

128, av. du Maréchal-de-Lattre-de-Tassigny - 87045 LIMOGES Cedex - France Tel: +33 (0)5 55 06 87 87 Fax: +33 (0)5 55 06 88 88 www.legrandgroup.com

# PDU SWITCHED BASE 0U, 1 PHASE 32A, 21 C13 + 3 C19 LOCKING OUTLETS, IEC 60309

#### Cat. No: 6 461 24/62

CONTENTS	Page
<ol> <li>KEY FEATURES</li> <li>GENERAL SPECIFICATIONS</li> <li>INPUT</li> <li>OUTPUT</li> <li>CONTROLLER</li> <li>CASCADING MODES</li> <li>MECHANICAL FEATURES</li> <li>ENVIRONMENTAL CHARACTERISTICS</li> <li>ELECTRICAL DIAGRAM</li> <li>DIMENSIONS</li> <li>MOUNTING SOLUTIONS</li> <li>PACKAGING</li> <li>STANDARDS AND REGULATIONS</li> </ol>	2 2 3 4 4 4 5 5 6 7

## **1. KEY FEATURES**

Linkeo Data Center intelligent PDUs provide electric power for IT equipment in 19" enclosures. They are connected devices enabling remote access to all measurements and alerts.

- Modular concept: available in 2 versions, NODE version with all functions (controller with LCD screen and LAN connection) and BASE version. Deploy intelligent PDUs without the need to have a PDU controller in every unit.

- Cascading possibilities to save switch ports connections. Daisy-chain up to 31 BASE PDUs downstream to a NODE PDU.
- Hot swappable controller. Allow the replacement on a NODE PDU or the adding on a BASE PDU without powering down connected equipment.
- 2 levels of alerts physically visible on the PDU thanks to LED bar and remotely in Web User interface.
- Metering at inlet and circuit level with +/- 1% accuracy.
- User-friendly and responsive Web User Interface. Data aggregation capabilities in DCIM.
- Each C13 and C19 outlets are numbered and equipped with a cord locking system.
- The circuits of the 32A PDUs are protected with hydraulic magnetic circuit breakers. Hydraulic magnetic circuit breakers are not affected by ambient temperature.

- Easy installation thanks to 330° rotating cable input and button-type brackets.

CONTENTS

## 2. GENERAL SPECIFICATIONS

Energy Metering	Voltage (V), Current (A), Active Power (kW), Apparent Power (kVA), Energy (kWh), Power Factor	
Metering Accuracy	±1%	
Metering per Input Phase	Yes	
Metering per Branch Circuit Breaker	Yes	
Metering per Outlet	No	
Remote Outlet Switching	Yes - Remotely on/off control of each outlet via the Web User Interface Outlet's state is also visible on the product itself thanks to a small LED adjacent to each outlet. LED lits green when the outlet is ON	
With display	No	
Networking	via the Ethernet port of the upstream Node PDU	
RS485 Cascading	Yes Daisy chain up to 31 BASE PDUs downstream to a NODE PDU by RS485 bus (ethernet RJ45 patchcord). Max length: 250m in total and 30m between each PDU.	
USB Cascading	No	
Remote management	HTTP(s), SSH, Telnet, SNMP version v2/v3, SMTP, JSON-RPC, Modbus over TCP	
Built-in processor	No	
Wireless connectivity	Yes, Zigbee 2.4 GHz chip embedded	
Compatible Sensors	Wireless sensors (Green Power) - Temperature/Humidity (cat number 6 460 03) - Contact closure (cat number 6 460 04) A maximum of 8 sensors can be paired to 1 PDU	
Replaceable controller	Yes - Hot swappable for node - Cold swappable for base	

# 3. INPUT

Input Plug	IEC 60309 32A 2P+E
Cord Length	3m - 9.84 ft
Cord Entry	Rotating (330°), bottom front
Cable Type	HO7RNF 3G6 LSZH
Maximum Input Current	32A
Nominal Input Voltage	230V, Single-phase
Rated Input Voltage	200 - 240V
Input Frequency	50/60Hz
Power Capacity	7.4kW at 230V

## 4. OUTPUT

Nominal Output Voltage	230V
Outlet type	21 C13 + 3 C19
Cord locking system	Yes
Cord Retention	100 N
Circuit breakers	Yes
Circuit breakers type	Magnetic Hydraulic (curve D)

