

SENDEF

iPDU H400 Programmable DC Power Distribution Units

- Software Controlled
SCPI over IP
- Touch Screen TFT LCD display for manual operation
- Long term data acquisition
- Current Limiting with Cutoff and Warn options
- Over/Under Voltage protection with different Warn and Cutoff levels
- 19" Rack mount



SENDEF iPDU Series DC Power Distribution Units (PDU) are designed and manufactured for use in industrial automation and automatic test systems. Unlike the SGDB series, iPDU's are designed to operate as standalone systems. However, management and monitoring through computer software is always possible.

Thanks to the touch screen on the front panel, units can always be managed without the need for an additional administrative software interface.

Current and voltage measurements are made with high precision for all output channels. Current limit can be set for each channel. When the specified limit is reached, it can be preferred to cutoff the channel automatically or keep it open with a audiovisual warning.

The Power Distribution Unit is designed as solid state in modular structure in BPS configuration. Each 5/6 channel is controlled by 1 microprocessor. Therefore, when it is detected that any channel has reached the set limit values, response is performed in a short time near 10 microseconds.

On the start up time a self test is executed. The main processor of the unit checks all channels and communication with submodules during to be sure that everything is working correctly. If the test is successful, it goes into normal operating mode and connects the voltage applied to the input to other internal units.

During normal operation, communication with all channels and submodules is constantly monitored. In this way, if a situation occurs where the main processor cannot control due to any malfunction, the input voltage is isolated from the output very quickly. This isolation is provided by high capacity circuit breaker(s) located at the input.

This isolation mechanism can also be triggered both by a physical Emergency Stop Button and the soft-button on the PDU Manager software. More than one PDU's can be controlled with a single Emergency Stop Button by making a chain connection through the Emergency Stop Connector on the unit. In addition, each output channel is also protected by a thermal fuse.

Besides firmware updates, basic settings like IP address, etc., can be made when necessary, via the Serial Interfaces on the front panel of the unit. In addition, detailed information can be obtained at the lower level about the status of unit's subcomponents when necessary. The start up test stages can also be monitored via those serial interfaces.

The front panel also includes a time counter (ETI) that shows how long the unit has been active; input voltage, network connection, data exchange and fault indicators, and output LED indicators directly connected to each output channel.

Features

- *Can be integrated to SGDB Series 28VDC/270VDC vs AC115/380 PDU's*
- *Can be integrated to iPDU Series PDU's and iPSU Series Power Supply Units*
- *Management via PDU Manager and long term data acquisition*
- *10 Microsecond current limit response time*
- *1% Measurement accuracy*
- *Capacity dimensioning owing to modular structure*

iPDU-H400-28DC



A standalone, 20-30VDC Power Distribution Unit, with a large 7-inch touch screen, eliminating the requirement for a computer interface or remote management unit.

There are a total of 25 output channels which can be configured in different current capacities.

Current limit can be determined for each channel. Additionally, there are “warn and continue” and “cut off” options when the channel reaches the current limit.

Sequential turn on and off options are available at user-specified time intervals. (If controlled via PDU Manager, 4 nested level on/off scenarios can be created. For details, please review the PDU Manager section of this document.)

The unit has also high/low voltage protection. Levels are determined at the production stage in line with user demand.

The screen design has the same structure as the PDU Manager screen. In this way, the user does not need to learn different interfaces. This provides ease of operation.

