



# V Series Rectifier Modules

#### Reliable, efficient, cost-effective rectifier modules

Eltek Valere *V-series* rectifier modules provide unprecedented power density and in a truly compact, plug-and-play format. With a wide range of available voltages, power ratings, and system form factors, Eltek Valere's power modules allow optimal system design and cost-effective deployment from initial install to future upgrades.

#### **Applications**

#### Cabinet power systems

Vertical air flow, high efficiency, and a high operating temperature rating make Eltek Valere rectifiers ideal for wireless, broadband, and fiberbased outdoor and indoor telecommunications cabinets.

#### **Enterprise networking equipment**

*V-series* rectifiers provide an efficient solution to the power needs of routers, servers, storage networks, modem pools, and other power-hungry networking gear.

#### **Embedded power systems**

Give your network a competitive edge. The combination of a space-saving form factor and high-efficiency leaves more room for other equipment.

#### **Carrier networks**

Is space cramped for powering more telecommunications equipment? Free up space with *V-series* rectifiers to avoid costly rack or cabinet expansions.

#### The Eltek Valere Difference

#### **Optimization**

Eltek Valere rectifiers 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 *V-series* rectifiers can provide up to 2,500 Watts of power per unit. The small rectifier size allows for the use of smaller DC systems, freeing up space for additional electronics.

#### **Industry-leading efficiency**

At over 95% efficiency, the *V-Series HE* rectifiers not only reduce energy waste and costs, but since they generate less heat it also takes less energy to cool the equipment, thus reducing expenses in multiple areas of the operator's network.

#### **Flexibility**

V-series rectifiers are designed to operate in Eltek Valere's Compact and Integrated DC Power Systems. Utilize V-Series rectifiers for 92% conversion efficiency. Upgrade to V-Series HE rectifiers for an incredible 95.5% efficiency.

### **Technical Specifications**

- o 2RU height
- Vertical airflow
- $_{\odot}\,$  Wide range of input voltage options

#### Input Specifications

- o Universal AC: 100 to 240Vac (up to 1250 watt)
- o High Line AC Only: 200 to 240 Vac (1500 watt and above)
- o Power Factor: >.98 for loads above 60% full load
- THD: Line Harmonics meet EN61000-3-2

Output Spe	Output Specifications		
Noise	20mV RMS, 10 kHz -20 MHz bandwidth		
Regulation	+/- 1% over line, load, and temperature		
Efficiency	<ul><li>92% for V-Series rectifiers</li><li>95% for V-Series HE rectifiers</li></ul>		

Temperature Range					
o -40°C to +85°C storage					
<ul> <li>See table below for operating range</li> </ul>					

## Standard Alarm and Control Interfaces Opto-isolated alarms: AC fail, DC fail, and thermal alarm Opto-isolated output disable command I²C addressable serial interface

#### **Auxiliary Bias**

12V/500mA independent bias output for system control loads

Protection				
Redundancy	internal "or"-ing protection			
ESD	EN61000-4-2			
AC surge	EN61000-4-5			

Physical Specifications			
Dimensions	<ul> <li>Height: 81.3 mm (3.2")</li> <li>Width: 86.4 mm (3.4")</li> <li>Depth: 266.7 mm (10.5")</li> </ul>		
Weight	o 3.2kg (7lbs)		

Configuration Options							
V Series	Rectifiers	Nominal DC Output Voltage	Rated DC Output Current	AC Input Voltage Range	Efficiency	Airflow	Operating Temperature
	V0500A1	48V	10A	Universal	92%	Vertical	-40 to +65°C
	V0750A1	48V	15A	Universal	92%	Vertical	-40 to +65°C
	V1000A1	48V	20A	Universal	92%	Vertical	-40 to +65°C
	V1500A1	48V	30A	High Line	92%	Vertical	-40 to +65°C
	V2000A1	48V	40A	High Line	92%	Vertical	-40 to +70°C
	V2500A1	48V	50A	High Line	92%	Vertical	-40 to +65°C
_	V1500B1	24V	30A	High Line	92%	Vertical	-40 to +73°C
	V1000A1-HE	48V	20A	Universal	95.5%	Vertical	-40 to +70°C
	V1500A1-HE	48V	30A	High Line	95%	Vertical	-40 to +70°C
	V2000A1-HE	48V	40A	High Line	95%	Vertical	-40 to +70°C

Agency Certifications	gency Certifications			
NEBS Level 3				
EMI/EMC	CISPR class B conducted and radiated 10V/M radiated susceptibility			
CSA/UL	UL60950-1			
VDE EN60950-1				

Specifications are subject to change without notice