



# BASIC PDU

Power Distribution Units – Basic PDU



Intelligent



Safe



Green





## SHENZHEN CLEVER ELECTRONIC CO., LTD.

SHENZHEN CLEVER ELECTRONIC CO., LTD. is a high-tech enterprise specialized in development, production and sales of network power manager, power distribution units, power socket and surge protector; she has introduced “new conception of safety to drive power” and has several series of products: environment monitoring system, network power manager for cabinet, power distribution controlling system, power distribution units, sequential controlled power distribution units, serial interface power distribute unit, auto-switching power source device, surge protector and the matching cables and plugs. These products are specially suitable for high-tech fields of IT, finance, telecom, electric power, hospital, military, aviation, scientific research and E-government, can be widely applied for protection of electronic/electrical equipments of computer, server, telecommunication equipment, network system, cabinet products, lightning project, information technology equipment and precision instruments, have applied and launched in the worldwide.

Clever's survival and expansion come from its endless development and innovation, scientific design, up-to-date manufacturing technique, strict quality control, well-equipped testing environment, seeking increasing perfection and conscientious working attitude. “Manufacturing world-advanced PDU products, providing complete set of technical solutions for customers” is the outstanding characteristic of CLEVER product and service. “Leading the global PDU technical development, to be the professional and first-class PDU supplier” is the career CLEVER is striving for all the time.

CLEVER products are found in full compliance with the newly-published criteria both at home and abroad, and are awarded a safety certificate by internationally known bodies and 3C certificate by Chinese authority, and have got national invention patents. Clever is the sole designated supplier of relevant products by Xichang Satellite Emission Base. She is ISO9001:2008 certified, and awarded a title of Good Quality Supplier, User Friendly Company, Outstanding Standardization Unit and others equivalent. She is among the standard makers of GB2099.3-1997, a domestic national standard for socket/switch supply.

CLEVER holds a consistent idea of “human based, technology advanced, quality first, name well-known” for her further development. CLEVER hopes to join hands with valued clients from all circles for a mutual prospect with its “most reliable product and top-grade service” .



**CLEVER MPD-Latest development, patent holding, world market sale.**

## 1. MPD functional module

### 1.1. Instruction:

MPD functional module is the latest meter developed by CLEVER, with hot-swappable, replaceable, multi-functional, patented strengths which is divided into two types: intelligent MPD with RS485 port and advanced MPD to be equipped with basic PDU.

Advanced MPD includes NAVM (current/voltage display module) and NAVPEM (current/voltage/power/energy display module). It solves the problem which customer concerns mostly: during system operation, when display function needs to be repaired or replaced, the power output is not allowed to be affected. So PDU can realize the purpose of no power failure.



### 1.2. Application:

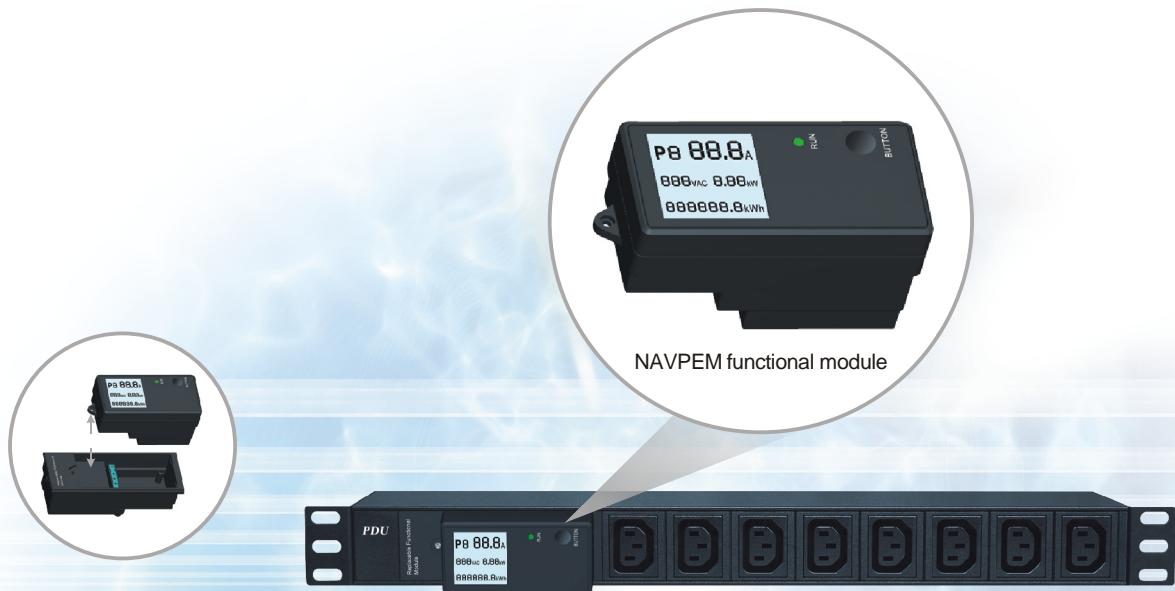
Intelligent MPD functional module is applicable to Metered PDU of EMS system.  
Advanced MPD functional module is applicable to basic PDU.



## 1.3. Function:

NAVM-current/voltage display module can display the load current, input voltage of the PDU through LED.

NAVPEM-current/voltage/power/energy display module can display the load current, input voltage, load power and energy consumption through LCD.



## 1.4. Feature:

Hot Swappable, replaceable structure ensures Metered PDU system operation with no power failure;

## 1.5. Products Specifications:

Module Name	Module Code	Display	Part. No.		Display and data collection function
			Frontal installation	Inverse installation	
NAVM	A	LED	NAVMX	NAVMY	Load current, input voltage
NAVPEM	A	LCD	NAVPEMX	NAVPEMY	Load current, input voltage, load power and energy consumption

## 1.6. Technical Feature:

Advanced MPD functional module adopts hot swappable, replaceable technique and product structure, when MPD functional module needs to repair or replace, no need to cut down the power of PDU or open it, just replace the failure one with a new one. This feature ensures the safe, reliable and uninterrupted operation of system;

## 1.7. Technical innovation:

With hot swappable structure, MPD functional module can solve the problem which customer concerns mostly: during system operation, when data collection or display function needs to be repaired or replaced, the power output is not allowed to be affected. So PDU can realize the purpose of no power failure.

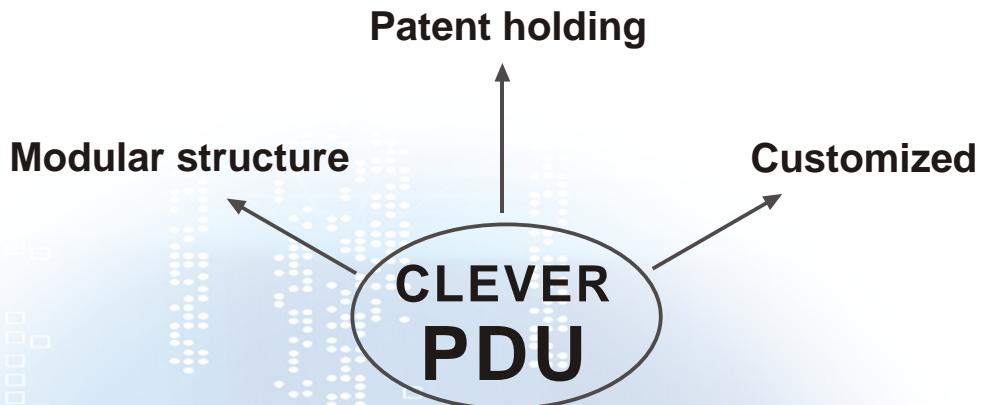
## 2. THE “ANTI-FALL” DEVICE FOR IEC C14 PLUG

The connection of the power and the electrical equipment is realized by the joint of the plug and the socket, so the safe and reliable connecting method is of great importance, especially how to make sure the plug will be fixed but not loose or fall after it is been inserted into the socket which is a significant security question that all the professional persons cares in the world.

The “anti-fall” device invented by CLEVER effectively solved the problem that the IEC C14 plug will loose, move or fall when inserted into IEC C13 socket suffering from shake and collision that will make the system halt, power output breaks which may bring about the big accident and immeasurable economic loss.

The “anti-fall” device has simple structure, is easy to insert and pull out, safe and reliable and meet the IEC standard which can be popularized and applied all over the world.





## CLEVER PDU

Designed based on international standard and hold several patent of invention;  
Internationally advanced technology, creative structure and reliable quality;  
Passed safety test and certification of international authorities;  
All source materials environment friendly and RoHS compliant.