PDU_28_GK1 K051A 28.7v 0.2A DC LIMIT 5.0 A ON NORMAL	PDU_28_GK1 K051B 28.7v 3.1A DC LIMIT 5.0 A ON NORMAL	PDU_28_GK1 K051C 28.7v 1.3A DC LIMIT 5.0 A ON NORMAL	PDU_28_GK1 K051D 28.7v 2.2A DC LIMIT 5.0 A ON NORMAL	PDU_28_GK1 K051E 28.7v 4.5A DC LIMIT 5.0 A ON NORMAL	ON
PDU_28_GK1 K101A 0.1v 0.1A DC LIMIT 10.0 A OFF NORMAL	PDU_28_GK1 K101B 0.1v 0.1A DC LIMIT 10.0 A OFF NORMAL	PDU_28_GK1 K101C 0.1v 0.0A DC LIMIT 10.0 A OFF NORMAL	PDU_28_GK1 K101D 28.7v 7.2A DC LIMIT 10.0 A ON NORMAL	PDU_28_GK1 K101E 28.7v 9.5A DC LIMIT 10.0 A ON NORMAL	LIMITS
PDU_28_GK1 K201A 28.7v 0.2A DC LIMIT 20.0 A ON NORMAL	PDU_28_GK1 K201B 28.7v 6.8A DC LIMIT 20.0 A ON NORMAL	PDU_28_GK1 K201C 0.1v 0.0A DC LIMIT 20.0 A OFF NORMAL	PDU_28_GK1 K201D 0.1v 0.1A DC LIMIT 20.0 A OFF NORMAL	PDU_28_GK1 K201E 0.2v 0.1A DC LIMIT 20.0 A OFF NORMAL	TIMINGS
PDU_28_GK1 K301A 0.1v 0.1A DC LIMIT 30.0 A OFF NORMAL	PDU_28_GK1 K301B 28.7v 3.6A DC LIMIT 30.0 A ON NORMAL	PDU_28_GK1 K301C 0.2v 0.1A DC LIMIT 30.0 A OFF NORMAL	PDU_28_GK1 K301D 28.7v 11.2A DC LIMIT 30.0 A ON NORMAL	PDU_28_GK1 K301E 0.1v 0.1A DC LIMIT 30.0 A OFF NORMAL	AUTO
					NETWORK
					INFO
					HELP

The unit supports 15 LP (up to 10 amps) and 10 HP (up to 30 amps) output channels and can be ordered in different configurations according to user requirements. For example:

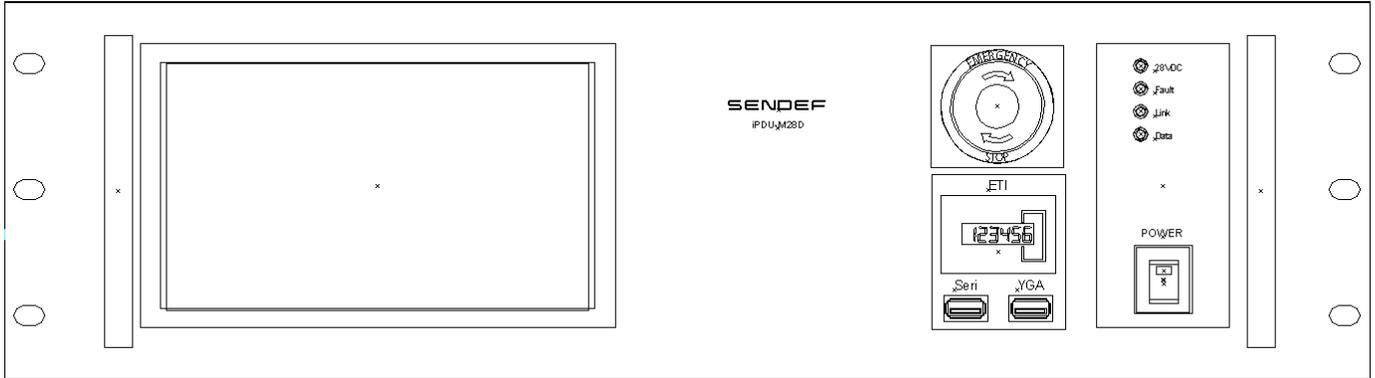
- 25x10A, a total of 250A
- 10x5A, 5x10A, 5x20A, 5x30A, a total of 350A
- 15x10A, 10x20A, a total of 350A
- 15x10A, 5x20A, 5x30A a total of 400A,

are some of the alternative configurations.

