ECO-PLUS

Power distribution unit for Data center

High reliable with New technology
for Smart Data center

Plus+1, is Basic PDU is a reliable solution distribution unit provides a wide array of power distribution solutions for rack-mounted electrical equipments. Power Distribution Units are an essential element in managing power capacity and functionality for critical network, server and data center equipment needs with tool-less mounting, a low-profile and numerous plug configurations. The Basic PDU is also equipped with an ambient temperature rating of 60°C , making it ideal for energy efficient applications.

Key Features:
Mini circuit breaker with cover, surge protector or on-off switch availability
High ambient temperature ratings up to 60°C
Locking outlet options available*
Output oultet available for 10 or 16 or 20 or 24 outlet
Input power plug IEC 309 (male) options available*
UL/CE Listed

Material
Aluminum alloy shell + PC(polycarbonate) scoket.
(Basically the industry is more ABS + PC, PC material cost is higher than the cost of materials ABS and ABS + PC,
which features also are different.).
Color available, Red, Yellow, Blue or Black.

Surge protection (optional)
Difference mode   :±2kV
Common mode   :±2kV
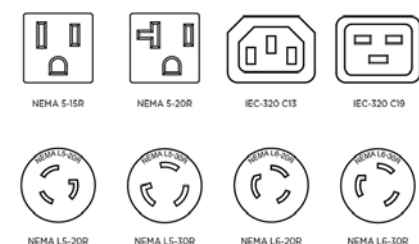flux   : 3KA
The max discharge current: 5KA

Input plug type

Mini Circuit breaker

Plug style	DIN49441	Plug style	NEMA 5–15P	Plug style	IEC60329	Plug style	IEC320 C14	Plug style	BS 1363
Parameter	16A250VAC	Parameter	15A 125VAC	Parameter	16/32A 250VAC	Parameter	10(16A) 250VAC	Parameter	13A 250VAC

Outlet type

NEMA 5-15R   NEMA 5-20R   IEC-320 C13   IEC-320 C19

NEMA L5-20R   NEMA L5-30R   NEMA L6-20R   NEMA L6-30R

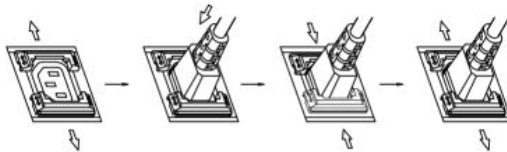## Multi color power cord (optional)

ECO-Plus+1
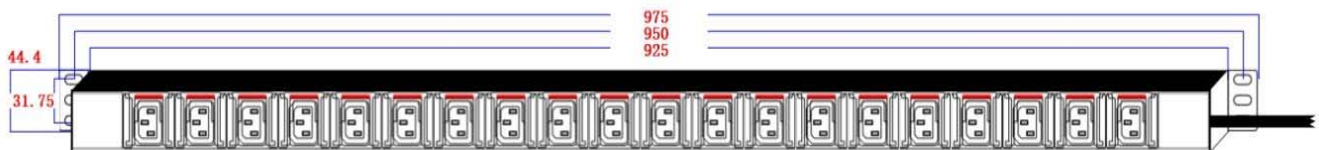## Reliable Power Distribution Unit

A new technology for Security outlet locking

KEPBER present security Outlet locking, which prevent accidental disconnections. This patent pending feature securely fastens straight equipment power cords to the PDU, protecting your power from sudden disruptions.

Use of installation space

Fits in the Zero-U space at the side of cabinets and does not block access to equipment mounting rails or exhaust airflow
Ensures notification of impending issues proactively through threshold settings and notifications.
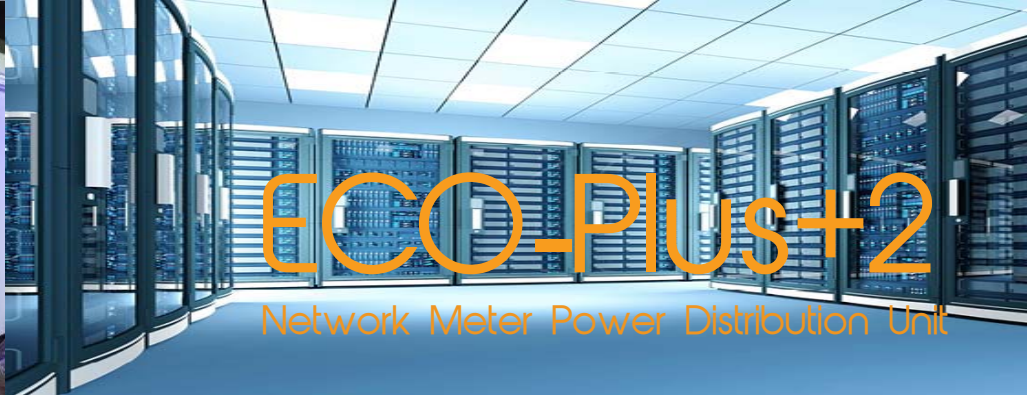
Technical specification