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All Clever's PDU products are manufactured by environmental protection materials and components, accord with the regulations of European Union RoHS directive, and we had passed test of SGS.

## 1. STANDARD AND CRITERIA, BASIS FOR PRODUCT DESIGN AND TEST:

- **IEC 60320-1:1994** Appliance couplers for household and similar general purposes Part1: General requirements
- **IEC 60320-2-2:1990** Appliance couplers for household and similar general purposes Part2: Interconnection couplers for household and equipment
- **BS 1363-3-1995** 13A plugs, socket-outlets and adaptors-Specification for adaptors
- **BS 1363 Pt.2-1995** 13A plugs, socket-outlets and adaptors. Specification for 13A switched and unswitched socket-outlets
- **DIN 49440-1-1989** Two-pole socket-outlets with earthing contact;10A 250V DC.,16A 250V AC.; main dimensions
- **DIN 49440-2-1987** Two-pole socket-outlets with earthing contact 10A 250V DC.,16A 250V AC.;mobile multiple socket-outlets; combination of socket-outlets 10/16A 250V and socket-outlets 2.5A 250V; main dimensions.
- **NF C61-314:2003** Plugs and sockets-outlets for household and similar purposes-6A/250V and 16A/250V systems
- **UL 498-1996** Attachment plugs and receptacles
- **UL 60950-1** 《The security of the communication technology equipment》
- **AS/NZS 3112:2004** Australian/New Zealand Standard™
- **IEC 60906-1-1986** Approval and test specification-Plugs and socket-outlets IEC System of plugs and socket outlets for household and similar purposes.
- **IEC 60906-1-1986** Part 1: Plugs and socket-outlets 16A 250V AC.
- **IEC 60906-2-1997** IEC System of Plugs and Socket-Outlets for Household and Similar Purposes
- **IEC 60884-1-1994** Part 2: Plugs and Socket-Outlets 15A 125V AC.
- **IEC 60884-1-1994** Plugs and socket-outlets for house-hold and similar general purposes
- **IEC 60884-2-5-1995** Part 1: General requirements
- **IEC 60884-2-5-1995** Plugs and socket-outlets for household and similar purposes
- **GB1002-1996** Part 2: Particular requirements for adaptors
- **GB 2099.1-1996** Single phase plugs and socket-outlets for household and similar purposes Types, basic parameters and dimensions
- **GB 2099.1-1996** Plugs and socket-outlets for household and similar purposes
- **GB 2099.2-1997** Part 1: General requirements
- **GB 2099.2-1997** Plugs and socket-outlets for household and similar purposes
- **GB 2099.3-1997** Part 2: Particular requirements for socket-outlets for appliances
- **GB 2099.3-1997** Plugs and socket-outlets for household and similar purposes
- **GB 2099.3-1997** Part 2: Particular requirements for adaptors
- **GB 17465.1-1998** Appliances coupler for household and similar general purposes General requirements
- **IEC 61643-1:1998** Surge protective devices connected to low-voltage power distribution systems
- **IEC 61643-1:1998** Part 1: Performance requirements and testing methods
- **IEC 61312-1:1995** Protection against lightning electro-magnetic Impulse Part 1: General principles
- **IEC 61312-3: 2000** Protection against LEMP Part 3: Requirements of Surge protective Devices
- **UL 1449-1996** Transient voltage surge suppressors
- **DIN VDE 0675: 1989** Overvoltage Protection of Low Voltage Systems
- **GA 173-1998** Lightning protection for a computer information system
- **GB 17464-1998** Connecting devices-Safety requirements for screw-type and screw less-type clamping units for electrical copper conductors
- **YD/T 1235.1-2002** Performance requirements for Surge Protective Devices Connected to Low-voltage Distribution Systems of Telecommunication Stations/Sites
- **YD/T 1235.2-2002** Testing Methods for Surge Protective Devices Connected to Low-voltage Distribution Systems of Telecommunication Stations/Sites

## 2. PRODUCT FEATURES

- **Modularized structure**

Design and manufacturing of all the products are arranged in a modularized way.

- **Series specification**

CLEVER PDU products divided into nine series, respectively, applicable to different application environments, can easily meet the technical needs of different customers.

- **Diversified socket system**

The products is equipped with supply socket modules meeting different systems and standards in the world, which puts the product in a rather advantageous position to satisfy clients in each country or region.

- **Optional output unit**

CLEVER PDU products can meet customers' need to choose a different number of output units, up to 46 output socket modules can be installed.

- **Optional power input**

CLEVER PDU power input contains left / right input, front / back input, single / double input, socket type input and multi-power input style, can be satisfy to the clients' technology requirement easily.

- **Easily mounting**

CLEVER design the different mounting methods and can be easily, fastness, multi-side to install the PDU products by frontal and inverse installation.

- **Connecting port to connect**

CLEVER design the special connecting box and provide the plug meeting the different systems and standards in the world, and it can satisfy the customers' different requirement for the power input, cables connecting and power connecting port's.

- **Use a terminal for internal connection**

Thread ends are used for an internal connection of socket modules, plug connectors for functional modules.

- **Diversified controlling function**

CLEVER PDU contains multi-controlling function module, the master switch, master air circuit breaker, and power indicator and so on, these controlling function can control the master, individual and the special designated controlling.

- **Case color abundantization**

Independently developed patent shell is adopted insulating electrophoresis aluminum alloy, the color has titanium white & black. Customers can select the color of shell & functional module.

- **Effective protecting function**

CLEVER designed the high-performance surge protective module according to international standard, including the polarity indicator and earth indicator surge protector, replaceable surge protection component, and we can make up the effective surge protecting as the customers' technology requirement.

- **Tailored hole space**

The product can be tailored in terms of hole space to satisfy the customers' requirement for the installation and connecting.

- **Reliable output characteristics**

Sleeves or parts subordinate to a socket are made with phosphor bronze, the material famous for its elasticity; wear resistance, diamagnetism and corrosion resistance. The product is a result of precision work and integral impact and forming, which ensures a reliable contact and a single-pole pull-and-plug life at 5000 times above, a safe and reliable operation, no loosening, no strike, and reliable electric conductivity and connectivity.

- **Requirement customization**

CLEVER design the PDU products as the customers' special requirement, to produce the different length and super load PDU products.

- **Quality thermal endurance and fire resistance**

All functional modules are adopted PC/ABS plastic materials, hot change temperature reach to above 120°C, fire-retardant characteristic accords with UL94-V0 standard.

- **Current display digitization**

The system design has digital AC amperemeter module which can be installed horizontally or vertically, and digital AC amperemeter module with overload automatic protecting, which can ocularly display the change of load current. Users can select according to requirement.

- **Internationally prevailing system and standard**

The product, a result of design and manufacturing process meeting applicable standards in the world, finds particular applications in standard cabinets 482.6mm (19") in terms of its installation, application and other technical matters.

### 3. Clever PDU Part Number Explanation

3.1. Clever PDU's part number is made up of 17 letters and figures which can be divided into 9 parts.

**I. PDU series code:** 7 (3 letters and 4 figures) (Details please see Page 9 to Page 12);

**II. Outlet standard:** 2 (1 letter and 1 figures) (Details please see Page 13 to Page 17);

**III. Outlet quantity:** 2 figures;

**IV. Power input style:** 1 letter (Details please see Page 18 to Page 19);

**V. Bracket installation:** 1 letter (Details please see Page 19 to Page 20);

**VI. Cable(cord) with plug:** 1 letter (Details please see Page 21 to Page 24);

**VII. Control function:** 1 letter (Details please see Page 25 to Page 26);

**VIII. Protection function:** 1 letter (Details please see Page 26 to Page 29);

**IX. Case color:** 1 letter (Details please see Page 29).

For example:



**AUE2220 D1 - 08 A H D P M W**

AUE2220: PDU products series

D1: socket & standard(DIN49440 standard)

08: outlet quantity(8way)

A: power input style(left end single input)

W: case color(white)

M: protecting function(NO)

P: controlling function

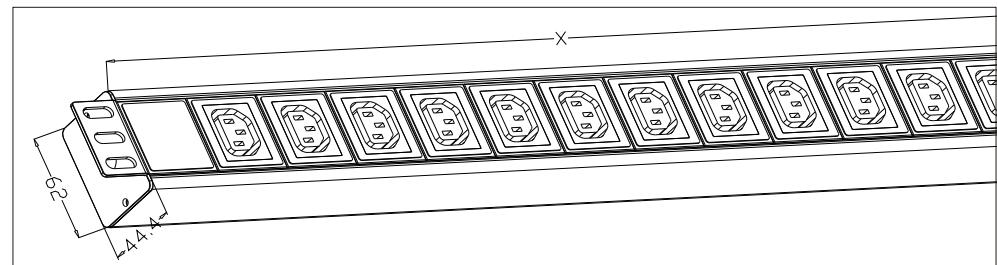
D: cable & plug

H: Mounting bracket(Frontal installation)

