



# EcoTower

## DC Power System

### Overview

Integrating state-of-the-art, high efficiency, switch-mode rectifier technology with Eltek's feature-rich Smartpack2 control and monitoring unit, the high-performance EcoTower system can be configured to use either single-phase Flatpack2 HE or three-phase Powerpack rectifiers.

### Applications

- Medium to Large sites
- Simplified Engineering
- High Capacity MSO/CSO
- Central office
- Co-locates
- Private networks
- CATV

### Features

The EcoTower delivers up to 2400A and can be equipped with as many as four different DC distribution panels in a single cabinet.

- Advanced-function Smartpack2 controller
- Uses either Flatpack2 HE or Powerpack rectifiers
- Up to 2400 Amps DC output
- Front-access design
- Lightweight module components
- Cable management bar
- Internal return bus
- Eight battery connections



Powerpack Rectifier



Flatpack2 HE Rectifier

## Additional Technical Specifications

		FLATPACK2 HE 48V/3000W, 1200A OR 2400A CONFIGURATION	POWERPACK 48V/11KW, 1200A OR 2000A CONFIGURATION
<b>Mechanical</b>			
Dimensions		24"W x 84" H x 24.8" D	24"W x 84" H x 24.8" D
Weights	Racked System	Seismic 378 lbs (171 kg). With all rectifiers system weighs approximately 625 lbs (284 kg).	Seismic: 378 lbs (171 kg). With all rectifiers system weighs approximately 825 lbs (374 kg).
	Rectifier	4.19 lbs (1.9 kg) each	40.8 lbs (18.5 kg) each
Clearances		Zero clearance needed below, left or right of unit. 24" suggested rear clearance for proper airflow and access. Cable egress from top rear.	Zero clearance needed below, left or right of unit. 24" suggested rear clearance for proper airflow and access. Cable egress from top rear.
<b>Electrical</b>			
Input	Voltage Range	Full power input : 208/240VAC	Full power output : 208/480 VAC, +/-10%, 3-phase
	Current (per rectifier)	Operational range: 85 – 300 VAC 19.2 A <sub>rms</sub> max at 176 VAC input and full load Recommended AC input fuse: 25A	Operational range: 180 – 264/260 – 550 VAC 16.5A <sub>rms</sub> max at nominal input and full load Recommended AC input fuse: 25A@480VAC (38.5@208VAC)
	Frequency	45-66 Hz	45-66 Hz
	Voltage Range	43.5-58.0VDC (53.5VDC Nominal)	45-56VDC (53.5VDC Nominal)
Output	Maximum Current	62.5A at 48 VDC and nominal input (208Vac)	230A at 48 VDC and nominal input (11kW constant power)
	Ripple and Noise	< 100 mV peak to peak, 30 MHz bandwidth, < 2.0 mV <sub>rms</sub> psophometric	< 100 mV peak to peak, 30 MHz bandwidth, < 1 mV rmspsophometric at 10% load, or < 2.0 mV rmspsophometric at 1A load or more B / 32dBrn-C
<b>Distribution Option</b>			
Up to Three DC Distribution Panels		12 position high-capacity breakers, and/or 24 position plug-in breakers, and/or 6 position TPL fuse panel	12 position high-capacity breakers, and/or 24 position plug-in breakers, and/or 6 position TPL fuse panel
<b>Connections</b>			
AC Input		Single or three-phase inputs, 85-277 VAC	Single or dual AC Feeds, 208 or 480VAC three-phase (depending on rectifier deployed)
CO Ground		Position for two-hole lug, 3/8" on 1" center, max width of 2.25"	Position for two-hole lug, 3/8" on 1" center, max width of 2.25"
Battery		Shunt-monitored bus with eight battery connection points. Optional LVBD	Shunt-monitored bus with eight connection points Optional LVBD
<b>Environmental</b>			
Operating Temperature		-40° to +55° C (-40° to +131° F), de-rating above 46°C (115°F)	-10° to +50° C (14° to +122° F)
Storage Temperature		-40° to +70° C (-40° to +158° F)	-40° to +70° C (-40° to +158° F)
Relative Humidity		0-95%, non-condensing	0-95%, non-condensing
Cooling - Rectifier		One fan, front-to-rear airflow	Three fans, alarmed, temperature-controlled speed
Acoustic Noise		< 65dBA	< 72dBA
TCP/IP		GUI WebPower interface, using standard Web Browser, and SNMP	GUI WebPower interface, using standard Web Browser, and SNMP
<b>Interface</b>			
Alarm Relays		Six configurable form-C output relays Six configurable digital inputs	Six configurable form-C output relays Six configurable digital inputs
<b>Applicable Standards</b>			
Electrical safety		IEC 60950-1, CSA/UL 60950-1	
EMC		GR-1089-CORE	
Environment		GR-63-CORE	