Input plug type	IEC 309 or IEC 320-C20 or IEC 320-C14 or NEMA 5-15P
Input voltage	220-240 VAC for Single-Phase with ground (2P+E) *
Input frequency	50 Hz
Input current rating	16 A or 32 A
Output voltage	220-240 VAC for Single-Phase with ground (2P+E)
Output current rating /outlet	10 A for C13 or 16 A for C19
Output outlet type	IEC-60320F-C13 or IEC-60320-C19
Number of outlets	10 or 16 or 20 or 24
Power cord length	2.0 m, 3.0 m(option)
Temperature (Operating)	−5 to 60°C
Humidity (Operating)	5−95% RH, non-condensing
EMC verification	EN 55022 Class A, EN 55024, EN 61000-3-2, EN 61000-3-3
Safety verification	CE , EN/IEC 60950-1
Environmental verification	ROHS
Flame classifications	UL94-v0

* for Input plug type is available for IEC309 (Single or Three Phase)

ECO-Plus+2
Network Meter Power Distribution Unit

Plus+2, is Power distribution unit that provides premium power protection for your professional workstations and connected devices. With the innovative IP-based technology, Power Distribution Unit (PDU) distributes power to devices in the rack and offers real-time metering and network monitoring of power loads for overload avoidance, capacity & load balancing, and energy use optimization. It can be monitored through HTTP, Telnet, SNMP, SMTP or SSH interfaces.

Key Features:
Built-in web server, allow different user (administrator, manager, user) to monitor the real time of the current consumption of the power strip.
The device supports for Current, Voltage, Power, Power Factor, Electric Energy monitoring.
The device supports upper and lower limits alarm threshold value settings for Current, Voltage
Real time to control each outlet of PDU.
Build-in true RMS current meter.
Reboot fucntion.
Setup easily, meter can read the IP address directly.
Provide audible alarm when the power consumption over the setting of warning and overload.
Send the email and traps when the power consumption exceeds the trigger value of warning or overload to the PDU.
Provide utility, it can monitor a large amount of PDU at the same time.
Support the SNMP and provide MIB for the PDU to be monitored by NMS.
History recording of voltage, current, temperature, humidity and over-limit alarm information.
Support for temperature/humidity sensor availability (optional).
The device supports cascade via RS485 communication protocol.(Up to 32pcs)
Provide power protection by the Mini-circuit breaker, surge protector or on-off switch availability (optional).
Slim size is suitable for the variety of rack to use.
Indicate outlet status with LED (optional).
LCD monitor can display Voltage, Current, Frequency, Power factor and Electric value such as data information
High ambient temperature ratings up to 60°C
Locking outlet options available*
Output oultet available for 10 or 16 or 20 or 24 outlet
Input power plug IEC 309 (male) options available*
UL/CE Listed.

Alarm function
Custom alarm : When the load current or voltage exceeds its theshold (uper limited or lower limited), and Temperature/Humidity exceeds its theshold (uper limited or lower limited).
Multiple alarms mothod : Buzzer beeps, Front color to red when view work state, Email automatically sent to system administator or SNMP sent trap alarm information.

Device cascade connection
Support to 32 pcs used and connecting by host.

Network supoort
Support : SNMP (V1/V2c/V3), SMTP (V1/V2c/V3), Network program (telnet): Serial interface consoles.
Support : DHCP, NTP service, Radius service, RS485 communication protocol.

Unit port
1 Port support for 10/100 MB (ethernet port).
1 Port support for serial console (telnet).
1 Port support for cascade device.
1 Port support for Temperature/Humidity sensor (optional).

Material
Aluminum alloy shell + PC(polycarbonate) scoket.
(Basically the industry is more ABS + PC, PC material cost is higher than the cost of materials ABS and ABS + PC, which features also are different.).
Color available, Red, Yellow, Blue or Black.