Technical data sheet: FT-646124-EN-02

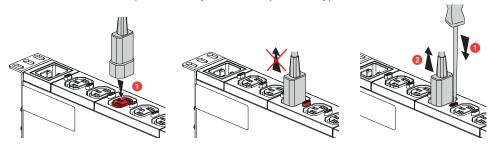
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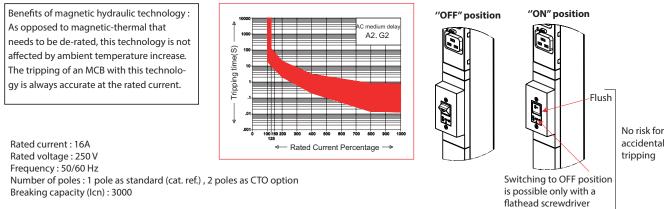
#### Cable locking system on C13/C19 sockets

The cable is locked mechanically into the socket to prevent any unintended disconnection (caused by maintenance, vibrations, etc.). Pull-out force 100 N

This universal solution is compatible with any standard compliant cord type on the market.



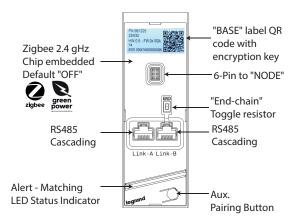
#### Magnetic hydraulic MCB



Approvals : UL/CSA, VDE, CCC

## **5. CONTROLLER**

## Base

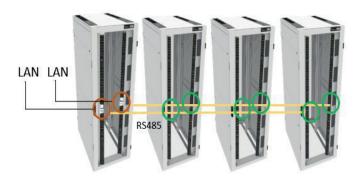


Networking	Via the NODE controller only
Wireless control (radio frequency)	Button for pairing wireless sensors
LED indicator	RGB LED for visual indication and replicating configured alerts Normal operation Warning threshold exceeded Critical threshold exceeded Wireless sensors pairing in progress

## 6. CASCADING MODE

## 6.1 RS485 - CASCADING

- Daisy chain up to 31 BASE PDUs downstream to a NODE PDU with Cat5e or higher RJ 45 patch cables (RS485 link).
- Only the NODE PDU is connected to your network.
- NODE controller aggregates all BASE units data into its user interface.
- Thresholds and alerts are configured directly in the NODE unit.



NODE BASE BASE

LAN

## Deployment illustration with one daisy-chain on feed A and one daisy-chain on feed B

# 7. MECHANICAL FEATURES

- Casings: 6060 T5-R19 natural anodised aluminium.

- Outlet modules:

PC/ABS

CW507L (CuZn 36) brass

- Fixing brackets:

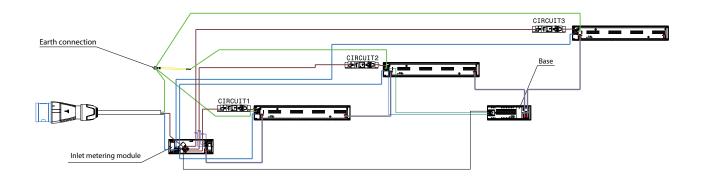
DC01-A-m galvanised steel

Color	Aluminium grey (casing) / black (outlet modules)
Casing	Zero-U, aluminium
IP	20
IK	04

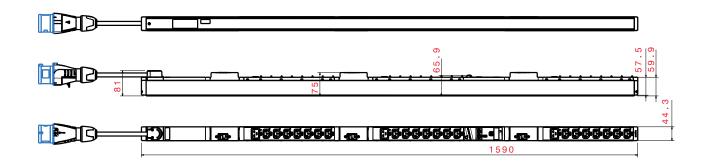
## 8. ENVIRONMENTAL CHARACTERISTICS

Storage and transport tempe- rature	-20 to +70°C
Operating temperature	+5°C to +60°C
Operating Relative Humidity	5% to 95%
Operating Elevation	0 - 2000 m

## 9. ELECTRICAL DIAGRAM



**10. DIMENSIONS** 



#### Technical data sheet: FT-646124-EN-02

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## **11. MOUNTING SOLUTIONS**

## 11.1 INCLUDED

Delivered with 2 different sets for mounting in a rack.

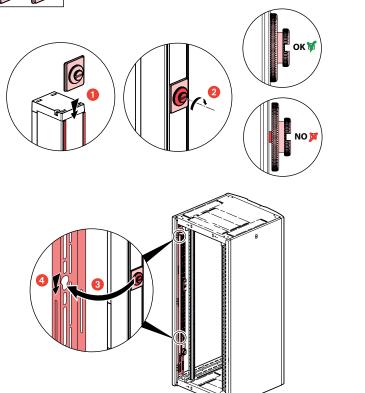
#### Set of 2 buttons

Screwless fixing. The height of the fixing centre can be set at any point along the full height of the PDU by sliding the button slots into the groove on the rear of the PDU. Tightened using a screwdriver.

