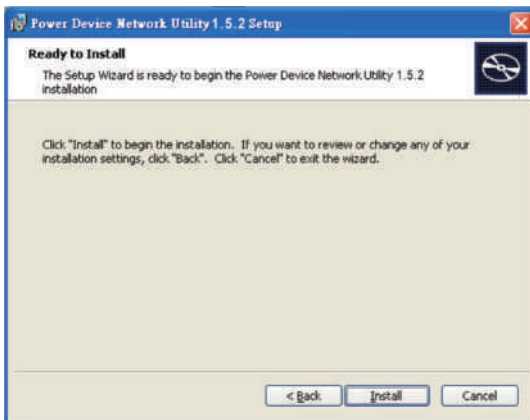Step 4. Select **Install** to confirm the settings and install (Shown in Figure 3).

Figure 3

Appendix B-Power Device Network Utility

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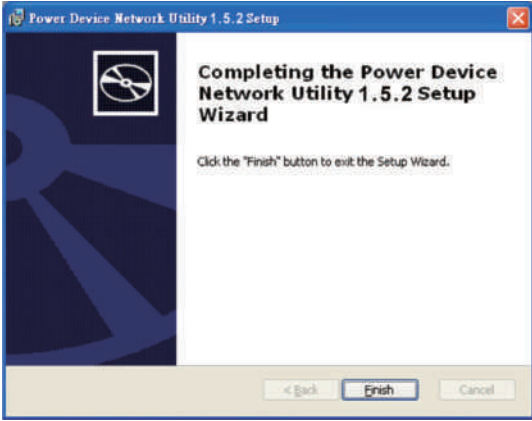

Figure 4

Launch Program

To launch the Power Device Network Utility and get started, select Programs from the Start menu in Windows and locate the new folder and icons for Power Device Network Utility. Select Power Device Network Utility from the program folder (Shown in Figure 5).
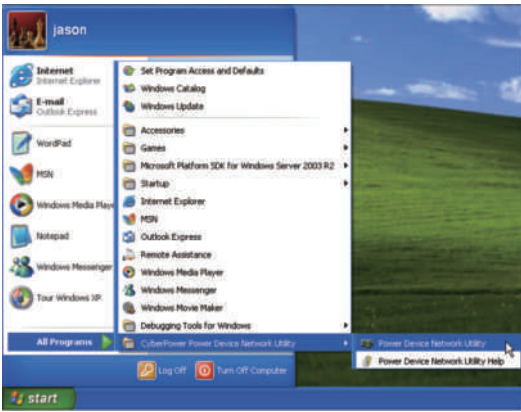

Figure 5. Power Device Network Utility

Getting Started

The Power Device Network Utility 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 from the Equipment List (Shown in Figure 6).
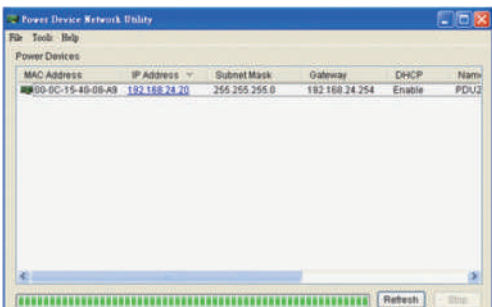

Figure 6. Equipment List

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 is installed correctly. Pressing **Stop** will cancel the scan/refresh process.

Note: If your computer has a software firewall installed, you may see a Windows Security Alert message (Shown in Figure 7).

In Windows XP SP2, the default firewall alert message is shown as Figure 7. You need to allow the Power Device Network Utility access through the firewall. Click **Unblock** to allow access.

Appendix B-Power Device Network Utility

Figure 7. Windows Security Alert

Step 2. Assign a valid IP Address to the ATS PDU.

With the appropriate device selected from the Equipment List, open the Network Settings menu (shown in Figure 8) [Tools=>Device Setup]. In the Device Network Setting Menu, enter a valid IP address, subnet mask, and gateway address to setup the ATS PDU device.
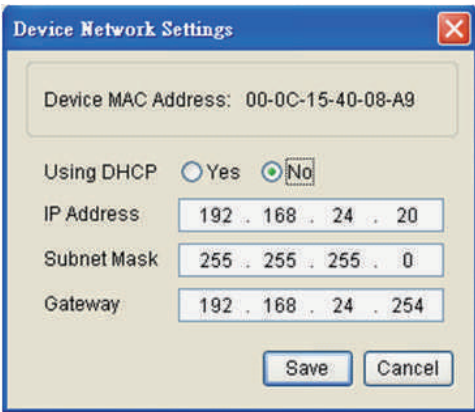

Figure 8. Network Setting Menu (Device Setup)

Step 3. Authentication

Enter the user name and password of the ATS PDU at the Authentication menu (shown in Figure 9).

