



# POWER-PLUS

## DC POWER SYSTEM



- Compact design and high power density
- High reliability
- High efficiency and high power factor
- Versatile and easy to install
- Low noise levels
- Maximum protection and safety
- Complete self-contained power system
- Application : PABX, Telecom Exchange, Microwave, Cellular Switching System, Industrial Process Control and Emergency Equipment etc.

### Power-plus System

Power-plus DC Power System is the latest innovation modular DC power product offered by Power-plus Company. Our Switching mode rectifier power system is ideal for application such as program control switching systems, microwave digital system, mobile phone switching system, industrial process control and emergency equipment etc.

Our principal of design is to provide a range of equipment's in modular form which can be used as building blocks for a vast range of system solutions. Added to this is the best design capability utilizing the highly experienced resource from within our engineering and development design teams.

Supplying some of the world's major telecoms companies with a wide range of standards and custom designed products from its purpose built factory in Canada, Power-plus system are renowned for its high reliability, which is clearly of major importance in power supplies for telecoms systems.

Our Products comfortably pass the most stringent design verification tests of manufactures. Utilizing profession design facilities, we can offer rapid solutions to power systems designs demanded by the world markets for cellular radio, cable TV, telecommunications and safety critical systems.

### High Quality Switchmode Rectifiers

Our major components are out Switchmode power converts operating from single phase mains AC power supply or generators. They provide either a nominal 24 volt, 48 volt or 110 to 220 volt output, depending on type, and are specifically designed for telecommunications loads and to maintain standby battery sets fully charged. They are manufactured under ISO 9000 quality standard.

Every stage in manufacture is subject to thorough inspection. Additionally, we have implemented an EMC strategy to ensure that our modules not only comply with current EMC standards, but in many cases far exceed the performance required. Pre-compliance testing is carried out using a combination of in-house test equipment and special test laboratory facilities.

### Self Contained System

Systems comprising Switchmode rectifiers are completely self contained within a single enclosed cabinet or mounting shelf (depends on the size of the systems), which contains rectifiers, alarms / controls, and MCB/ interface.

### Technical Specification of Power-plus

**Main Supply :** 220V -250V Single Phase Or 380V / 400V/ 415V 3-Phase, 50/ 60Hz

**Paint Finish :** RAL 7032-Light grey

**Cable Entry :** Top / Bottom subject to requirement

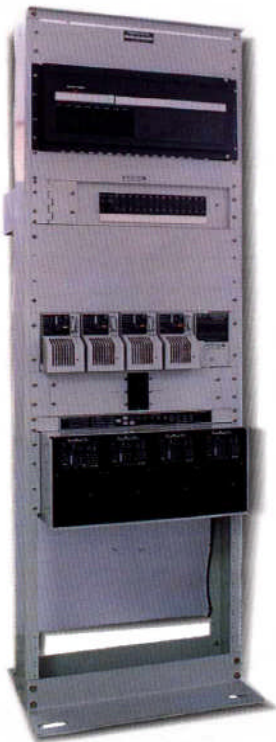
**Enclosures :** 19" or 21" rack type of protection. 22U to 42U high Or IP20 up to IP67 of Cabinet

**Low Voltage Disconnect :** Contactor provide to automatically disconnecting the battery from load at the end of discharge (optional).

**Protection :** Rectifier Input MCB's and Rectifier Output MCB's

**Terminals :** AC input, battery and load terminals. Earth link also included.

**Optional item :** Distribution MCB's with tripped alarm and Battery Isolator



**POWER-plus**



**POWER BATTERY COMPANY, INC.**

USA - 25 McLEAN BLVD., PATERSON, NJ 07514-1507 PHONE (201) 523-8630 FAX (201) 523-3023

E-MAIL US AT - [America@powerplusbatteries.com](mailto:America@powerplusbatteries.com) or [information@powerplusbatteries.com](mailto:information@powerplusbatteries.com)

SEE US ON THE WEB AT - <http://www.powerplusbatteries.com>

CANADA - 770 THOMAS AVE., IBERVILLE, QUEBEC, J2X5E7 PHONE (514) 346-3273 FAX (514) 346-8003

# POWER-PLUS

## DC POWER SYSTEM



- 19" & 21" Racks Or IP20 up to IP67 Cabinet
- Metering : AC voltmeter, DC voltmeter and DC ammeter
- AC and DC distribution Panel
- Low Voltage load disconnect
- Battery isolator
- Alarm with dry contact

### TECHNICAL SPECIFICATION OF SWITCHMODE Or THYRISTOR-SCR DC POWER SYSTEM

**Input Voltage :** 176 – 264 Vac (Phase Voltage), Single or Three Phase (complies to IEC 364)

**Input Frequency :** 45 – 66 Hz

**Harmonic Distortion :** < 3%, complies to ENG61000-3-2

**Input Power Factor :** Greater than 0.9, typically 0.98 corrected to EN6100-3-2 for output loads in excess of 50%

**Start up time :** ≤ 3 sec. from application of line input to output voltage achieving regulation

**Float output :** up to 56,0Vdc (Adjustable)

**Boost Output :** up to 64,0Vdc (Adjustable)

**Reverse Quiescent Current :** 5mA

**Recovery (within 500mV) :** 2 msec

**Temperature coefficient :** ± 0.015% / °C over the operating temperature range

**Ripple and noise :** ≤ 50mVrms, complies to ETS300386-2-3 and BTNR2511

**Efficiency :** ≥ 90%

Model	Number of Modules	Output voltage (Vdc)	Output Current (A dc)	Output Rating (W)
PP-48V-33A	1	-48V	33A	1800W
PP-48V-44A	1	-48V	44A	2400W
PP-48V-50A	1	-48V	50A	2800W
PP-48V-66A	2	-48V	66A	3600W
PP-48V-88A	2	-48V	88A	4800W
PP-48V-99A	3	-48V	99A	5400W
PP-48V-100A	1 x 100A or 2 x 50A	-48V	100A	5600W
PP-48V-132A	3 x 44A or 4 x 33A	-48V	132A	7200W
PP-48V-150A	3 x 50A	-48V	150A	8400W
PP-48V-176A	4	-48V	176A	9600W
PP-48V-200A	2	-48V	200A	11200W
PP-48V-220A	5	-48V	220A	12000W
PP-48V-250A	5	-48V	250A	14000W
PP-48V-264A	6	-48V	264A	14400W

**NOTE :** \* Available Rectifier Modules 48V / 10A / 25A / 50A also DC-Output Voltage for 60Vdc

\* Provide Thyristor-SCR Rectifier System based on Customer specifications

\* Amp.Current can be designed up to 1000 Amps and also DC-Output Voltage for 60Vdc

**Backup Time :** Depends on the customer's requirement

**Output Current Limit :** The system is designed to operate continuously in current limit. The current limit characteristic is constant down to 40 Vdc below which the current folds back to the short circuit value

**Output Over Voltage :** An output voltage in excess of the trip levels will cause the rectifier module to latch into a shutdown condition. The rectifier power can be reset by interrupting main input. The over voltage trip is provided with discrimination so that on parallel connected rectifiers only the faulty rectifier will be shutdown.

**Thermal :** A thermal sensor monitors the internal temperature of the rectifier power, which under thermal overload conditions, will cause the unit to shutdown until the temperature has reduce to an acceptable level

**Distribution Panel:** Input MCB and Output MCB, LVD /Battery Isolator

**Metering :** Analog or Digital AC Voltmeter, DC Voltmeter and Ammeter

**Environmental Specification :** -20°C to +45°C, RH 0 -85%, Pollution EN60950 degree 2 and

Vibration complies to BS2011 test Fc