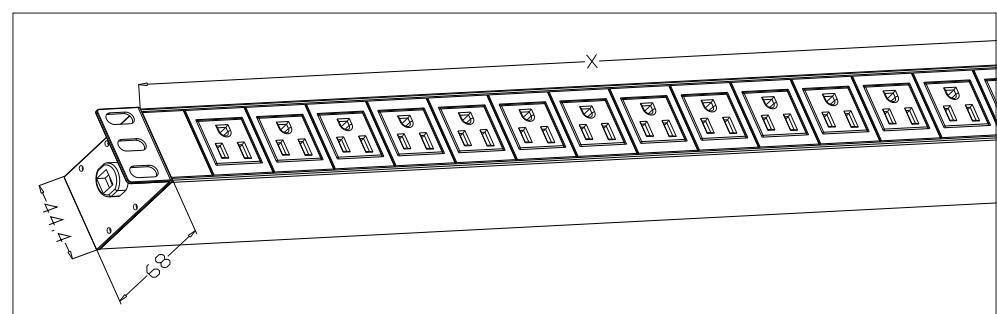
## 4. CLEVER PDU Series

### 4.1. There are 9 series for CLEVER PDU products

AUE2220 series PDU Product size: L×W×H=X<sup>\*</sup>×44.4×62mm (1.4U)

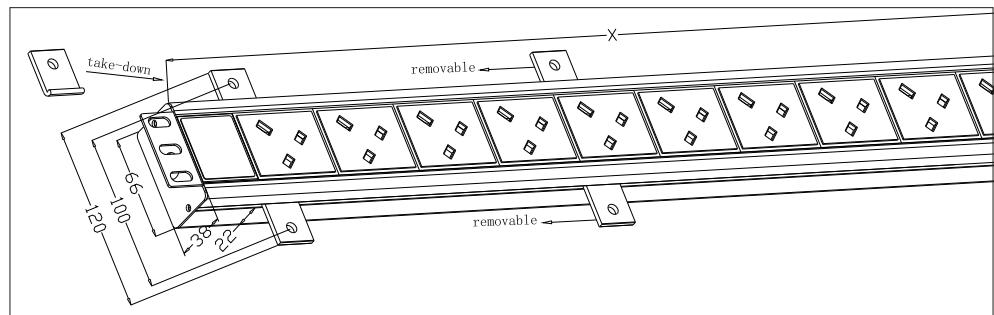


AUE2230 series PDU Product size: L×W×H=X<sup>\*</sup>×68×44.4mm (1U)

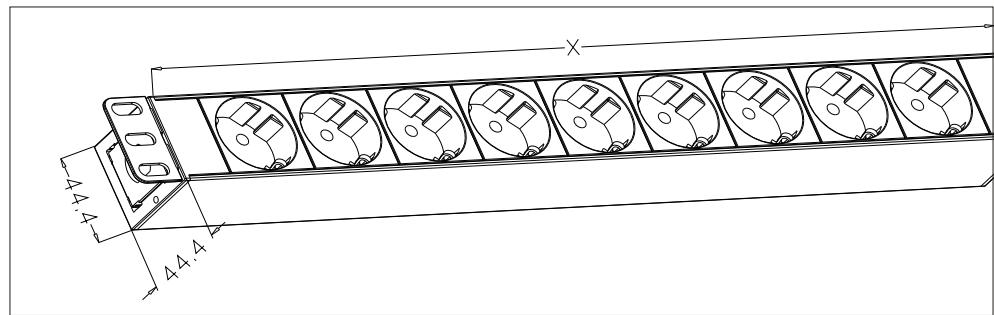
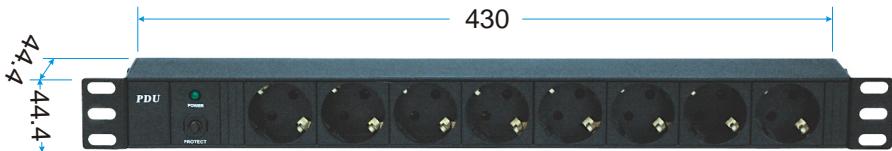


# PDU

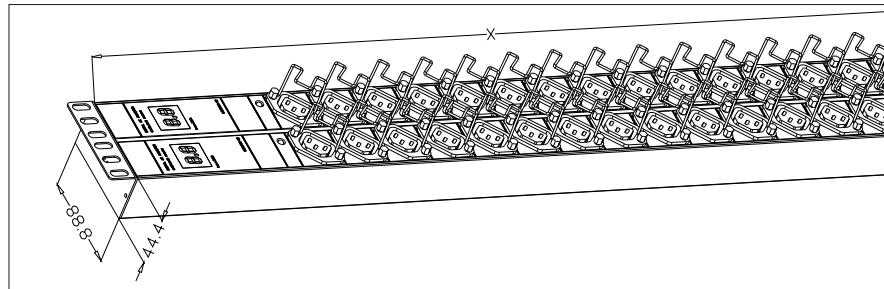
**AUE2240 series PDU** Product size: L×W×H=X<sup>\*</sup>×38×66mm (1.5U)



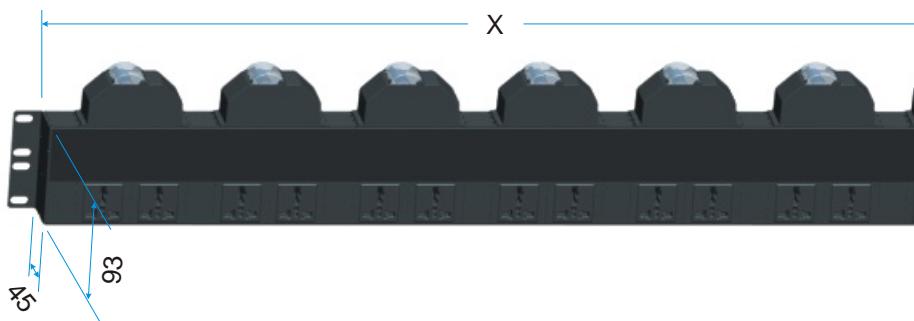
**AUE2250 series PDU** Product size: L×W×H=X<sup>\*</sup>×44.4×44.4mm (square 1U)



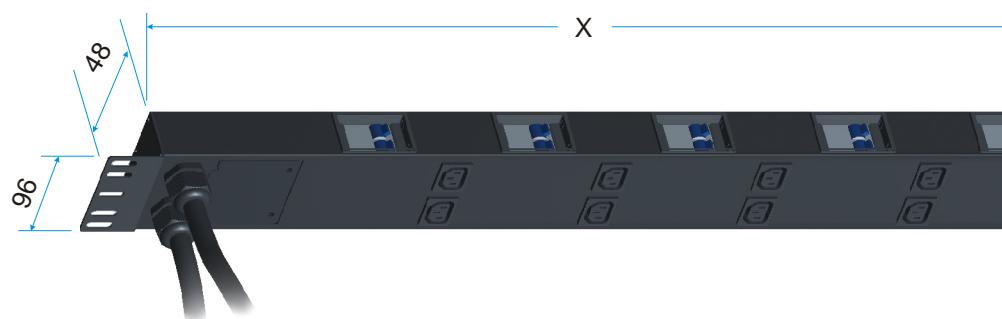
**AUE2260 series PDU** Product size: L×W×H=X<sup>\*</sup>×44.4×88.8mm (double U)