**Button dimensions** 

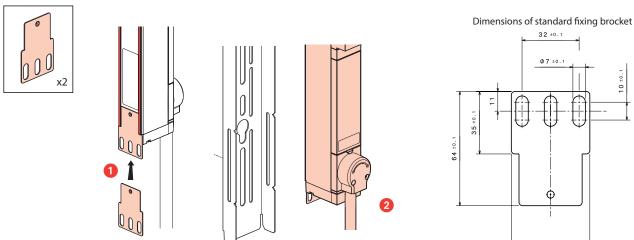
014 ±0.2





Set of 2 standard fixing brackets

Screw-fixing (screws not included).



Fixing centres (min.-max.) with standard brackets : 1602mm -1622mm

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44 ±0.1



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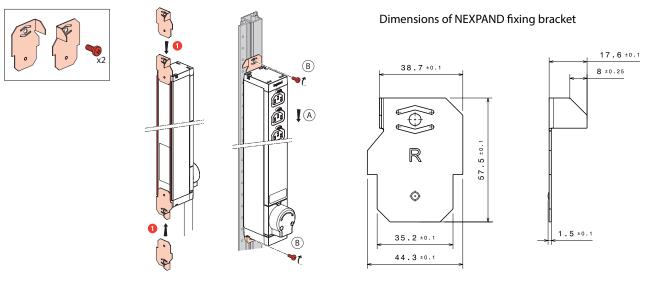
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10±0.1

#### 11.2 OPTION

#### **Brackets for Nexpand racks**

Screw-fixing (2 screws included). Ref. 981227 Set of 2 brackets (for 1 PDU) Ref. 981228 Set of 20 brackets (for 10 PDUs)



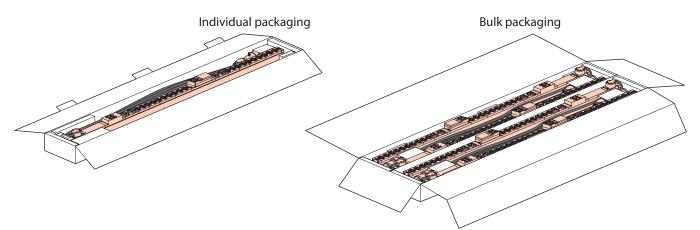
### **12. PACKAGING**

	Individual packaging	Bulk packaging*
Cat. Ref	6 461 24	6 461 62

Linkeo Data Center PDUs can be delivered in two different types of packaging

- Individual packaging : 1 PDU in 1pack

- Bulk packaging : a set of 4 PDUs in 1 pack



Bulk packaging aims to facilitate and lighten the management of products, but also to reduce the environmental impact.

- Unpack and deploy PDUs faster

- Save time and money for waste treatment: bulk packaging saves more than 50% cardboard per PDU compared to individual packaging. - Contribute to reducing carbon emission : bulk packaging makes it possible to ship up to 86% more units on a single pallet compared to individual packaging (56 PDUs versus 30)

\* The bulk packaging option is open to PDUs between 1126mm and 1765mm in length.

Single-use plastic is eliminated in both individual and bulk packaging.

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## **13. STANDARDS AND REGULATIONS**

## 13.1 STANDARDS

Application	Standards
Safety	IEC 62368-1
C13 and C19 connectors for electrical equipment	IEC 60320-2-2
	IEC 62368-1
Circuit breakers	IEC 60934
	IEC 60947-2
Industrial plugs	IEC 60309-1
Information and communication technology equipment	IEC 62368-1
Electromagnetic compatibility for radio equipment and services	EN 301489 (ETSI EN 301 489-1 V2.2.3, ETSI EN 301 489-17 V3.2.4)
Radio transmission equipment	ETSI EN 300 328-1
	(V2.2.2 2020-02-08)
Electromagnetic compatibility	EN 62311 (2008) EMF
	EN 50491-5-2
	EN 50491-5-3
	EN 55035
	EN 55032
	EN 61000-4-11
	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
	EN 61000-4-6
	EN 61000-3-2

## **13.2 REGULATORY APPROVALS**

CE, UKCA, CMIM

RoHS directive (Restriction of Hazardous Substances).

REACH regulations (Registration, Evaluation, Authorisation & restriction of CHemicals).