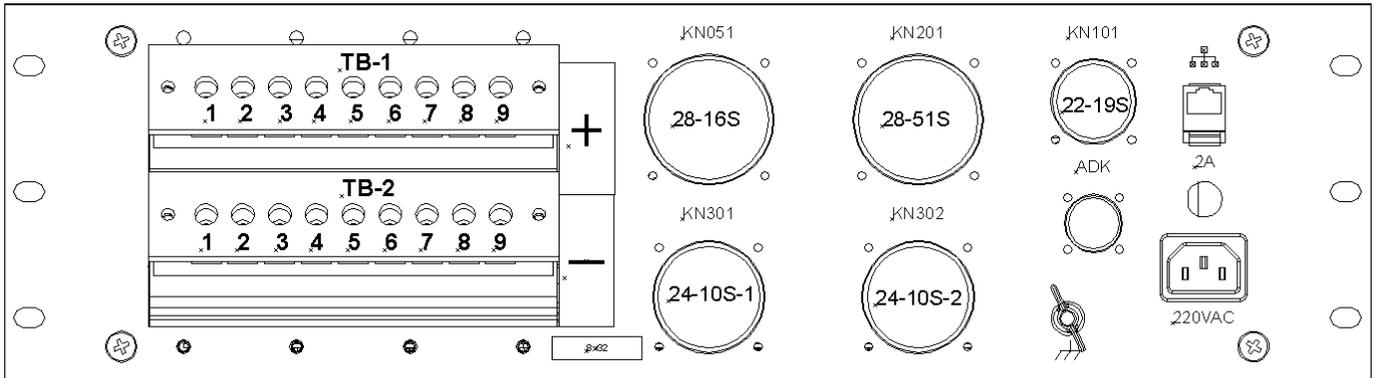
Specifications

PDU	Unit	Value
1.Input Voltage	V	19.5-30VDC
2.Switching Capacity	A	Upto 400 amps depending on the configuration
3.Output Channels	---	25
5.Total Power	W	12.000
6. Measurement Accuracy	%	1 (at max value of channel)
7. Current Limit Response Time	μ S	~10
8. Output Connectors	---	MIL-DTL-5015
9. Input Connectors	---	9 Pole Terminal Block
10. Aux Power Input	V	85-265VAC
11. Protection Contactor Interrupt Current	A	500
12. LAN	Mbit	10/100
13. Serial Communication	---	USB 2.0
14. Cooling	---	Convection
15. Dimensions	mm	482(W) x 133(H) x 600(D)