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

Figure 9. Authentication screen

Advanced Settings

Timeout Settings

The Timeout Setting (Shown in Figure 10). [Edit=>Timeout Settings] is used to specify the wait time when scanning for network ATS PDUs. When there are many devices on the local network, it may take extended periods of time to locate all the devices. The timeout function is used to limit the search time.

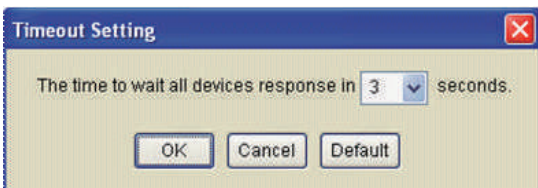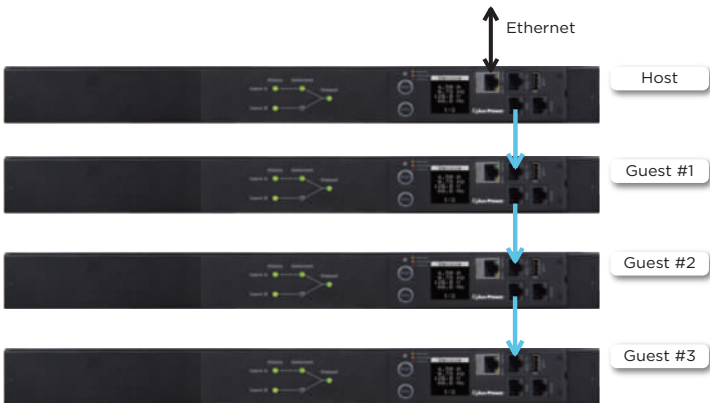The default setting is 3 seconds. Valid values are 3 to 60 seconds.

Figure 10. Timeout Setting

Appendix C-ATS PDU Daisy-Chain Function

The daisy-chain function allows up to four ATS PDUs to be connected together to be monitored and controlled from one IP address.


When ATS PDUs are connected, two roles are defined: Host and Guest. Up to three Guest ATS PDUs can be connected to one Host ATS PDU. The Guest ATS PDUs will be recognized by serial number and their order within the daisy-chain.

Note: To perform the daisy-chain function, the firmware version of the connected ATS PDUs needs to be the same (v1.2.2 or above).

How to connect the PDUs together?

Use one Ethernet cable and connect one end of it to the daisy-chain (Out) port on the Host ATS PDU and the other end to the daisy-chain (In/ENV) port on the Guest 1 ATS PDU to connect the ATS PDUs (as shown below).
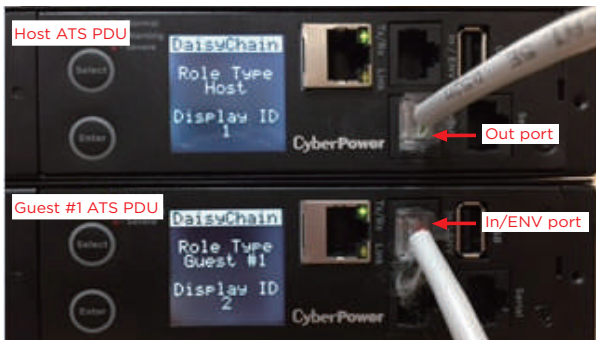
What remote management protocols are supported in ATS PDU daisy-chains?

Currently users can monitor and control daisy-chained ATS PDUs through Web interface (HTTP/HTTPS) or SNMP protocols.

What functions on the Web pages does daisy-chain support?

Please find in below table:

Summary	
	Source Status
	Device Status
	Outlet Status
	Source Manager
PDU	Device Manager
	Outlet Manager
	Outlet Control
	Outlet Schedule
	Event Counts
	Status Records
Log	Energy Records
	Graphing
System	Identification

Appendix C-PDU Daisy-Chain Function

How to switch between Host and Guest ATS PDUs on the Web interface?

Functionality supported by daisy-chained ATS PDUs will have the Host/ Guest # drop down menu displayed on the Web interface (as shown below).


Can I upgrade the firmware version of the Guest ATS PDUs through the Host PDU?

Yes, you can upgrade the firmware using the Upgrade and Configuration Utility, FTP (network connection required), or USB port. Once the Host completes the ATS PDU firmware upgrade, it will trigger its Guest ATS PDUs to upgrade the firmware automatically. It takes about 5 minutes for the Guest ATS PDUs to upgrade, regardless of the number of ATS PDUs in the series.

What will happen if an Ethernet cable is disconnected in the ATS PDUs daisy-chain?