**AUE2270 series PDU** Product size: L×W×H=X<sup>\*</sup>×45×93mm (for telecom)

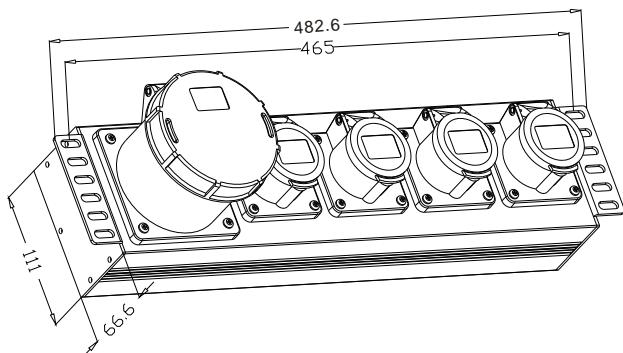


**AUE2271 series PDU** Product size: L×W×H=X<sup>\*</sup>×48×96mm (for telecom)

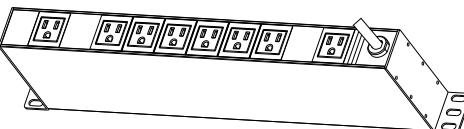
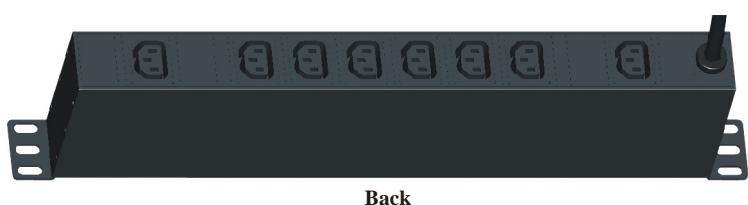
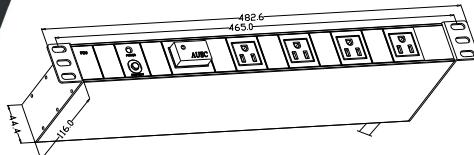
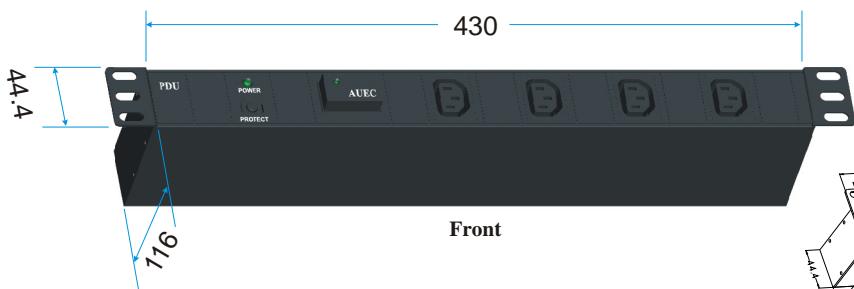


# PDU

AUE2280 series PDU Product size: L×W×H=X<sup>\*</sup>× 66.6×111mm (**industrial standard**)



AUE2290 series PDU Product size: L×W×H=X<sup>\*</sup>× 116× 44.4mm (**double side PDU**)



## 5. Introduction of modules

### 5.1. Output unit style

Tip:  means the applicable product series of the socket module.

Such as: the number 2, 3, 5 means the socket module can be applied to AUE2220, AUE2230 and AUE2250 series.



Code S-C1  
Style IEC320 C13  
Parameter 10A 250VAC  
For product Series





Code S-C2  
Style IEC320 C13  
Parameter 10A 250VAC  
For product Series





Code S-C3  
Style IEC320 C13  
Parameter 10A 250VAC  
For product Series



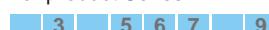


Code S-C4  
Style IEC320 C13  
Parameter 10A 250VAC  
For product Series





Code S-C5  
Style IEC320 C13  
Parameter 10A 250VAC  
For product Series





Code S-C6  
Style IEC320 C13  
Parameter 10A 250VAC  
For product Series





Code S-E1  
Style IEC320 C19  
Parameter 16A 250VAC  
For product Series





Code S-E2  
Style IEC320 C19  
Parameter 16A 250VAC  
For product Series





Code S-C7  
Style IEC320 C13  
Parameter 10A 250VAC  
For product Series







Code S-M1  
 Style NEMA 5-15R  
 Parameter 15A 125VAC  
 For product Series



**2 3 4 5 6 7 8 9**



Code S-M2  
 Style NEMA 5-15R  
 Parameter 15A 125VAC  
 For product Series



**3 4 5 6 7 8 9**



Code S-M3  
 Style NEMA 5-20R  
 Parameter 20A 125VAC  
 For product Series



**2 3 4 5 6 7 8 9**



Code S-M4  
 Style NEMA 5-20R  
 Parameter 20A 125VAC  
 For product Series



**3 4 5 6 7 8 9**



Code S-A1  
 Style AS/NZS 3112  
 Parameter 10A 250VAC  
 For product Series



**2 3 4 5 6 7 8 9**



Code S-A2  
 Style AS/NZS 3112  
 Parameter 10A 250VAC  
 For product Series



**3 4 5 6 7 8 9**



Code S-A3  
 Style AS/NZS 3112  
 Parameter 15A 250VAC  
 For product Series



**2 3 4 5 6 7 8 9**



Code S-A4  
 Style AS/NZS 3112  
 Parameter 15A 250VAC  
 For product Series



**3 4 5 6 7 8 9**



Code S-H1  
 Style NBR14136  
 Parameter 10A 250VAC  
 For product Series



**2 3 4 5 6 7 8 9**



Code S-H2  
 Style NBR14136  
 Parameter 20A 250VAC  
 For product Series



**2 3 4 5 6 7 8 9**



Code S-G1  
 Style GB1002  
 Parameter 10A 250VAC  
 For product Series

**2** 3 4 5 6 7 8 9



Code S-Z1  
 Style GB1002  
 Parameter 16A 250VAC  
 For product Series

**2** 3 4 5 6 7 8 9



Code S-G2  
 Style GB1002  
 Parameter 10A 250VAC  
 For product Series

**3** 4 5 6 7 8 9



Code S-Z2  
 Style GB1002  
 Parameter 16A 250VAC  
 For product Series

**3** 4 5 6 7 8 9



Code S-G3  
 Style GB1002  
 Parameter 10A 250VAC  
 For product Series

**3** 4 5 6 7 8 9



Code S-Z3  
 Style GB1002  
 Parameter 16A 250VAC  
 For product Series

**3** 4 5 6 7 8 9



Code S-W1  
 Style GB2099.3  
 Parameter 10A 250VAC  
 For product Series

**2** 3 4 5 6 7 8 9



Code S-W2  
 Style GB2099.3  
 Parameter 10A 250VAC  
 For product Series

**3** 4 5 6 7 8 9



Code S-W3  
 Style GB2099.3  
 Parameter 10A 250VAC  
 For product Series

**3** 4 5 6 7 8 9





Code S-K1  
 Style SR 107-2-D1  
 Parameter 10A 250VAC  
 For product Series  




Code S-K2  
 Style SR 107-2-D1  
 Parameter 10A 250VAC  
 For product Series  




Code S-F1  
 Style NF C61-314  
 Parameter 16A 250VAC  
 For product Series  




Code S-F2  
 Style NF C61-314  
 Parameter 16A 250VAC  
 For product Series  




Code S-D1  
 Style DIN49440  
 Parameter 16A 250VAC  
 For product Series  



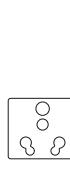

Code S-D2  
 Style DIN49440  
 Parameter 16A 250VAC  
 For product Series  




Code S-Y1  
 Style ITALY UNIVERSAL  
 Parameter 16A 250VAC  
 For product Series  




Code S-V1  
 Style INDIA SOCKET  
 Parameter 6/16A 250VAC  
 For product Series  

Code S-B1  
 Style BS1363(90°)  
 Parameter 13A 250VAC  
 For product Series  




Code S-B2  
 Style BS1363(45°)  
 Parameter 13A 250VAC  
 For product Series  






Code S-B3  
Style BS1363(135°)  
Parameter 13A 250VAC  
For product Series



### Other one



Code S-Q1  
Style GST18  
Parameter 16A 250VAC  
For product Series



Code S-Q2  
Style GST18  
Parameter 16A 250VAC  
For product Series



Code S-N1  
Style IEC60309  
Parameter 380VAC  
For product Series



Code S-N2  
Style IEC60309  
Parameter 250VAC  
For product Series



Code S-N3  
Style IEC60309  
Parameter 110VAC  
For product Series



Code S-N4  
Style IEC60309  
Parameter 380VAC  
For product Series



Code S-N5  
Style IEC60309  
Parameter 250VAC  
For product Series



Code S-N6  
Style IEC60309  
Parameter 110VAC  
For product Series



## 5.2. Power input style



Code IN-A  
Description Left end single input style  
For product Series  
[2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#)



Code IN-B  
Description Left end double input style  
For product Series  
[2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#)



Code IN-C  
Description Right end single input style  
For product Series  
[2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#)



Code IN-D  
Description Right end double input style  
For product Series  
[2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#)



Code IN-E  
Description Both ends single input style  
For product Series  
[2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#)



