

# Integrated Power System

The Integrated DC Power System provides an industry-leading DC power system optimized for the demanding power needs of wireless communications and broadband access equipment. With up to two power shelves and two distribution panels, the Integrated DC Power System offers expanded options for power and distribution in a compact design.



## Integrated Power System

### DC Power Supply System

Doc 370163.DS3 – rev1.0

#### APPLICATIONS

##### WIRELESS, FIBER AND FIXED LINE COMMUNICATION

Today's communications demand state of the art, efficient and compact DC power systems. Integrated Power Systems deliver 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 V-HE rectifiers combined with BC-2000 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, V Series HE rectifiers are used in system solutions up to 25 kW.

#### PRODUCT DESCRIPTION

##### MORE ROOM FOR REVENUE EQUIPMENT

The 4U distribution is designed to meet the demand for compact and flexible DC power solutions. It is based on building blocks and has a variety of configurations depending on battery and load needs. Pluggable breakers ensure easy configurability as well as "in field" placement.

##### REDUCED INSTALLATION AND MAINTENANCE COSTS

Highly powerful system controller and elegant product design make it easy to understand and simple to install.

##### BETTER QUALITY OF SERVICE

96% efficiency and Advanced Battery Management result in reliable, trouble-free networks.

#### KEY FEATURES

- **COMPACT DESIGN**  
Small overall dimensions are ideal for both rack and cabinet solutions.
- **DIGITAL CONTROLLER**  
The BC2000 digital controller system provides comprehensive monitoring.
- **HEAT MANAGEMENT**  
V Series HE modules feature bottom-to-top airflow, supplementing high-efficiency energy conversion with excellent heat management.
- **COST EFFICIENCY**  
A true plug-and-play system, the Integrated power system reduces both time-to-install and overall costs.

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## INPUT SPECIFICATIONS

Rated Input Voltage Range	100 – 240 VAC <sup>1</sup> <sup>1</sup> See module datasheet for further details.
Input Connections (Rear Access)	Terminal Block <sup>2</sup> MATE-N-LOK™ <sup>3</sup> <sup>2</sup> Default configuration is one rectifier per input; jumper straps are sold separately for two inputs per shelf, or for one input for shelf. <sup>3</sup> Input cables are sold separately; options include one rectifier per input or one cable with two MATE-N-LOK connectors to power two rectifiers per line cord, or one cable with three MATE-N-LOK connectors to power three rectifiers per line cord (cannot be used with 2500W modules).

## OUTPUT SPECIFICATIONS

Rated Voltage	0 – 56 V
Rated Current	480A

## PHYSICAL ATTRIBUTES

Nominal rack sizes	19" / 23"
Depth	14.0"
Height	6 RU to 12 RU, depending on number of distributions and rectifier shelves.

## DC DISTRIBUTION OPTIONS (VARY BY SYSTEM)

Distribution configurations*	Load breaker, bulk load, battery breaker, and bulk battery options available <i>*For additional details, see Integrated Product Guide.</i>
Available breaker positions	19" systems – 21 single-pole breaker positions per panel,* ¼-20 studs, ⅝" center-to-center 23" systems – 26 single-pole breaker positions per panel,* ¼-20 studs, ⅝" center-to-center <i>*Up to two panels</i>
Bulk battery connections	19" - Five (5) ¼-20 nuts, ⅝" center-to-center and five (5) ⅜-16 studs, 1" center-to-center 23" – Eight (8) ¼-20 nuts, ⅝" center-to-center and seven (7) ⅜-16 studs, 1" center-to-center
Low voltage disconnect options	None or battery (LVBD)
Breaker sizes	Single pole, 0 – 100A Double pole, 125 –200A Triple pole, 250A

## CONTROLLER

Monitoring Unit	BC-series controller
Inputs/Outputs	16 Character front panel display Four external temperature probe inputs and one internal sensor Six programmable form-C relays. Ethernet port with HTTP, SNMP, and Telnet CAN port for peripheral monitors
Other features	Battery float control with temperature compensation Battery boost / equalize control Battery recharge and system current limit

## MODULES (SOLD SEPARATELY)

V0500A1-HE	V Series 48V, 560W HE Rectifier
V0750A1-HE	V Series 48V, 840W HE Rectifier
V1000A1-HE	V Series 48V, 1120W HE Rectifier
V1250A1-HE	V Series 48V, 1400W HE Rectifier
V1500A1-HE	V Series 48V, 1680W HE Rectifier
V2000A1-HE	V Series 48V, 2240W HE Rectifier
V2500A1-HE	V Series 48V, 2800W HE Rectifier

## OTHER SPECIFICATIONS

Operating temperature	–40 to +65°C (–40 to +149°F)
Storage temperature	–40 to +70°C (–40 to +158°F)

## APPLICABLE STANDARDS

Electrical Safety	UL/CSA 60950-1, 2 <sup>nd</sup> edition IEC 60950-1, 2 <sup>nd</sup> edition
EMI/EMC	GR-1089-CORE
Environment	GR-63-CORE, NEBS LEVEL 3