



8U Distribution with 24V rectifiers and 24V-to-48V converters

Modular HE DC Power System

High-efficiency central office solution

Powered by the Flatpack2 HE rectifier, Eltek Valere's Modular Power System (MPS) is a highly-efficient solution for applications that require up to 1200A of DC power. The 24V Flatpack2 HE rectifier can deliver 95% efficiency, and the power system can be configured for both 24V and 48V output using the DCX-series converter. The 48V Flatpack2 HE rectifier can deliver up to 96% efficiency.

Performance and Applications

Industry-leading technology

Eltek Valere offers the world's first rectifier line to achieve 95 – 96% efficiency—the *Flatpack2 HE*. An increase from 92% to 96% conversion efficiency effectively reduces power loss by 50%. Released globally and confirmed by third-party agencies, the *Flatpack2 HE* rectifier is the first proven product in a new wave of highly-efficient rectifier technology.

Applications

The Modular HE Power System—which features flexible distributions and Eltek Valere's industry-leading *Flatpack2 HE* rectifier—is the ideal power system for small to medium control offices, remote switching units, wireless towers, and small data centers.

More room for revenue-generating equipment

With a footprint that fits within a single 23" telecommunications rack, the Modular HE can reduce space reserved for power equipment by as much as 75%. Highly-efficient rectifiers generate less heat, easing space and thermal demands in confined locations. More room is made available for network equipment, while reducing demand on cooling equipment.

Design and Features

Modular building block design

Eltek Valere's Modular HE Power Systems can be customized in a wide variety of combinations to meet the needs of specific applications ranging from 600 to 1200 Amps. DC-to-DC converters supply +24V to -48V conversion for sites with mixed voltages. Flexible distributions can be configured with bullet-style breakers as well as GMT and TPS fuse types.

Distribution flexibility

Modular distributions can be configured with a variety of distribution modules and as required for specific sites. Distribution design minimizes cable congestion, simplifies wiring, and provides many possibilities for growth and scalability.

Advanced control and monitoring

The XC2010 controller offers control and monitoring capability through both a local interactive display and an Ethernet connection. The LAN connection provides a powerful interface in a comfortable web browser environment. Configurable SNMP, Form-C relays, and audible alarms allow for robust system monitoring and operation.

See reverse side for specifications

Modular HE - DC Power System

Additional Technical Specifications

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Modular Power System Components	
Rack	<ul style="list-style-type: none"> 7" heights, 23" width Components mounted in rack at the factory 1200A main bus structure Dual bay options available Up to three (3) distribution panels (see options below) Battery panel options available (see options below) Optional top mounted AC termination panel available Rectifier and converter shelf options (see options below)
Rectifier Shelves Flatpack 2	<ul style="list-style-type: none"> +24VDC: 4 shelves with dual or individual feed options -48VDC: 5 shelves with individual feed (1,200 amp ratings)
Converter Shelves (SDX-series)	<ul style="list-style-type: none"> 24V to 48V conversion Up to 4 modules (one shelf)
8U Distribution	<ul style="list-style-type: none"> 1200A distribution (2x600A buses) 48 one-pole circuit breaker positions (2x24 panels) Battery shunt option Optional low voltage disconnect (LVD)
15U Distribution	<ul style="list-style-type: none"> 1200A distribution 800A primary voltage bus Optional 300A secondary bus for DC-DC converter output Up to 20 "BG" module positions (2x10 rows) Mix-and-match BG modules Available BG modules: <ul style="list-style-type: none"> Ten (10) GMT-style fuses Four (4) 50A bullet breakers or TPS-style fuses Two (2) 100A bullet breakers or TPS-style fuses
Distribution Devices	<ul style="list-style-type: none"> Bullet-style circuit breakers and adapters <ul style="list-style-type: none"> 1-100A single-pole 125-200A double-pole 225-250A triple-pole (8U only) Adapters for 1 - 125A TPS-style fuses Fuse blocks for 1/8 - 15A GMT fuses

Dimensions and Weight	
8U Distribution	<ul style="list-style-type: none"> Width: Standard 23" rack Height: 355.2 mm (14.0"/8U) Depth: 526.0 mm (20.7")
15U Distribution	<ul style="list-style-type: none"> Width: Standard 23" rack Height: 666.9 mm (26.3"/15U) Depth: 526.0 mm (20.7")
Flatpack2 HE Rectifier	<ul style="list-style-type: none"> Height: 41.5 mm (1.69") Width: 109 mm (4.25") Depth: 327 mm (12.87") Weight: 1.95 kg (4.30 lbs)
DCX1500BA Converter	<ul style="list-style-type: none"> Height: 81.3 mm (3.2") Width: 132.1 mm (5.2") Depth: 406.4 mm (16.0") Weight: 6.8 kg (15.0 lbs)

Control and Communications	
Standard features (XC2010)	<ul style="list-style-type: none"> Front panel display with 5 button control Full set-point control and review from front display Battery float, boost/equalize, thermal compensation, and discharge testing Battery recharge and system current limit Ethernet Access (HTTP, FTP, Telnet) Shunt soft-naming via GUI Set-point back-up available via FTP Two (2) CAN bus for access to external devices (PM modules and expansion controller) Four (4) input ports for temperature probes or input alarms Six (6) programmable form-C relays

Agency Approvals	
NEBS	Level 3
CSA/UL	Canada/US 60950-1

Specifications are subject to change without notice

Power Modules	
Flatpack2 HE rectifiers	<ul style="list-style-type: none"> 24V/1800W: 75A 48V/2000W: 40A 48V/3000W: 60A
DCX-series converter	<ul style="list-style-type: none"> 24V-to-48V: 15A, 30A

Temperature Range	
Storage	-40°C to +85°C
Operating	-40°C to +40°C



8U Distribution

15U Distribution

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