Surge protection (optional)
Difference mode   :±2kV
Common mode   :±2kV
flux   : 3KA
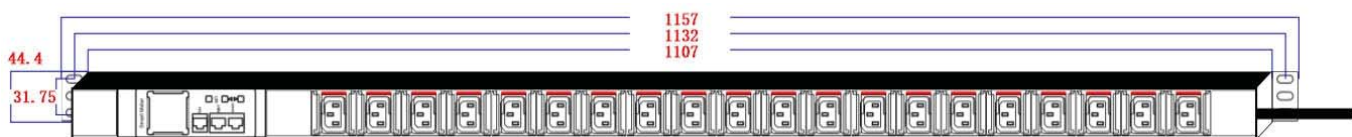The max discharge current: 5KA

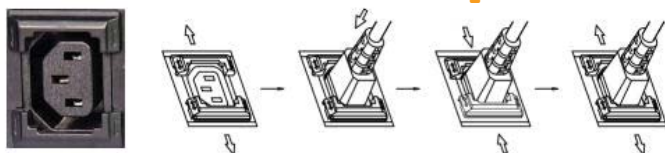**Mini Circuit breaker**

www.kepber.com

Outlet locking

Monitoring function : LCD view the total Voltage, total Power, total Eletrical energy, Power factor, Temperature/Humidity state

Input plug type

Plug style DIN49441	Plug style NEMA 5–15P	Plug style IEC60329	Plug style IEC320 C14	Plug style BS 1363
Parameter 16A250VAC	Parameter 15A 125VAC	Parameter 16/32A 250VAC	Parameter 10(16A) 250VAC	Parameter 13A 250VAC

Accuracy of sensor

Monitor the input voltage	**Monitor Environment Temperature**
Resolution:1V	Resolution: 1℃
Accuracy: ±1%+1 digit	Accuracy: ±1%+1 digit
Meter range: 90~350V	Meter range: -30~100℃
Monitor the total current	**Monitor Environment Humidity**
Resolution: 0.1A	Resolution: 1%
Accuracy: ±1%+1 digit	Accuracy: ±1%+1 digit
Meter range: 0.1~40A	Meter range: 01~99%

Technical specification

Input plug type	IEC 309 or IEC 320-C20 or IEC 320-C14 or NEMA 5-15P
Input voltage	220-240 VAC for Single-Phase with ground (2P+E) *
Input frequency	50 Hz
Input current rating	16 A or 32 A
Output voltage	220-240 VAC for Single-Phase with ground (2P+E)
Output current rating /outlet	10 A for C13 or 16 A for C19
Output outlet type	IEC-60320F-C13 or IEC-60320-C19
Number of outlets	10 or 16 or 20 or 24
Power cord length	2.0 m, 3.0 m(option)
Temperature (Operating)	−5 to 60℃
Humidity (Operating)	5–95% RH, non-condensing
EMC verification	EN 55022 Class A, EN 55024, EN 61000-3-2, EN 61000-3-3
Safety verification	CE , EN/IEC 60950-1
Environmental verification	ROHS
Flame classifications	UL94-v0

* for Input plug type is available for IEC309 (Single or Three Phase)

ECO-Plus+3
Intelligent Power Distribution Unit

Plus+3, is Intelligent PDU is a new generation of intelligent power distribution solutions for rack-mounted electrical equipments. Smart PDU units to provide fully function for network managment interface and intergrate a variety of partical function In order to meet the perfomance requirements of the user to remote monitoring PDU.Support 220 or 380 V input power supply, order electric, monitor and control each output interface.
It can be detect and shunt voltage, current, power, power factor and etc. It can show and monitor acritical environment (Temperature, Humidity Smoke detect, Rack door open/close, etc) It can set the threshold of temperature & humidity.
Smart PDU has a LCD monitor can display Voltage, Current, Frequency, Power factor and Electric value such as data information.

Key Features:
1. Built-in web server, allow different user (administrator, manager, user) to monitor the real time of the current consumption of the power strip.
2. Real time to control each outlet of PDU.
3. Build-in true RMS current meter.
4. Setup easily, meter can read the IP address directly.
5. Provide audible alarm when the power consumption over the setting of warning and overload.
6. Send the email and traps when the power consumption exceeds the trigger value of warning or overload to the PDU.
7. Provide utility, it can monitor a large amount of PDU at the same time.
8. Support the SNMP and provide MIB for the PDU to be monitored by NMS.
9. Provide power protection by surge protection ,mini circuit breaker with cover (optional)
10. Remotely manage outlets so users can turn outlets off that are not in use.
11. Define alarm thresholds in order to avoid overloaded circuits.
12. Rename the output port name, ON-delay, OFF-delay, the default settings.
13. Slim size is suitable for the variety of rack to use.
14. Set the threshold of outlets & total load current.
15. Support the power on sequence.
16. Output oultet available for 10,16,20,24 outlet and plug locking.
17. Input power plug IEC 309 (male) options available
18. Indicate each outlet status with LED.
19. UL/CE Listed.

Mini Circuit breaker

Alarm function
Custom alarm : When the total load current exceeds its theshold, load current of each output unit exceeds its theshold and Temperature/Humidity exceeds its theshold.
System default alarm : When the total load current exceeds the rated value, load current of each output unit exceeds the rated value,Temperature/Humidity exceeds the rated value, Water leak occurs, Smoke occurs and Access open.
Multiple alarms mothod : Buzzer beeps, Front color to red when view work state, Email automatically sent to system administator or SNMP sent trap alarm information.

