

VK-ZPDU-V3 series Smart PDU function

I. INTRODUCTION

We produce all-Smart PDU to provide rich interface and management functions. Rich configuration, perfect function, users can choose the corresponding products according to the actual needs, very suitable for the use of large and medium-sized data centers, integrated computer rooms and other industries.

II. High performance indicators

1. Double-precision high-tech energy calculation can provide very accurate power metering and power factor data for a single socket.

2. Color LCD Display

The color LCD display screen is used to display the information of voltage, current, power factor, electric energy, IP address, temperature and humidity, CAN/485 hardware address and so on.

3. Provides real-time power monitoring

By using efficient data processing, it can not only provide real-time data such as input current, voltage, power, power factor, electric energy, frequency and so on. PDU, with the detection function of each socket, it can also provide the power output of each socket, and can display the current, power factor and electric energy of each socket in real time. Provides the function of graph image display.

4. Can switch on/off single socket remotely

The PDU, with each control function can control each socket through HTTP、SNMP、SSH and other network protocols to realize remote control function. At the same time, various protocols can provide encryption SSL, make remote control more secure and reliable.

5.PDU socket metering function

It can provide users with the basis to realize PUE accurate calculation, and can plan and optimize the energy consumption of the data center, thus providing the basis for the data center managers to reduce the cost of load balancing and setting IT environment.

6. Users can customize the alarm threshold, which can warn potential circuit overload by real-time local and remote alarm, thus reducing the risk.

7. Advanced switch function, it can realize user-defined logic control, can independently realize the switch action and schedule of each plug seat, and can take intelligent action according to the change of environment.

According to the current threshold and temperature threshold, the user can control the PDU output switch, and give a variety of alarm tips. The socket has the function of parameter replication, setting the parameters of one socket, can quickly copy to other sockets. At the same time PDU, each socket can switch the socket according to the time or time set by the user, and has 20 user-defined time or time editing functions to meet the user's complex logic control requirements.

8. Socket sort delay to avoid circuit overload and customize time

When switching socket or power on, the time interval between sockets can be set flexibly, which is beneficial to the stable operation of load and avoid surge.

9. Socket group management function

PDU, users with single socket management can customize socket grouping, and flexible socket grouping is beneficial to user classification management of socket. At the same time, the hardware is also independently divided into 3 groups, each group of 8 sockets. Electrical isolation is also achieved for every 8 bit socket of the three-phase PDU.

Users can access and configure multiple access controls through secure Web、SNMP、SSH or Telnet interfaces for ease of operation and integration.

11. Provision of isolation of 2 temperature/humidity sensors ,3 inputs and 1 output port

12. Provide isolation CANbus、RS485 serial networking

This PDU not only provides the common SNMP management function of data center, but also can collect data and control equipment through serial mode such as CAN bus and RS485. In small and medium-sized data centers or environments without network

conditions, the PDU can provide a variety of integration methods, easy for users to develop twice.

III. Rich network services

1. Provide HTTPS management, support TLS encryption authentication

HTTP support TLS1.0 the above standards, with a high level of security.

2. Provide SNMP v3 Agent, support DES or AES certification. Provide MD5 or SHA private encryption

Provide SNMP function, can be easily secondary development, facilitate other data center management software integration with SNMP network management function. At the same time SNMPv3 also provides encryption protection. Improve the safety and reliability of the equipment.

3. Support Telnet and SSH

Support network command line view and operation equipment, SSH provide network security encryption.

4. Support network firewall. provide packet filtering, anti- PING and other network protection. A more reliable level of network security

5. Provides NTP time synchronization settings

Network clock synchronization, this function can provide accurate device time in the case of device networking.

6. Provides run, event log and power time record

Event log mainly records device operation and alarm, operation log provides device data record, including device input and socket output information and power record.