iPDU H400-28 Main Chassis Mechanical Outline²



iPDU-H400-28 Front



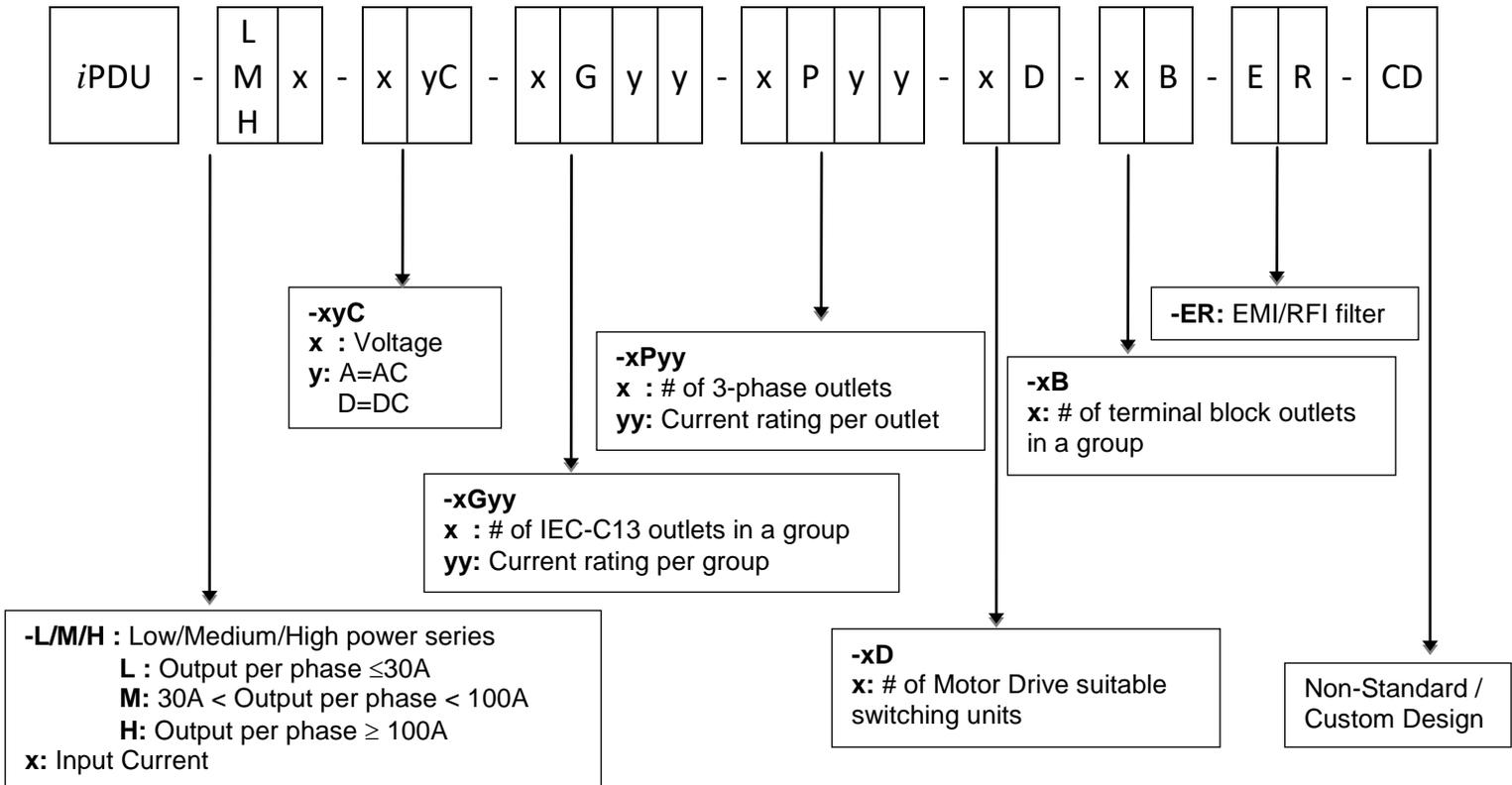
iPDU-H400-28 Back

Dimensions:(Based on iPDU-M60-3G30-3P30)

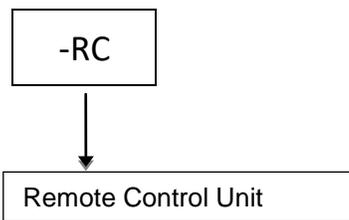
- Front : 482.6mm x 177.3mm (4U)
- Back : 425mm x 131.5mm
- Depth :420mm (excluding handles and connectors)

² Drawings are for reference only. Not to scale. The design depends on the model and the options.

iPDU Series Power Distribution Units Part Number Guide



* Some of the options are mutually exclusive. e.g. a DC unit can not be configured with 3-phase outputs. Please check before ordering.



SENDEF™ and iPDU™ are Registered Trade Marks of Sendef Savunma Inc.

SENDEF

Contact

Sendef Savunma Inc.

Macun Mahallesi 177. Cad. No:28/67 Yenimahalle 06105 Ankara Türkiye

0312 544 0220

contact@sendef.com.tr

www.sendef.com.tr