Code IN-F  
Description Both ends double input style  
For product Series  
[2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#)



Code IN-G  
Description IEC320 C14 input style  
For product Series  
[2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#)



Code IN-H  
Description IEC320 C20 input style  
For product Series  
[2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#)



Code IN-P  
Description IEC320 C14(anti-fall) input style  
For product Series  
[3](#) [5](#) [6](#) [7](#) [8](#) [9](#)



Code IN-L  
Description Back input style  
For product Series  
[2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#)



Code IN-Q  
 Description GST18 input style  
 For product Series  
2 3 4 5 6 7 9



Code IN-R  
 Description Wire terminal connection box input style  
 For product Series  
2 4



Code IN-K  
 Description Wire terminal connection box input style  
 For product Series  
3 5 6 7 9



## 5.3. Installation method



Code M-H  
 Description Frontal installation style  
 For product Series  
2 3 4 5 6 7 8 9



Code M-V  
 Description Inverse installation style  
 For product Series  
2 3 4 5 6 7 8 9



Code M-C  
 Description Frontal side installation style  
 For product Series  
5 6 7 9



Code M-B  
 Description Both sides installation style  
 For product Series  
4



Code M-R  
 Description Inverse side installation style  
 For product Series  
5 6 7 9



Code M-M  
 Description Multi-sides installation style  
 For product Series  
3 5

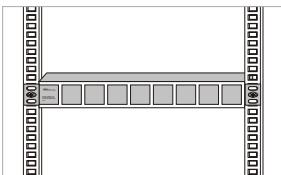


Code M-K  
Description Back installation style  
For product Series

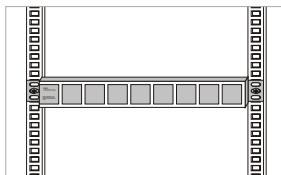
**2 3 4 5 6 7**



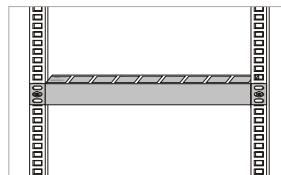
### 5.3.1. Horizontal installation method



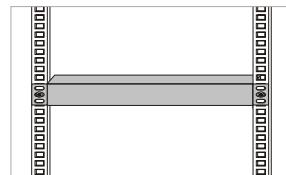
Drawing 001



Drawing 002

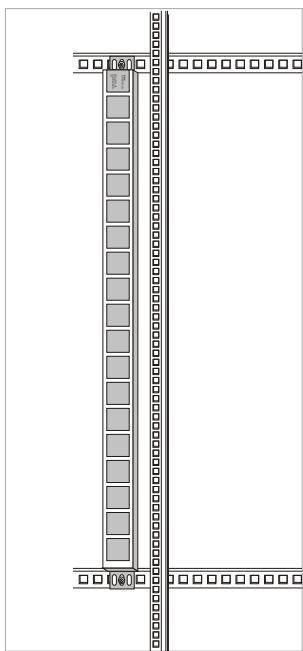


Drawing 003

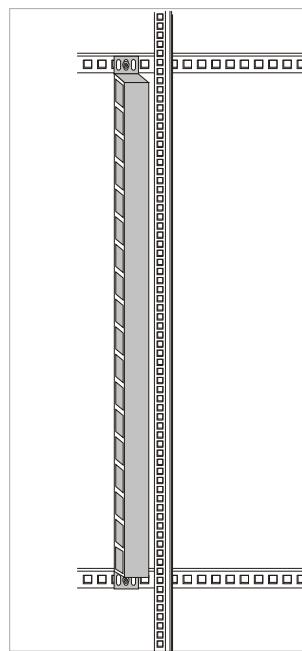


Drawing 004

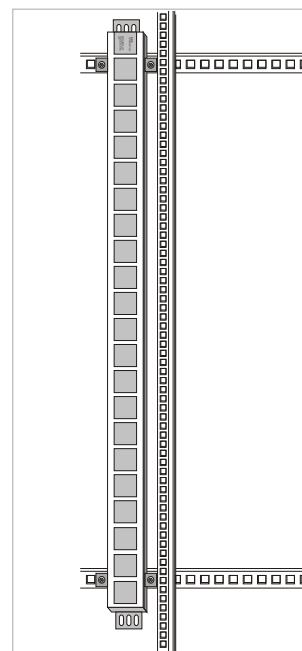
### 5.3.2. Vertical installation method



Drawing 005



Drawing 006



Drawing 007

### 5.4. Input part

For all PDU series.

#### 5.4.1. Input voltage range

Sheet 001

Input voltage range	Rating standard voltage	Frequency
110VAC	125VAC	50/60Hz
220VAC	250VAC	
380VAC	380VAC	

### 5.4.2. Input characteristics

Sheet 002

Cable-choosing scheme			
IEC standard		UL standard	
Total load current (A)	Cable specification (mm <sup>2</sup> )	Total load current (A)	Cable specification (#)
10	3×1.5		
13	3×1.5	10	16
15	3×1.5 ~ 3×2.5	15	14 ~ 16
16	3×1.5 ~ 3×2.5	20	12 ~ 14
32	3×4.0 ~ 3×6.0	30	10 ~ 12

### 5.4.3. Input connect type



Code T-C  
Plug style IEC320 C14  
Parameter 10A 250VAC



Code T-I  
Plug style IEC320 C20  
Parameter 16A 250VAC



Code T-M  
Plug style NEMA 5-15P  
Parameter 15A 125VAC



Code T-H  
Plug style NEMA 5-20P  
Parameter 20A 125VAC



Code T-N  
Plug style NEMA L5-20P  
Parameter 20A 125VAC



Code T-O  
Plug style NEMA L5-30P  
Parameter 30A 125VAC



Code T-P  
Plug style NEMA L6-20P  
Parameter 20A 250VAC



Code T-Q  
Plug style NEMA L6-30P  
Parameter 30A 250VAC





Code T-A  
Plug style AS/NZS 3112  
Parameter 10A 250VAC



Code T-R  
Plug style AS/NZS 3112  
Parameter 15A 250VAC



Code T-G  
Plug style GB1002  
Parameter 10A 250VAC



Code T-Z  
Plug style GB1002  
Parameter 16A 250VAC



Code T-S  
Plug style SR 107-2-D1 DK 2-1a  
Parameter 10A 250VAC



Code T-L  
Plug style SR 107-2-D1 DK 2-5a  
Parameter 10A 250VAC



Code T-D  
Plug style DIN49441  
Parameter 16A 250VAC



Code T-T  
Plug style ITALY  
Parameter 10A 250VAC



Code T-Y  
Plug style ITALY  
Parameter 16A 250VAC





Code T-U  
Plug style BS546  
Parameter 6A 250VAC



Code T-V  
Plug style BS546  
Parameter 16A 250VAC



Code T-B  
Plug style BS1363  
Parameter 13A 250VAC



Code T-W/X IP44  
Plug style IEC60309  
Parameter 16A/32A 125VAC



Code T-E/F IP44  
Plug style IEC60309  
Parameter 16A/32A 250VAC



Code T-J/K IP44  
Plug style IEC60309  
Parameter 16A/32A 380VAC



## Other one



Code T-  
Plug style GST18  
Parameter 16A 250VAC



Code T-  
Plug style Aviation plug  
Parameter 16A 250VAC





Type IP44  
Plug style IEC60309  
Parameter 125VAC



Type IP44  
Plug style IEC60309  
Parameter 250VAC



Type IP44  
Plug style IEC60309  
Parameter 380VAC



Type IP44  
Plug style IEC60309  
Parameter 125VAC



Type IP44  
Plug style IEC60309  
Parameter 250VAC



Type IP44  
Plug style IEC60309  
Parameter 380VAC



Type IP67  
Plug style IEC60309  
Parameter 380VAC



Type IP67  
Plug style IEC60309  
Parameter 125VAC



Type IP67  
Plug style IEC60309  
Parameter 250VAC



Type IP67  
Plug style IEC60309  
Parameter 380VAC



## 5.5. Control function



Code C-K  
Name Master switch  
Parameter 10A/16A 250VAC  
For product Series

**2** 4 5 6 7 8 9



Code C-C  
Name Lighted master switch  
Parameter 10A/16A 250VAC  
For product Series

**2** 4 5 6 7 8 9



Code C-K  
Name Master switch  
Parameter 10A/16A 250VAC  
For product Series

**3** 5 6 7 9



Code C-C  
Name Lighted master switch  
Parameter 10A/16A 250VAC  
For product Series

