

# X Series Rectifiers DCX Series Converters Power Modules



## Reliable, efficient, high-power rectifier modules

Eltek Valere X Series rectifier and DCX Series converter modules provide unprecedented power density and power levels in a true plug-and-play format. With a wide range of available voltages, power ratings, and form factors, Eltek Valere's rectifiers and converters allow optimal system design and cost-effective deployment from initial install to future upgrades.

## Applications

### Cabinet power systems

Eltek Valere X-series rectifiers and DCX-series converters are ideal solutions for wireless, broadband, and fiber-based outdoor and indoor communications cabinets.

### Enterprise networking equipment

Eltek Valere X-series rectifiers and DCX-series converters satisfy the powering needs of routers, servers, storage networks, modem pools, and other power-hungry networking gear with optimal efficiency.

### Embedded power systems

Give your product a competitive edge. The combination of a space-saving package and high efficiency leaves more room in your equipment for additional features and functions.

## The Eltek Valere Difference

### Optimization

Eltek Valere rectifiers and converters are optimized for the demanding power and power conversion needs of wireless communications, enterprise and broadband access equipment.

### Small size, big power

At only 2RU, Eltek Valere X-series rectifiers can provide up to 7,500 Watts of power, and Eltek Valere DCX-series converters can provide up to 1,500 Watts of power. The small size frees up space to reduce system size or incorporate additional electronics.

### Industry leading efficiency

Industry-leading efficiency reduces the thermal load, thus improving the overall reliability and availability of the system.

### Flexibility

These power modules are designed to operate in Eltek Valere's Scalable and Modular lines of DC power systems. They are very flexible and can be operated either as standalone modules or with a system controller.

# X Series Rectifiers and DCX Series Converters

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## Additional Technical Specifications

- Compact 2RU height
- Horizontal airflow
- Wide range of voltages

### Input Specifications

X series rectifiers	<ul style="list-style-type: none"> <li>○ Wide AC (A2): 180 to 305 Vac</li> <li>○ 3 Phase AC (A3): 360 to 530 Vac</li> <li>○ High Line AC (B1): 180 to 264 Vac</li> <li>○ Power Factor: &gt;.98 for loads above 60% full load</li> <li>○ THD: Line Harmonics meet EN61000-3-2</li> </ul>
DCX series converters	<ul style="list-style-type: none"> <li>○ 20 to 32 Vdc</li> </ul>

### Output Specifications

Noise	20mV RMS, 10 kHz -20 MHz
Regulation	+/- 1% over line, load, and temperature
Efficiency	<ul style="list-style-type: none"> <li>○ X Series: 92% for 48V units, 90% for 24V units</li> <li>○ DCX Series: min. 88% for 24V and 48V units</li> </ul>

### Temperature Range

- -40° C to 65° C operating; output de-rates 2%/° C over 45° C (A2 or A3 only)
- -40° C to +85° C storage

### Standard Alarm And Control Interfaces

Opto-isolated alarms	<ul style="list-style-type: none"> <li>○ X Series Rectifiers: AC fail, DC fail, and thermal alarm</li> <li>○ DCX Series Converters: Input fail, output fail, and thermal alarm</li> </ul>
Opto-isolated output disable command	
I <sup>2</sup> C addressable serial interface	

### Auxiliary Bias

12V/200mA independent bias output for system control loads



### Protection

Redundancy	Internal "or"-ing protection
ESD	EN61000-4-2, 15kV/8kV
EFT	EN61000-4-4, 1kV on AC fast burst transients
AC surge	GR1089, 6kV

### Physical Specifications

Dimensions	<ul style="list-style-type: none"> <li>○ X Series: 132.1mm (5.2")w , 81.3mm (3.2")h, 406.4mm (16")d</li> <li>○ DCX Series: 132.1mm (5.2")w , 81.3mm (3.2")h, 406.4mm (16")d</li> </ul>
Weight	<ul style="list-style-type: none"> <li>○ X Series (A2): 6.8kg (15lbs)</li> <li>○ X Series (A3): 8.18kg (18lbs)</li> <li>○ DCX Series: 6.8kg (15lbs)</li> </ul>

### Modules

X Series Rectifiers		Nominal DC Output Voltage	Rated DC Output Current	AC Input Voltage Range	Airflow
	X5000A2	48V	100A	Wide	Horizontal
	X5000A3	48V	100A	Three Phase	Horizontal
	X7500A2	48V	150A	Wide	Horizontal
	X3750B1	24V	150A	High Line	Horizontal
DCX Series Converters		Output Voltage	Output Current (Max)	Input Voltage	Input Current (Max)
	DCX1500BA	48V	30A	24V	100A

### Agency Certifications

NEBS	Level 3 compliant (X Series Rectifiers Only)
UL	UL 60950-1
CE	CE mark meets 73/23/EEC and 93/68/EEC directives

Specifications are subject to change without notice