

Flatpack2 power system

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 in combination with advanced control and monitoring means that it can be used in a wide variety of DC Telecom applications, both for fixed grid and alternative energy across the globe.



Flatpack2, 5U-7U Integrated DC Power supply system, 300A / 500A

Doc M20405.401.DS3 – rev6

APPLICATIONS

TELECOM – MOBILE / WIRELESS

- Radio Base stations/ Cell Sites
- LTE / 4G / WiMAX
- Distributed Antenna Systems
- Microwave
- Broadband

TELECOM – FIXED

- Telephony servers / switches
- Fiber Optics / FTTx
- Microwave
- Cable
- Broadband

PRODUCT DESCRIPTION

The 4U distribution is designed to meet the demand for compact and flexible DC power solutions.

Its highly configurable design is based on building blocks and offers a variety of configurations depending on power, controller, battery section and load section.

Pluggable battery breakers and DIN mounted load breakers ensures easy configurability as well as “in field” replacement.

The power system has two controller options, Smartpack2 or Smartpack S, which both has all the functionality required in present and future applications.

KEY FEATURES

- COMPLETE SYSTEM
- SMARTPACK2 OR SMARTPACK S CONTROLLER
- SUPER HIGH EFFICIENCY RECTIFIERS
- HOT PLUGGABLE MODULES
- 19” / 4U DISTRIBUTION CHASSIS
- UPTO 8X BATTERY BREAKERS
- LVBD
- UPTO 20X LOAD BREAKER POSITIONS
- LVLD (OPTIONAL)
- GLOBAL APPROVALS



Flatpack 2 48/2000 SHE rectifier

Flatpack2, 5U-7U Integrated



Doc M20405.401.DS3 – rev6

MODEL	300A DISTRIBUTION	500A DISTRIBUTION
Part number (Configured power system)	CTOxxxxx.nnnn	CTOxxxxx.nnnn
POWER MODULE		
Flatpack2 rectifier ¹⁾	Flatpack2 48/2000 HE or SHE Flatpack2 48/3000 HE or SHE	
INPUT DATA		
Voltage (range)	85-300 VAC (HE module) 85-264 VAC (SHE module)	
Frequency	45-66 Hz	
Mains configuration	1p230 V _{AC} TN / 3p400 V _{AC} TN / 3p230 V _{AC} IT	2x 3p400 V _{AC} TN / 2x 3p230 V _{AC} IT
Connection	Terminal blocks, 10 mm ² max	
OUTPUT DATA		
Voltage	-48 V _{DC}	-48 V _{DC}
Current (maximum)	300 A	500 A
BATTERY DISTRIBUTION		
Number of breaker positions	4x or 6x 100 A	8x 100 A
LVBD	300 A (default)	500 A (default)
Battery breaker type	Plug-in type	
LOAD DISTRIBUTION		
Number of load positions	Up to 20x 18 mm	Up to 16x 18 mm
LVLVD (optional)	Up to 2x 150 A or 1x 300 A (max 6x 18 mm or 4x 27 mm on each LVLVD)	150 A (max 6x 18 mm or 4x 27 mm on LVLVD)
Load breaker type	DIN rail mounted, 18 mm and 27 mm wide (13 mm wide MCBs and plug-in type breakers on request) Configurable with all brands	
CONTROL AND MONITORING		
Control and Monitoring unit ²⁾	Smartpack2 or Smartpack S	Smartpack2
Mounting location	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	
OTHER SPECIFICATIONS		
Operating temperature	-40 to +70 °C [-40 to +158 °F] ³⁾	
Storage temperature	-40 to +85 °C [-40 to +185 °F]	
Dimensions (W x D x H) ⁴⁾	482 x 380 x H mm [19 x 14.9 x H inch] Height (H): - 5U: 222 mm [8.8 inch] - 6U: 267 mm [10.5 inch]	482 x 380 x H mm [19 x 14.9 x H inch] Height (H): - 6U: 267 mm [10.5 inch] - 7U: 311 mm [12.3 inch]
Weight (excluding modules)	Approximately 5 kg [11 lbs]	
DESIGN STANDARDS		
Electrical safety	IEC/UL 60950-1	
EMC	ETSI EN 300 386 v1.3.2 EN 61000-6-1 /-2 /-3 /-4	
Environment	ETSI EN 300 019-2-1 (Class 1.2) /-2 (Class 2.3) /-3 (Class 3.2) ETSI EN 300 132-2 Normal operating conditions as per IEC 62040-5-3:2016 clause 4.2. Other operating conditions as per IEC 62040-5-3:2016 clause 4.3, must be advised	
1)	See Flatpack2 rectifier datasheet for details	3) +45 to +70 °C [+113 to +158 °F] with de-rated performance
2)	See controller datasheet for details	4) Recommended minimum cabinet depth is 400 mm [15.7 inch]

Doc M20405.401.DS3 – rev6

Specifications are subject to change without notice