**3** 5 6 7 9



Code C-G  
Name Mini circuit breaker  
Parameter 1A-60A  
For product Series

**2** 4 5 6 7 9



Code C-G  
Name Mini circuit breaker  
Parameter 1A-60A  
For product Series

**3** 5 6 7 9



Code C-G  
Name Mini circuit breaker  
Parameter 1A-60A  
For product Series

**3** 5 6 7 9



Code C-F  
Name Leakage circuit breaker  
Parameter 1A-60A  
For product Series

**2** 4 5 6 7 9



Code C-H  
Name Leakage circuit breaker and over current protector  
Parameter 1A-60A  
For product Series

**2** 4 5 6 7 9



Code C-S  
Name single controlled switch & fuse device  
Parameter 125V/250VAC  
For product Series

**2** 4 5 6 7 9



Code C-P  
Name Single power indicator  
Parameter 125V/250VAC  
For product Series

**2** 3 4 5 6 7 8



Code C-P  
Name Single power indicator  
Parameter 125V/250VAC  
For product Series

**2** 3 5 6 7 9



Code C-B  
Name Double power indicator  
Parameter 125V/250VAC  
For product Series

**2** 3 4 5 6 7 8



Code C-D  
Name Single controlled fuse device & power indicator  
Parameter 1A-10A  
For product Series

**2** 3 5 6 7 9



Code C-E  
Name Master overload protector & power indicator  
Parameter 10A-20A  
For product Series

**2** 3 4 5 6 7 8



Code C-E  
Name Master overload protector & power indicator  
Parameter 10A-20A  
For product Series

**2** 3 5 6 7 9

## 5.6. Protection function



Code P-L  
Name AUEC-M30  
Parameter refer to sheet 003  
For product Series

**2** 3 4 5 6 7 8



Code P-H  
Name AUEC A20-C2\*  
Parameter refer to sheet 006  
For product Series

**2** 3 4 5 6 7 9



Code P-H  
Name AUEC A20-C2\*  
Parameter refer to sheet 006  
For product Series

**2** 3 4 5 6 7 8



Code P-H  
Name AUEC A20-C2\*  
Parameter refer to sheet 006  
For product Series

**2** 3 4 5 6 7 8

# POWER DISTRIBUTION UNIT



**Code** P-H  
**Name** AUEC A20-C2\*  
**Parameter** refer to sheet 006  
**For product Series**  
3 5 6 7 9



**Code** P-C  
**Name** MB3306  
**Parameter** refer to sheet 007  
**For product Series**  
2 3 4 5 6 7 9



**Code** P-G  
**Name** MB3306  
**Parameter** refer to sheet 007  
**For product Series**  
2 3 4 5 6 7 9



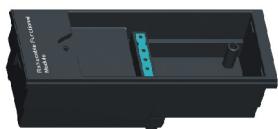
**Code** P-N  
**Name** MB3307  
**Parameter** refer to sheet 007  
**For product Series**  
2 3 4 5 6 7 9



**Code** P-S  
**Name** AUEC-M01  
**Parameter** refer to sheet 008  
**For product Series**  
2 4 5 6 7 9



**Code** P-T  
**Name** AUEC-M01  
**Parameter** refer to sheet 008  
**For product Series**  
2 4 5 6 7 9



**Code** P-A  
**Name** MPD (base module)  
**Parameter** refer to sheet 004/sheet 005  
**For product Series**  
2 3 5 6 7 9



NAVMX



NAVPEMX



NAVMY

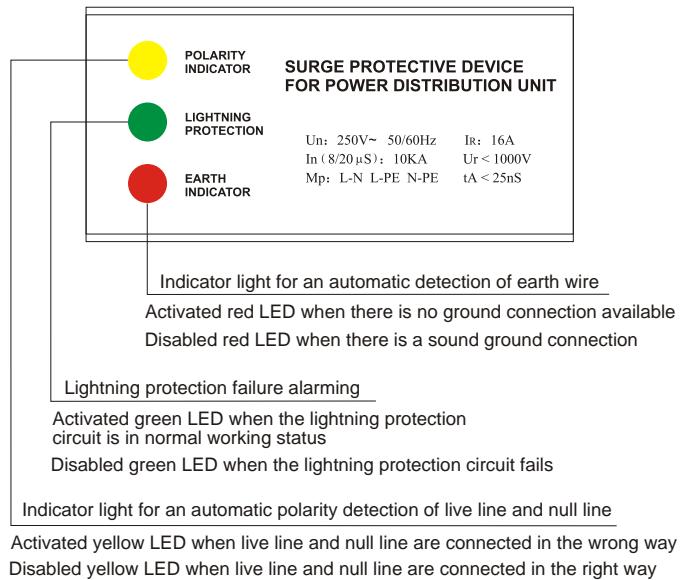


NAVPEMY

## Surge protective device

Sheet 003

AUEC-M30 Performance index		Parameter
Rated voltage	250VAC	50/60Hz
Rated load current Ir	16A	
Max. Power P <sub>max</sub>	4000W	
Max. Continuous operating voltage U <sub>c</sub>	320VAC	
Measured limiting voltage U <sub>r</sub>	<1000V	
Nominal discharge current (8/20 μS) I <sub>n</sub>	10KA	
Voltage protection level U <sub>p</sub>	<1000V	
Response time t <sub>a</sub>	< 25 nS	
Protection mode	L-N L-PE N-PE	
Polarity indicator	Yellow LED	
Lightning protection	Green LED	
Earth indicator	Red LED	
Alternative filtration	Highly efficient	
Insulation resistance R <sub>is</sub>	>100M Ω	
Fire resistance	Up to UL94V-0	
Environment temperature	-40 °C ~ +70 °C	
Relative humidity	≤95%	



## Hot swappable current/voltage meter

Sheet 004

Performance	Parameter	
Input	Rating voltage	125/250VAC 50/60/Hz
Display	Operation state	1 LED indicator
	Current/voltage	LED digital tube
	Load current	Full scale: 32A Accuracy: ±1%+1 Resolution:100mA Response time: 400ms
	Input voltage	Full scale: 255V Accuracy: ±1%+3 Resolution: 1V Response time: 400ms
	Controlling button	BUTTON Switch over display information
Module outlook	Dimension	L×W×H= 110×41×56mm
	Color	Black
Working environment	Temperature	0°C~55°C
	Relative humidity	10~90%

## Hot swappable current/voltage/power/energy meter

Sheet 005

Performance	Parameter	
Input	Rating voltage	125/250VAC 50/60/Hz
Display	Operation state	1 LED indicator
	Current/voltage/power/energy	LCD
	Load current	Full scale: 32A Accuracy: ±1%+1 Resolution:100mA
	Input voltage	Full scale: 255V Accuracy: ±1%+3 Resolution: 1V
	Power	Resolution: 0.1kW
Energy		Round/kWh: 1000imp/kWh Level: 1 Resolution: 0.1kWh
Controlling button	BUTTON	Switch over display information (for 3 phase)
Module outlook	Dimension	L×W×H= 110×41×56mm
	Color	Black
Working environment	Temperature	0°C~55°C
	Relative humidity	10~90%

**Replaceable surge protection component**

Sheet 006

Performance index	A20-C2	A20-C2*
Rating voltage $U_n$	250VAC	50/60Hz
Max. Persist work voltage		300VAC
Nominal discharge current (8/20 $\mu$ S) $I_n$		10KA
Residual voltage (8/20 $\mu$ S) $U_r$		<1000V
Response time $t_A$		< 25 nS
Protect mode		L/N-PE
Invalidation indicator	No	Yes
Insulating resistance		>10G $\Omega$
Allowed working temperature		-40 °C ~ +80 °C
Relative humidity		≤95%

**Digital AC amperemeter**

Sheet 007

Performance index	MB3306	MB3307
Max. Input	AC 16A/32A	AC 3x 16/32A
Full measurement	AC 16A/32A	AC 16A/32A
Accuracy	±1.0%+2Digit	
Resolution		200mA
Frequency range		50-60Hz
Digit display		2
Display		Red LED
Overload alarm	alarm, LED flashes	alarm, LED flashes L1, L2 and L3 light
Power supply	125/250VAC	3-Phase Electricity

**Surge protector for network and telephone**

Sheet 008

Performance index	AUEC-M01	AUEC-M03
Voltage $U_c$	180V	5V
Nominal discharge current (8/20 $\mu$ S) $I_n$	5KA	5KA
Voltage protection level (10/700 $\mu$ S) $U_p$	< 400V	< 30V
Response time $t_A$	< 10nS	< 10nS
Data transmission speed Bit/s	> 10M	> 100M
Insertion loss dB	< 0.5dB	< 0.5dB
Protection cable core	3.4	1.2.3.6
Tie-in modality	RJ11	RJ45

