



138/139 Power System



- ▶ Configurations to 2000 Amps available
- ▶ Wide variety of DC output distribution
- ▶ Positive output (138) and negative output (139)
- ▶ High efficiency with energy management
- ▶ Battery management
- ▶ Modular design lowers Installed First Cost
- ▶ Installer friendly cable management
- ▶ Ethernet connectivity with SNMP
- ▶ Converter options available
- ▶ Delivered fully assembled and tested to reduce installation time

■ ■ PRODUCT DESCRIPTION

Power for the equipment load, distribution, alarms, and monitoring are all contained within the 138/139 Power Plant using a minimum of rack space. The system's modular design enables users to add power capacity and protection devices as the load requirements increase.

Rectifiers and converters can be interchangeably energized in any power slot to create a dual-voltage power system. Available with your choice of DC distribution; Plug-in fuses/breakers, TPL fuses, GJ circuit breakers, and GMT fuses. As many as 80 plug-in positions can be equipped in a single bay. Low voltage battery (LVB) and low voltage load disconnect (LVD) options are also available.

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| <ul style="list-style-type: none"> ▶ Individual or 2 rectifiers per AC input ▶ 23" mounting ▶ 3.5', 4', 6', 7', and 9' rack heights ▶ 26 status LED's ▶ 10 alarm extension relays ▶ Battery temperature compensation ▶ Controlled battery recharge ▶ High float current alarm ▶ 4 Auxiliary alarm inputs ▶ 2 EPO input connection points | <ul style="list-style-type: none"> ▶ Up to 2000 Amps systems ▶ Circuit breakers up to 600 Amps ▶ Fuses up to 800 Amps ▶ 48V, 50 Amp and 24V, 100Amp rectifiers ▶ 30 Amp, 48V and 75Amp, 24V converters ▶ Front panel test jacks ▶ Optional battery disconnect/EPO ▶ Optional LVD with highly reliable latching ▶ High efficiency, up to 96% |
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■ ■ APPLICATIONS

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| <ul style="list-style-type: none"> ▶ Wireless Power Cabinets ▶ Base Termination Stations (BTS) Cabinets ▶ Base Termination Stations (BTS) Huts | <ul style="list-style-type: none"> ▶ Controlled Environment Vaults (CEV) ▶ Small Center Office (CO) / Small MTSO Sites ▶ Remote Switches / Wireless Cell Sites |
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■ ■ SPECIFICATIONS

Input	24V Rectifier	48V Rectifier
Voltage Range	175 – 275VAC Nominal 208 / 240VAC	
Voltage Range, Low Line	85 – 140VAC Nom 110/120VAC	N/A
Frequency	45 – 66Hz	
Current	14.9A @ 208VAC, 12.9A @ 240VAC	14.5A @ 208VAC, 12.6A @ 240VAC
Customer Provided Protection	20A CB per rectifier	
Output		
Voltage Range	21 – 29VDC	42 – 58VDC
Current	100A per rectifier	50A per rectifier
Efficiency Rectifier	> 90% full load > 92% in 2010	> 92% full load > 96% in 2010
Converter	> 90% full load	> 90% full load
Noise		
Voice Band	< 32dBrc (with battery)	
Wide Band	≤ 100 mVrms (10 – 20MHz)/ < 250 mV peak to peak (0 – 100MHz)	
Acoustic	< 55dB	
Total Harmonic Distortion	> 5% at full load	
Environmental		
Storage Ambient	-40°F to +185°F (-40°C to +85°C)	
Operating Ambient	-40°F to +167°F (-40°C to +75°C)	
Humidity	< 95% non-condensing	
Heat Dissipation Per rectifier	930 BTU/hr	745 BTU/hr 371 BTU/hr in 2010
Per converter	615 BTU/hr	490 BTU/hr

Mechanical	Standard	Extended
Dimensions, Fully Equipped	36.8"H x 22"D x 23" mounting width	45.5"H x 22"D x 23" mounting width
Weight (approx)	450 lbs.	590 lbs.
Shelf Weight	15.1 lbs / 6.85 kg	
Rectifier Weight	5.2 lbs / 2.4 kg	
Cooling	Front to rear variable speed fans	
Safety & Compliance		
Safety Standards	ETL Listed to UL 60950-1-07 CAN/CSA C22.2 No. 60950-1-07 NEBS Certified	
Documentation		
Product Manual	4380478PD	
J Drawing	438138-9LP	
Phoenix II Manual	4380405PD	
Quick Start Guide	4380403P	



■ ■ POWER SYSTEM CONTROLLER FEATURES



- ▶ Ethernet connectivity and SNMP
- ▶ 26 Front panel status indicators
- ▶ 10 form-C alarm contacts
- ▶ 4 auxiliary alarm inputs
- ▶ 2 EPO connection points
- ▶ Remotely open load disconnect
- ▶ 2 optional temperature probes
- ▶ 6-line x 16 character backlit LCD
- ▶ Control knob navigation
- ▶ Front panel test jacks
- ▶ Audible alarm with cutoff
- ▶ Controller self test
- ▶ Remote operation of battery test
- ▶ Front panel test jacks