

# Flatpack S – Intrepid Series

## 1U High Efficiency DC Power System

### Overview

Increasing network speed demands flexible and expandable DC power solutions. Due to its small size, high efficiency, reliability and wide range of communication, the Flatpack S Intrepid Series Systems are the key for future needs. The shallow depth makes the system suitable for most cabinets and thereby excellent as a replacement unit.



# FLATPACK S 1U

## HIGH-EFFICIENCY DC POWER SYSTEM

Doc 370012.DS3 Issue 2.1

### APPLICATIONS

The Eltek Flatpack S 1U system is a high-efficiency power solution with an optimal footprint for applications where space is limited – both in racks and various cabinet installations.

The Flatpack S 1U is a one rack-unit high system that delivers 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. Built as a plug-and-play system, the Flatpack S 1U reduces installation time and enables cost-effective deployment.



Smartpack S Controller



Flatpack S 48V 1800W Rectifier

### KEY FEATURES

- **COMPACT DESIGN**  
Small overall dimensions are ideal for both rack and cabinet applications.
- **SIDE / REAR ACCESS CONNECTIONS**  
DC loads and controller connections (alarms, communication, etc.) are front accessible. The AC connections and battery connections are rear.
- **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 1U system reduces both time-to-install and overall costs.

## INPUT SPECIFICATIONS

|                   |   |
|-------------------|---|
| Input Voltage     | 100V – 250V AC or DC (full output power above 185 V)  |
| Input Connections | Individual Feed using MATE-N-LOK connectors. AC line cords are available to convert shelves into Dual Feed. |

## OUTPUT SPECIFICATIONS

|                                 |                     |
|---------------------------------|---------------------|
|                                 | 48V                 |
| Nominal Voltage                 | 54.00 V DC          |
| Operating Voltage Range         | 47.00 – 57.7 V DC   |
| Maximum Power (Input at >185 V) | 5.4 kW <sup>1</sup> |
| Maximum Rated Current           | 80A                 |

## PHYSICAL ATTRIBUTES

|                              |   |
|------------------------------|---|
| Shelf Dimensions (H x W x D) | 1.75" x 19" x 11.875"   |
| Rack Requirements            | 19" ANSI/EIA 310-D and 23" racks with extender brackets (sold separately) |
| Weight                       | 12 lbs. without rectifiers or controller                                  |

## OUTPUT DISTRIBUTION SPECIFICATIONS

|           |   |
|-----------|---|
| Breakers  | Four (4) bullet-style breaker positions, 60 & 62 circuits only (dry contact breakers, sold separately)<br>Two (2) bullet-style breaker positions, 65 & 66 circuits only (dry contact breakers, sold separately) |
| GMT Fuses | Ten (10) GMT fuses, 65 & 66 circuit only (fuses sold separately)  |
| LVBD      | Optional battery low voltage disconnect   |

## OTHER SPECIFICATIONS

|                                    |  |
|------------------------------------|--|
| Operating temperature <sup>2</sup> | -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, 2 <sup>nd</sup> edition<br>IEC 60950-1, 2 <sup>nd</sup> edition |
| EMI/EMC           | GR-1089-CORE  |
| Environment       | GR-63-CORE, GR-3108-CORE<br>Directive 2011/65/EU (RoHS2)                        |

| SHELF PART NUMBERS | DC Load | AC Feed    | Nominal Output Voltage | Battery LVD (LVBD) | Number of Battery Breakers | Number of Load Breakers | Number of GMT Fuses |
|--------------------|---------|------------|------------------------|--------------------|----------------------------|-------------------------|---------------------|
| FPSJ60I-ANL-VC     | Rear    | Individual | -48V                   | Yes                | 2                          | 2                       | 0                   |
| FPSJ60I-ANS-VC     | Rear    | Individual | -48V                   | No                 | 2                          | 2                       | 0                   |
| FPSJ65I-ANL-VC     | Rear    | Individual | -48V                   | Yes                | 2                          | 0                       | 10                  |
| FPSJ65I-ANS-VC     | Rear    | Individual | -48V                   | No                 | 2                          | 0                       | 10                  |
| FPSF65I-ANL-VC     | Side    | Individual | -48V                   | Yes                | 2                          | 0                       | 10                  |
| FPSF65I-ANS-VC     | Side    | Individual | -48V                   | No                 | 2                          | 0                       | 10                  |

## CONTROLLER PART NUMBERS (SOLD SEPARATELY)

|                   |  |
|-------------------|--|
| SPS-FPS100-A01-VV | -48V shelves with LVBD   |
| SPS-FPS100-A04-VV | -48V shelves no batteries (battery functions disabled, circuit breakers used for equipment load) |

## 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 |
| 241122.930    | Flatpack S Blind Panel          |

Doc 370012.DS3 Issue 2.1

<sup>1</sup> Actual value depends on the rectifiers installed; see rectifier datasheet, Doc. No. 241122.1x5.DS3

<sup>2</sup> Reference rectifier datasheet for additional operating ranges, Doc. No. 241122.1x5.DS3

Specifications are subject to change without notice.