**5.7. Case color**

Code Y-W  
Name Aluminium alloy  
Parameter White  
For product Series  
2 3 4 5 6 7 8 9

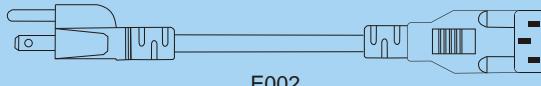


Code Y-B  
Name Aluminium alloy  
Parameter Black  
For product Series  
2 3 4 5 6 7 8 9

**5.8. Optional fittings**

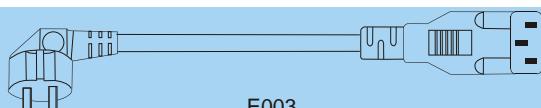
Specification 10A 250VAC  
Plug IEC320 C14

Cable line 3×1.0mm<sup>2</sup>×2M  
Connector IEC320 C13



Specification 10A 250/125VAC  
Plug NEMA 5-15P

Cable line 3×1.5mm<sup>2</sup>×3M  
Connector IEC320 C13



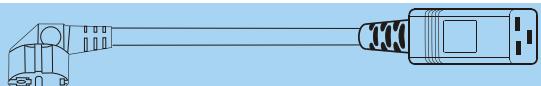
Specification 10A 250VAC  
Plug GB1002

Cable line 3×1.5mm<sup>2</sup>×3M  
Connector IEC320 C13



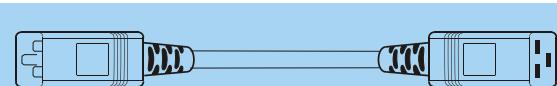
Specification 16A 250VAC  
Plug IEC60309

Cable line 3×2.5mm<sup>2</sup>×3M  
Connector IEC320 C19



Specification 16A 250VAC  
Plug DIN49441

Cable line 3×1.5mm<sup>2</sup>×3M  
Connector IEC320 C19



Specification 16A 250VAC  
Plug IEC320 C20

Cable line 3×1.5mm<sup>2</sup>×3M  
Connector IEC320 C19

## 5.9. Socket standard and outlet quantity configuration

Product Series	Cabinet specification		PDU dimension L×W×H(mm)										
					IEC320 C13	IEC320 C19	NEMA 5-15R	NEMA 5-20R	AS/NZS 3112	AS/NZS 3112	NBR14136	NBR14136	GB1002
AUE2220	Horizontal	19"	Standard	482.6×44.4×62	9	9	9	9	8	8	9	9	9
	Vertical	42U	Max.	1860×44.4×62	40	40	40	40	35	35	40	40	40
AUE2230	Horizontal	19"	Standard	482.6×68×44.4	11	6	11	11	9	9	9	9	8
	Vertical	42U	Max.	1860×68×44.4	42	24	42	42	36	36	36	36	32
AUE2240	Horizontal	19"	Standard	482.6×38×66	9	9	9	9	8	8	9	9	9
	Vertical	42U	Max.	1860×38×66	40	40	40	40	35	35	40	40	40
AUE2250	Horizontal	19"	Standard	482.6×44.4×44.4	11	6	11	11	9	9	9	9	8
	Vertical	42U	Max.	1860×44.4×44.4	42	24	42	42	36	36	36	36	32
AUE2260	Horizontal	19"	Standard	482.6×44.4×88.8	21	11	21	21	17	17	17	17	15
	Vertical	42U	Max.	1860×44.4×88.8	2×42	2×24	2×42	2×42	2×32	2×32	2×32	2×32	2×32
AUE2270	Vertical	42U	Max.	1860×45×93	24	24							24
AUE2271	Vertical	42U	Max.	1860×48×96	22	22							22
AUE2280	Horizontal	19"	Standard	482.6×66.6×111									
	Vertical	42U	Max.	1860×66.6×111									
AUE2290	Horizontal	19"	Standard	482.6×116×44.4	20	10	20	20	16	16	16	16	14

## Socket standard and the Max. outlet quantity (way)

GB1002	GB2099.3	SR 107-2-D1	SR 107-2-D1	NF C61-314	DIN49440	ITALY UNIVERSAL	INDIA SOCKET	BS1363(90°)	BS1363(45°)	BS1363(135°)	GST18	IEC60309	
9	9			8	8	7	7	7	6	6	9		
40	40	42	42	36	36	32	30	32	28	28	40		
8	8	9	9	9	9						10		
32	32	36	36	36	36						42		
9	9			8	8	7	7	7	6	6	9		
40	40	42	42	36	36	32	30	32	28	28	40		
8	8	9	9	9	9						10		
32	32	36	36	36	36						42		
15	15	17	17	17	17						19		
2×32	2×32	2×32	2×32	2×32	2×32						2×42		
24	24												
22	22											4 - 5	
												20	
14	14	16	16	16	16	16					18		