7. Provide PDU configuration download and upload function, easy to set up

This function is mainly used for quick configuration of batch PDU. The user can set a PDU parameter, then download the parameter of the PDU, upload the parameter to other PDU, of the same type to realize the rapid configuration of the device. At the same time set parameters can also download backup. Once you need to reset, you can quickly configure and save time.

IV. Security and stability

1. Network security

Support TLS encryption authentication; support SNMPv3 encryption communication. The encryption mode is optional; supports SSH command line; supports SSL mail sending, supports network firewall.

2. Electrical Safety

All external sensor interfaces and communication interfaces are isolated. Further improve the electrical performance and communication safety of the equipment.

3. Memory Restitution

In the event of abnormal, recovery equipment, with memory state to maintain, rapid recovery.

4. Linux latest kernel version 4.0 and encryption library. Fix most system security vulnerabilities.

5. Provide online software upgrades to meet special scenario applications and reduce maintenance costs.

V. PRODUCT MODELS

Main functions	Monitoring Type VK-ZPDU-V3-M	Monitoring Control Type VK-ZPDU-V3-C
Input Electricity Detection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring of input voltage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring of input current	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring of input power	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring of input power factor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring of input frequency	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring of temperature/humidity status (optional)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Relay alarm output linkage (optional)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring of output current per socket	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring of output power per socket	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Set the upper/lower limit of output current per socket	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Electricity metering per socket output	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
On/off control per socket output	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Set each socket on/off interval	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Socket Group Management	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

VI. Appearance and Specifications

1. Level Installation Product Key Parameters Table

Output	
Rated output voltage	220Vac
Overload protection	Available
Maximum total current consumption	16A
Output connection	8 way C13 (Socket type optional)
Input	
Rated input voltage	200Vac/208Vac/230Vac
Input frequency	50/60 Hz
Acceptable input voltage	Vac 220-240
Cable Specification	H05VV-F3G=3*2.5 mm2-2 m
Bearing capacity	3700VA
Maximum input current	16A
Maximum line current	16A
Physical parameters	
Dimensions (mm)	440*165*44
Installation dimensions (mm)	485*162*44
Packing Size (mm)	
Net weight (KG)	
Gross weight (KG)	
Color	Black (customized)
Environment	
Working temperature	-5-45°C
Working relative humidity	5 - 95 %
Operating height	0-3000 m
Storage temperature	°C 25-65
Storage relative humidity	5 - 95 %
Storage height	0-15000 m
Compatibility	
Standard Quality Assurance	Maintenance within 2 years
RoHS	Compliance



Warm reminder: the above parameters only provide reference to prevent technical upgrade parameters change, it is recommended to consult online customer service this product is a parameter.

2. Main Parameters of Vertical Installation Products

Output	
Rated output voltage	220Vac
Overload protection	Available
Maximum total current consumption	16A /32A
Output connection	21way C13+3way C19 (Socket type optional)
Input	
Rated input voltage	200Vac/208Vac/230Vac
Input frequency	50/60 Hz
Acceptable input voltage	Vac 220-240
Length of cable	3 m
Bearing capacity	3700VA/7400VA
Maximum input current	16A /32A
Maximum line current	16A /32A
Physical parameters	
Dimensions (mm)	1860*56*58
Installation dimensions (mm)	
Packing Size (mm)	
Net weight (KG)	
Gross weight (KG)	
Color	Black (customized)
Environment	
Working temperature	-5-45°C
Working relative humidity	5 - 95 %
Operating height	0-3000 m
Storage temperature	°C 25-65
Storage relative humidity	5 - 95 %
Storage height	0-15000 m
Compatibility	
Standard Quality Assurance	Maintenance within 2 years
RoHS	Compliance



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3. panel definition



Number	Description	Number	Description
1	PDU input	7	Communication indicator
2	Socket output	8	Reset key
3	LCD display	9	Screen key
4	Network interface	10	Temperature and Temperature Sensor Interface
5	Input 485/ canbus interface	11	IO Input Detection Interface
6	Output 485/ canbus interface		