Device cascade connection
Support to 4 pcs and total 5 pcs which included host.

Network supoort
Support : SNMP (V1/V2c/V3), SMTP (V1/V2c/V3), Network program (telnet): Serial interface consoles.
Support : DHCP, USB-Wifi, NTP service, Radius service.

Graphic statistics show
Total input voltage, Total input current and Output current interface.

Unit port
1 Port suport for USB-Wifi.
1 Port support for 10/100 MB (ethernet port).
1 Port support for serial console (telnet).
2 Port support for Input/Outport for cascade device.
1 Port support for Temperature/Humidity sensor.
1 Port support for 2 way door access sensor.
2 Port support for switch sensor (Water leak, Smoke or etc).
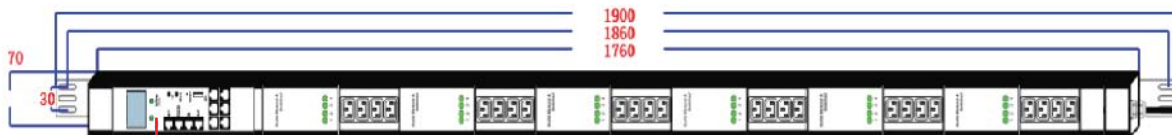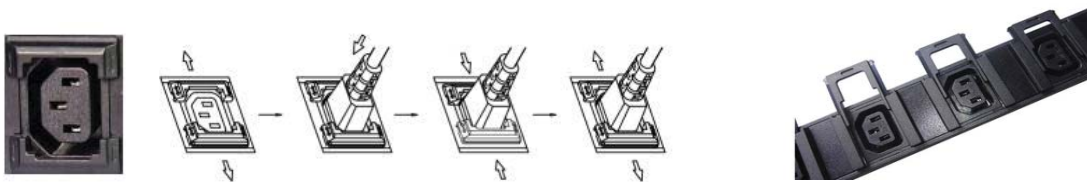2 Port support for digital sensor.

Outlet locking

Power

A new technology for Security outlet locking

KEPBER present security Outlet locking, which prevent accidental disconnections. This patent pending feature securely fastens straight equipment power cords to the PDU, protecting your power from sudden disruptions.

1900
1860
1760

70
30

1. Monitoring function : LCD view the total Voltage, total Power, total Eletrical energy, Power factor, Load current of each outlet, ON-Off state of each outlet uit, Temperature/Humidity state Smoke state, Water logging state, Access control state (Various typeof sensors are optional).
2. Control function : Control ON/OFF switch of outlet unit. Sequentially ON/OFF settingof the delay time interval of outlet unit.

ECO-PLUS+3 Smart PDU   offer the highest level oc control and monitoring with outlet-level monitoring and oulet-level switch that enable user to remotely monitor and control individual receptacles. SMART PDU offer the ability to configure outlet into group and assign user group access to specific outlets group.

Benefit feature

+ Remote switch ON/OFF or reboot.
+ Power failure warning.
+ Monitoring the current, voltage, power, power factors consumption of total or each output.
+ Monitoring environment temperature,humidity, smoke, flooding, access control,....etc and send alarm automatically.
+ Live monitoring and management of current capacity, neutral-live voltage and neutral-earth voltage.
+ Management via customer-end software safety and support secondary development and
   assets management.

status LED ---- Electric energy pulse LED

LCD screen

Web / SNMP / Telnet

Output module has plug out prevention function.The trip can be automatically reset.

Humidity	Water Logging	Infrared Alarm	Door Alarm	Temperature	Smoke Alarm
8.8 Current Display	8.8 Energy Display	245 Voltage Display	E-mail Alarm	Web Browsing	SNMP Protocol
Daisy Chain	RS 485	Dry Connector	19" or Vertical	Each Port on/off	

Surge protection (optional)

Difference mode   :±2kV
Common mode   :±2kV
flux   : 3KA
The max discharge current: 5KA

Sensor optional

Monitor Environment Smoke Max: 25 ㎡ available
Monitor water logging ,Water logging or drop monitor
Infrared monitoring The max monitor distance: 16m
Door open monitor Min. 5mm open distance available
Surge protection failure monitor PDU still normal working when failure

Control

Control each outlets on/off Each outlet breaking capacity 16A/250VAC
Sequential power on/off
The interval of sequential power off time: 0.5s,
Sequential power on 1~250s, user-defined
Power status retention When PDU restart power, Each
outlets will retain the previous status

Alarm limit setting

Total current limit
Auto identify limit rationality
Each ports current limit
Temperature limit
Humidity limit
Outlets alarm
Each fuse failure alarm

Technical specification

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Input frequency	50 Hz
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