Flatpack S 2U Shelves

High Efficiency DC Power System

Overview

The Flatpack S 2U DC power system delivers up to 200 A to applications where space is limited. Use of the highly-efficient and reliable Flatpack S rectifier, the advanced Smartpack S controller, and remarkably flexible front-access distribution make for optimal system design and cost-effective deployment.

FLATPACK S 2U

HIGH-EFFICIENCY DC POWER SYSTEM

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APPLICATIONS

The Eltek Flatpack S 2U system is a high-efficiency power solution with an optimal footprint for up to 200A applications where space is limited – both in racks and various cabinet installations.

The Flatpack S 2U is a two rack-unit high system that delivers 24V and 48V DC power to telecom infrastructure that include: 4G/LTE, FTTX, distributed antenna systems (DAS), microwave broadband, cable broadband, telephony servers and switches and fiber-optics.

PRODUCT DESCRIPTION

The compact size of the system makes it perfect for use in 19″ or 23″ wide racks and cabinets. And at 2U high, there's more room for technicians to connect cables and work inside the system. Horizontal cabling reduces vertical space requirements and connections are all front or rear access. Built as a plug-and-play system, the Flatpack S 2U reduces installation time and enables cost-effective deployment.

Eltek's Flatpack S high-efficiency rectifiers power the Flatpack S 2U, and typically achieve efficiency levels above 95 percent at 48V DC output.

When combined with Eltek's advanced Smartpack S controller, the system provides remote monitoring, maintenance and data collection.

KEY FEATURES

- **COMPACT DESIGN**
  Small overall dimensions are ideal for both rack and cabinet applications.
- **FRONT/SIDE OR REAR ACCESS CONNECTIONS**
  The AC connections, DC loads and controller connections (alarms, communication, etc.) are all front or all rear access. Horizontal cabling reduces vertical space requirements.
- **DIGITAL CONTROLLER**
  The Smartpack S digital controller system provides comprehensive monitoring and regulation by utilizing a variety of specialized data collection.
- **HEAT MANAGEMENT**
  Flatpack S modules feature front-to-back airflow and chassis-integrated heat-sinks, supplementing high-efficiency energy conversion with excellent heat management.
- **COST-EFFICIENCY**
  A true plug-and-play system, the Flatpack S 2U system reduces both time-to-install and overall costs.

FLATPACK S 2U

ELTEK™

INPUT SPECIFICATIONS

Input Voltage	100V – 250V AC or DC (full output power above 185 V)
Input Connections	Individual Feed using AMP MATE-N-LOK connectors (optional input cables with a single plug and two MATE-N-LOK connectors, to power two rectifiers per line cord)

OUTPUT SPECIFICATIONS

	24V	48V
Nominal Voltage	27.00 V DC	54.00 V DC
Operating Voltage Range	22.00 – 27.00 V DC	47.00 – 57.7 V DC
Maximum Power (Input at >185 V)	5.4 kW*	10.8 kW*
Maximum Current	200A	200A

PHYSICAL ATTRIBUTES

Shelf Dimensions (H x W x D)	3.5" x 19" x 12" ("I" systems), 3.5" x 19" x 14" ("K" systems),
Rack Requirements	19" ANSI/EIA 310-D and 23" racks with extender brackets (sold separately)
Weight	21 lbs. without rectifiers or controller

OUTPUT DISTRIBUTION

	I System	K System
Breakers	Four (4) bullet-style breaker positions (dry contact breakers, sold separately)	Six (6) bullet-style breaker positions (dry contact breakers, sold separately)
Bulk	Two (2) Connections (top access required)	One (1) Connection (rear access required)
GMT Fuses	Ten (10) GMT fuses (fuses sold separately)	Ten (10) GMT fuses (fuses sold separately)
LVBD	Optional battery low voltage disconnect	Optional battery low voltage disconnect

OTHER SPECIFICATIONS

Operating temperature	-40°C to 65°C (-40°F to +149°F) full output power below 45°C (113°F)
Storage temperature	-40°C to +70°C (-40°F to +158°F)

STANDARDS

Electrical Safety	UL/CSA 60950-1, 2nd edition IEC 60950-1, 2nd edition
EMI/EMC	GR-1089-CORE
Environment	GR-63-CORE Directive 2011/65/EU (RoHS2)

SHELF PART NUMBERS

SHELF PART NUMBERS	Connections	AC Feed	Nominal Output Voltage	Battery LVD (LVBD)	Number of Battery Breakers	Number of Load Breakers	Number of GMT Fuses	Bulk Connection (access required)
FPSI50I-ANL-VC	Front/side	Individual	-48V	Yes	0	4	10	Battery (top)
FPSI50I-ANS-VC	Front/side	Individual	-48V	No	0	4	10	Battery (top)
FPSI56I-ANL-VC	Front/side	Individual	-48V	Yes	2	2	10	Load (top)
FPSI56I-ANS-VC	Front/side	Individual	-48V	No	2	2	10	Load (top)
FPSI56I-BPL-VC	Front/side	Individual	+24V	Yes	2	2	10	Load (top)
FPSK59I-ANL-VC	Rear	Individual	-48V	Yes	2	4	10	Load (rear)
FPSK59I-ANS-VC	Rear	Individual	-48V	No	2	4	10	Load (rear)
FPSK59I-BPL-VC	Rear	Individual	+24V	Yes	2	4	10	Load (rear)
FPSK59I-BPS-VC	Rear	Individual	+24V	No	2	4	10	Load (rear)

CONTROLLER PART NUMBERS (SOLD SEPARATELY)

SPS-FPS200-A01-VV	48V shelves with standard profile
SPS-FPS200-B01-VV	24V shelves with standard profile

RECTIFIER PART NUMBERS (SOLD SEPARATELY)

241122.105.VC	Flatpack S 48/1000 HE with CLEI
241122.125.VC	Flatpack S 48/1800 HE with CLEI
241122.205	Flatpack S 24/1000 HE
241122.930	Flatpack S Blind Panel

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* Actual value depends on the rectifiers installed; see rectifier datasheet.

Specifications are subject to change without notice.