## 6. SOME POPULAR PRODUCTS IN DIFFERENT SERIES:

### 6.1. Some pictures of AUE2220 series PDU



AUE2220C7-06AHCGMB

Drawing 008



AUE2220C1-08AHGPMB

Drawing 009



AUE2220C1-06AHCNAB

Drawing 010



AUE2220A1-07AHAPMB

Drawing 011



AUE2220Z1-08AHZEMB

Drawing 012



AUE2220W1-08AHGPMB

Drawing 013



AUE2220F1-07AHDFMW

Drawing 014



AUE2220D1-06AHDKMB

Drawing 015



AUE2220D1-06AHDNCB

Drawing 016



AUE2220Y1-06AHYCMW

Drawing 017



AUE2220V1-06AHVKMB

Drawing 018



AUE2220B1-06AHBPMW

Drawing 019

## 6.2. Some pictures of AUE2230 series PDU



AUE2230C7-09AHCEMB

Drawing 020



AUE2230C1-07AHGGMB

Drawing 021



AUE2230C1-10AHCEMB

Drawing 022



AUE2230C4-10AHCPMB

Drawing 023



AUE2230E2-04AHIGMB

Drawing 024



AUE2230M4-08AHHNHB

Drawing 025



AUE2230A2-09AHANMB

Drawing 026



AUE2230Z3-06AHZDMMB

Drawing 027



AUE2230W2-07AHGWMB

Drawing 028



AUE2230F2-08AHDEMB

Drawing 029



AUE2230D2-09AHDPMB

Drawing 030



AUE2230Q2-04QHNNMB

Drawing 031



AUE2230C1-08AHCNAB

Drawing 032



AUE2230C1-09AHNEMB

Drawing 033



AUE2230C2-12AHNEMB

Drawing 034



AUE2230C3-08AHNDMB

Drawing 035



AUE2230C4-10AHNNMW

Drawing 036



AUE2230C5-06PHNDMW

Drawing 037



AUE2230E2-06AHNNMB

Drawing 038



AUE2230E2-05HHNNMB

Drawing 039



AUE2230M2-10AHNNMB

Drawing 040



AUE2230M2-09AHNEMB

Drawing 041



AUE2230M4-10AHNNMB

Drawing 042



AUE2230M4-09AHNEMB

Drawing 043

### 6.3. Some pictures of AUE2240 series PDU



AUE2240M1-07ABMWMB

Drawing 044



AUE2240B1-06ABBEMB

Drawing 045



AUE2240B2-06ABBPMB

Drawing 046



AUE2240B3-06ABBPMB

Drawing 047



AUE2240B1-16ABBEMB

Drawing 048



AUE2240B2-20ABFBMB

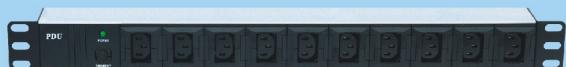
Drawing 049



AUE2240B3-24ABFBMB

Drawing 050

## 6.4. Some pictures of AUE2250 series PDU



AUE2250C7-10AHCEMW

Drawing 051



AUE2250C1-08AMCPMB

Drawing 052



AUE2250C1-10AHCEMB

Drawing 053



AUE2250C2-12AHCNHB

Drawing 054



AUE2250M2-09KHNNMB

Drawing 055



AUE2250W2-08AHGNMW

Drawing 056



AUE2250K1-08AMSPMW

Drawing 057



AUE2250K2-08AMLPMW

Drawing 058



AUE2250F2-06AHDNCB

Drawing 059



AUE2250F2-08AMDCMW

Drawing 060



AUE2250D2-06AHDNAB

Drawing 061



AUE2250D2-09AMDNMW

Drawing 062

### 6.5. Some pictures of AUE2260 series PDU



AUE2260C2-20BHCGMW

Drawing 063



AUE2260M4-19BHHPMW

Drawing 064



AUE2260C1-76BVCRMB

Drawing 065



AUE2260Z2-54KVNNGB

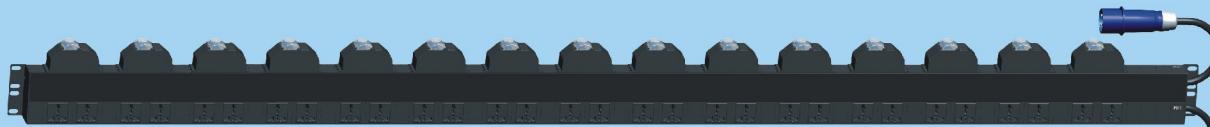
Drawing 066

### 6.6. Some pictures of AUE2270 series PDU



AUE2270C1-22CVEGMB

Drawing 067



AUE2270W2-30DVEGMB

Drawing 068

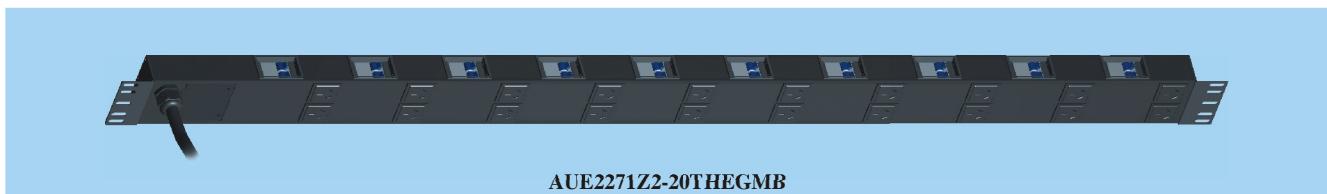
### 6.7. Some pictures of AUE2271 series PDU



AUE2271C1-24THEGMB

Drawing 069

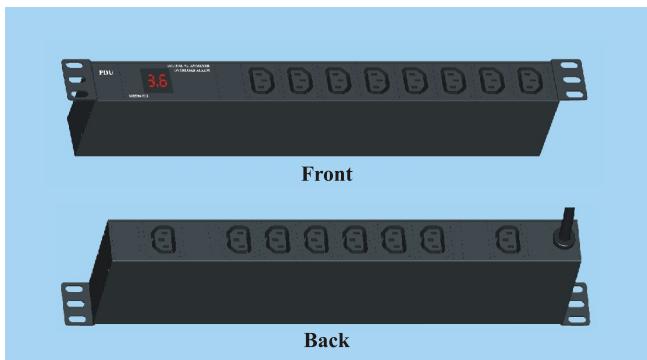
**AUE2270** is the new PDU product specially designed for telecom system customers, every outlet is controlled and protected by individual Mini Circuit Breaker.



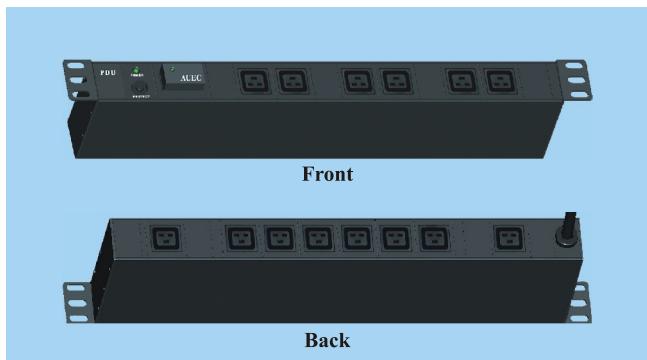
AUE2271Z2-20THEGMB

Drawing 070

## 6.8. Some pictures of AUE2290 series PDU



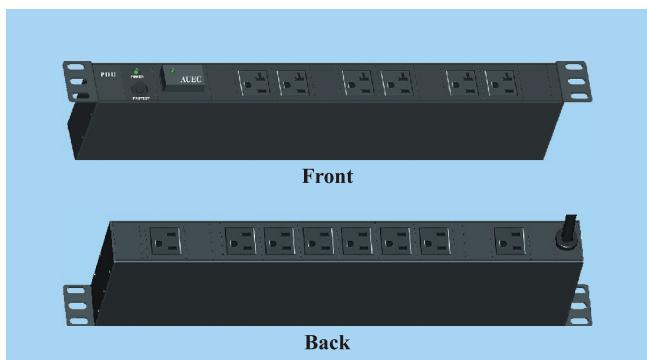
Drawing 071



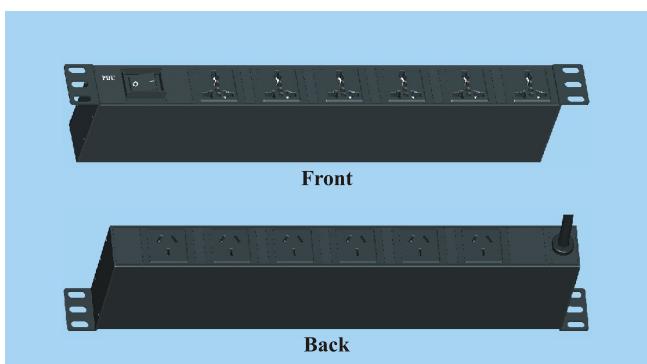
Drawing 072



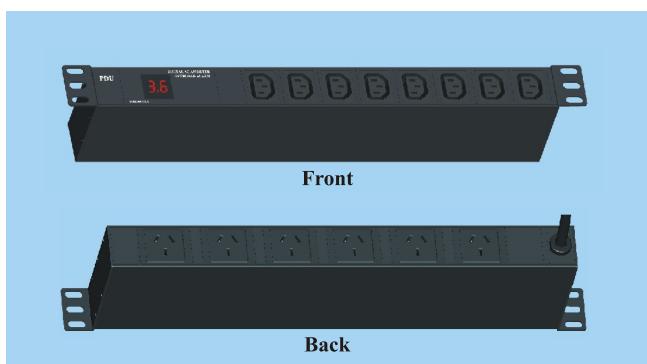
Drawing 073



Drawing 074



Drawing 075



Drawing 076

### 6.9. Some pictures of AUE2280 series PDU



Drawing 077



Drawing 078



Drawing 079



Drawing 080



Drawing 081



Drawing 082



Drawing 083



Drawing 084



Drawing 085



Drawing 086

AUE2280 is the new PDU product designed according to IEC60309 industrial standard.

## 7. SAFETY PRECAUTIONS

- 7.1. Before each use, check to confirm that the marked nominal voltage is same as the supply voltage used in your country or region. Use of any product with a different nominal voltage is forbidden.
- 7.2. For a safety power consumption and desirable lightening protection, please check your supply line carefully to make sure that such line is earth connected.
- 7.3. When the Product is equipped with AUEC-M30 power lightening protection module, the occurrence of followings shall be the cause to stop the use immediately. The Product shall then be immediately sent to a local authorized repair shop for further treatment.
  - 7.3.1. A working red light means the absence of earth connection of your power supply system, which shall be the case to call a professional to check the circuit. Earth wire shall be correctly connected till the disability of red light.
  - 7.3.2. A working yellow light indicates that live line L and null line N of your supply line are in wrong position. It is only reasonable to call a professional to check the supply line and to arrange live line and null line in correct positions till the disability of yellow light.
  - 7.3.3. Out-of-operation green light means that the lightening protection circuit is disabled.
- 7.4. For safety power consumption, please check the maximum power of electronics or electric equipment in a cabinet to ensure that such power is less than the maximum output power allowed in the system. Any overload application is strictly forbidden.
- 7.5. For a socket system equipped with an overload protective device, when fuse blows out and no power is supplied, please stop the power supply of connected equipment first, turn the knob on the overload protective device in a counter-clockwise direction to take out the disabled fuse tube. Change the disabled tube with a new one in the same specification, set the changed tube in the overload protective device and turn the knob in a clockwise direction, the device is now ready for a normal operation.
- 7.6. Outdoor use of this product is strictly forbidden.
- 7.7. Any unauthorized disassembly of the Product is not permitted. The manufacturer claims no responsibility for any losses or damages arising out of or in connection with such unauthorized disassembly.
- 7.8. Stop the power supply immediately at the detection of any defects of the Product, pull the cable plug out and deliver to a local authorized repair shop for further treatment.



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