For example, if four ATS PDUs are connected and the cable connecting Guest 1 and 2 is disconnected, then Guest 2 and 3 will no longer be detected by the Host ATS PDU. An event showing that Guest 2 and 3 are removed will be recorded in the Host ATS PDU. Meanwhile, Guest 2 and 3 will create a new daisy-chain where Guest 2 becomes a Host and Guest 3 becomes Guest 1 to the new Host.
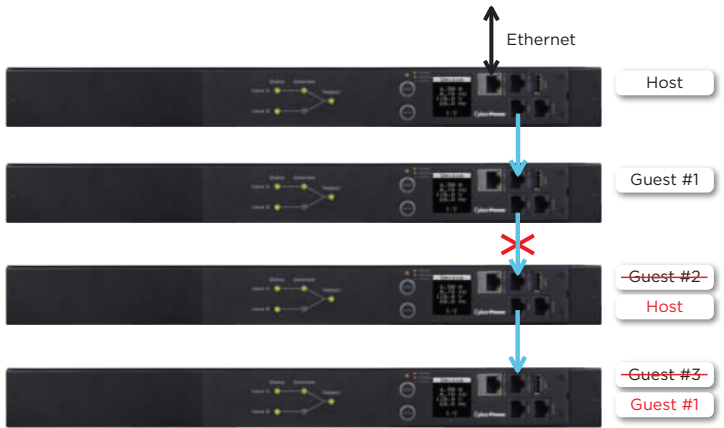
In the above example, if the disconnected Ethernet cable is re-connected, will the role of the ATS PDUs stay the same?

Yes, when the disconnected cable between Guest 1 and 2 is re-connected, Guest 2 and 3 will revert to their previous roles.

What happens if one ATS PDU in the daisy-chain is powered off?

For example, if four ATS PDUs are connected and Guest 1 is powered off, an event showing that Guest 1, 2 and 3 are removed will be recorded in the Host ATS PDU. Guest 2 and 3 will not create another daisy-chain.

Does the Host ATS PDU record the logs of the Guest ATS PDUs and itself?

Yes, the Host ATS PDU records the logs from all Guest ATS PDUs daisy-chained to it.

Will the Logs of the Guest ATS PDUs recorded in the Host ATS PDU be cleared if the Guest ATS PDUs are removed from the Host ATS PDU?

No, the Logs of the Guest ATS PDUs will remain even after the Guest ATS PDUs are removed.

Appendix C-PDU Daisy-Chain Function

Does the Host ATS PDU record the Status Records of the Guest ATS PDUs and itself?

Yes, the Host ATS PDU records the Status Records for all the ATS PDUs in the daisy-chain.

Will the Status Records of the Guest ATS PDUs logged in the Host ATS PDU be cleared if the Guest ATS PDUs are disconnected from the Host ATS PDU?

Yes, once the Guest ATS PDUs are removed, the Status Records logged in the Host ATS PDU will be cleared. As long as the Host ATS PDU does not connect to other ATS PDUs, the Status Records of the disconnected ATS PDU can be displayed when it is re-connected to the Host ATS PDU. If the Host ATS PDU connects to different ATS PDUs, the Status Records of the removed ATS PDU will be entirely cleared.

Are the Guest ATS PDUs able to connect to the network when they are daisy-chained?

Yes, even when the ATS PDUs are daisy-chained, the Guest ATS PDUs are able to connect to the network directly. Note that a Guest ATS PDU will require having its own Ethernet cable connected to the network.

What will happen if a 5th ATS PDU is added to a daisy-chain?

The maximum number of ATS PDUs that can be connected in one daisy-chain is 4. The daisy-chain functionality will not work until the fifth ATS PDU is removed.

What is the maximum recommended length of the Ethernet cable to daisy-chain the ATS PDUs?

50 ft (15 m)

Troubleshooting

Problem	Possible Cause	Solution
The ATS PDUs are connected but the daisy-chain function is not working.	- The firmware version does not support daisy-chain. - The ATS PDUs have dierent firmware versions.	Check the firmware version of each ATS PDU and upgrade it to v1.2.2 or above.
I cannot set the EnergyWise configuration on a Guest ATS PDU.	Only the Host ATS PDU supports EnergyWise.	N/A
I cannot set the WoL for Guest ATS PDUs.	Only the Host ATS PDU supports WoL.	N/A

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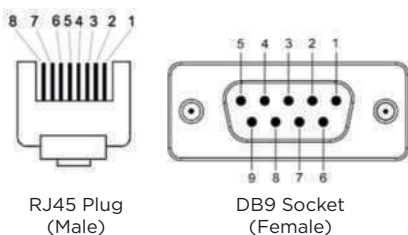
Pin1	N/A
Pin2	**GND**
Pin3	N/A
Pin4	N/A
Pin5	N/A
Pin6	**RX**
Pin7	N/A
Pin8	**TX**

CyberPower

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