

FP2 48V/300A 4U distribution with Smartpack2



Versatile and powerful solution for any application

The combination of high efficiency, power density and reliability makes the Flatpack2 a product family that truly stands out and provides unparalleled network availability. The versatility of the Flatpack2 rectifier and Smartpack2 controller means that it can be used in a wide variety of DC Telecom applications, both for fixed grid and alternative energy, across the globe.

Applications

Wireless, fiber and fixed line communication

Today's communications demand state of the art, efficient and compact DC power systems. Flatpack2 delivers an industry leading power density, efficiency and superb reliability at lowest lifetime cost

Broadband and network access

Increasing network speed demands flexible and expandable DC power solutions. The Flatpack2 rectifiers combined with Smartpack2 controller are your key building blocks for future needs.

Small and large

Due to the high power density, cost competitive design and a highly flexible system communication interface, Flatpack2 rectifiers are used in system solutions from 5kW to 288 kW.

Product Description

The 4U distribution has been specially designed to meet the demand for compact and flexible DC power solutions. Plug-in battery breakers give very simple replacement and expansion. The load part can be configured with 13, 18 or 27mm DIN rail breakers. Unique DIN rail breaker interface gives very simple breaker replacement and can handle all standard brands.

As basic the system comes with 8x18mm DIN rail position. But can easily be configured with additional 1 or 2 load breaker sections, each of 6x18mm. Each section can hold optional disconnection of low priority load.

The power system is monitored by Smartpack2 controller which has all the functionality required in present and future applications. Included in the 4U distribution is 1 rectifier shelf, which can house four FP2 rectifiers. Simple expansion, with one extra shelf, housing totally 8 rectifiers (48V/300A).

Highly Configurable

Basic system:

- 19"/4U distribution chassis and copper bars
- One FP2 power shelf
- Hinged front door with Smartpack2 master controller
- Smartpack2 Basic controller and I/O monitor
- Four plug-in battery breaker positions
- Eight 18mm DIN rail breaker positions
- Low volt battery disconnect
- Temperature sensor
- Mains input terminals

Configurable options

- FP2 power shelf
- Battery breaker: 1- 4 x 100A or 1-2 x 200A:
- Load breaker sections: 1-2 x 6/4 positions (18/27mm), optional 150A LVLD
- Load breakers: Max 20 x 18mm
- Blank panel for unused breaker positions
- AC surge protection
- Chassis top cover

Configurations on request

- 10 battery breaker positions
- 13mm DIN rail load breakers positions (max 26)
- Plug-in load breaker positions (max 10)
- 300A LVLD

FP2 48/300A Integrated Power Supply System

Additional Technical Specifications

AC Input	
Voltage	230 VAC, single phase 230 VAC, 3 phase (Δ) 230/400VAC, 3 phase (Y)
Maximum Current	49A@230V AC 3ph nominal 28A@230/400V AC 3ph nominal
Connection	Max 10mm ²
More details	See Flatpack2 rectifier datasheet

DC Output	
Voltage	48 VDC
Current	5U Max. 150A (with FP2 2kW) 6U Max. 300A (with FP2 2kW)

Monitoring and Control	
Mounting	Door/panel mounted
Local operation	Self-explanatory menu guided operation via touch-pad and graphical colour display
Remote operation	Ethernet for remote/local monitoring and control via WEB Browser
More details	See Smartpack2 datasheet

Other Specifications	
Operating temp.	-40 to +45°C (-40 to +113°F) +45 to +70°C with de-rated performance (+113 to +158°F)
Storage temp.	-40 to +85°C (-40 to +185°F)
Dimensions WxHxD	482 x 380 x 267mm (6U high) 19 x 14.9 x 10.5" Recommended cabinet depth is min 400 mm (15.7")
Weight	Approx. 5kg (11lbs) excl. rectifiers
Applicable Standards	
Electrical safety	IEC 60950-1 UL 60950-1
EMC	- ETSI EN 300 386 V.1.3.2 (telecommunication network) - EN 61000-6-1 (immunity, light industry) - EN 61000-6-2 (immunity, industry) - EN 61000-6-3 (emission, light industry) - EN 61000-6-4 (emission, industry)
Environment	ETSI EN 300 019 ETSI EN 300 132-2

Distribution details						
	Breaker type	Default Positions	Rating	Expandable positions	Low volt disconnect	Connection
Battery	Pluggable	4	4x100A or 2x200A	On request	Default (300A)	M8 studs for crimp terminal
Load	18mm DIN rail	8	2-63A	12 (sections of 6)	Optional (2x150A)	16-25mm ² depending on brand

Ordering Information

Part no.	Description
241115.105	Flatpack2 Rectifier, 48V 2kW HE (rectifier option I) "High Efficiency"
241115.100	Flatpack2 Rectifier, 48V 2kW (rectifier option II)
CTOxxx	FP 48V power system (to be ordered through standard CTO Process)

Specifications are subject to change without notice

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www.eltektvalere.com

Headquarters:
Eltek Valere

1303 E. Arapaho Rd, Richardson, TX. 75081, USA
Phone: +1 (469) 330-9100 Fax: +1 (469) 330-9101

Eltek Valere

Gråterudv. 8, PB 2340 Strømsø, 3003 Drammen, Norway
Phone: +47 32 20 32 00 Fax: +47 32 20 32 10



ELTEK VALERE