

SMPS 200

MPSU 200



MPSU 200

Maximum power for minimum space



The MPSU 200 is a flexible and expandable Modular Power Supply Unit with a maximum power capacity of 1600 Watts with either internal or external distribution options.

The MPSU 200 has been specifically designed to fit within installations such as micro cell base-stations, street-side cabinets and customer POP sites. These applications require an expandable, easily serviceable and reliable power supply fitted within a minimal space.

The MPSU 200 is a 3U high, 19" wide Modular Power Supply Unit with a depth of 280mm (11") for 230V applications and 305mm (12") deep for 110V applications. The MPSU 200 utilizes the AL 175NT monitoring and control unit with either VT100 or WinPower Silver interface.

Flexible and expandable

The high output power and low weight unit ensures efficient utilization of rack space. Up to a maximum of eight plug-in rectifier modules can be mounted in a single unit along with a monitoring unit and plug-in distribution. Distribution modules of varying specifications can be fitted into the system in order to provide customer specific distribution solutions. The modular system facilitates system expansion and minimizes initial capital costs.

Cost effective

Extensive remote supervision features have been developed in order to ease installation and maintenance. In addition, the MPSU 200 offers high output power and high efficiency thus reducing power losses and supply costs. Reliability is optimized through the utilization of active current sharing between the rectifier modules.

Control features

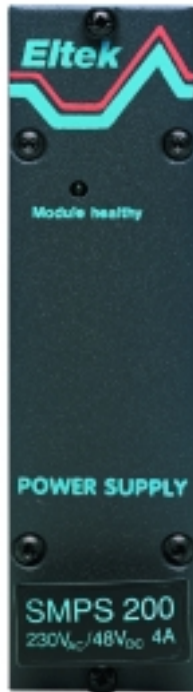
Temperature Compensation: Ensures the optimal temperature dependant charge voltage thus securing maximum battery performance.

Low Voltage Disconnect: Prevents deep discharge damage of the battery through Battery Disconnect.

SNMP for remote and central monitoring: The MPSU 200 can be monitored and controlled via a Network Management System (NMS) such as SNMPc, Tivoli or HP Open View. Site data is transferred either directly through the network or via a dedicated telephone line. Eltek can advise on specific applications.



SMPS 200 rectifier



The SMPS 200 rectifier module is designed for hot plug-in and features active current sharing for optimal heat dissipation and increased lifetime. The low weight and compact rectifier provides 200 Watts of high quality DC power, with high efficiency. Any rectifier failure will be reported to the monitoring unit via the rectifier's internal alarm circuit.

The SMPS 200 rectifier is produced in two different versions, one for 110 VAC +/-20% and one for 230 VAC +/-20% with a nominal output voltage of 48 VDC, adjustable from 45 to 59 V. The maximum output current is 3.8 Amps at 54 V.

AL 175NT monitoring unit



The AL 175NT has a user friendly, menu driven, interface that provides advanced set-up, monitoring and configuration possibilities. Operation of the AL 175NT is possible through a front panel keypad with LCD screen. The alarm unit has 6 output alarms from voltage free contacts. These configurable alarms can be set according to description in the manual. All input / output alarm signals are accessible through a separate contact on the back of the MPSU chassis.

Remote monitoring and control can either be done via RS-232 communication with a PC using VT100 or WinPower Silver based software. The wide range of alarm and control facilities is also available through remote supervision, either via modem, or through an SNMP adapter.

Distribution solutions

The MPSU 200 has been designed to allow for flexible distribution solutions in order to meet varying customer specific requirements.

MPSU 200 with plug-in MCB distribution

With the MCB distribution option installed, 1200 W (6 x SMPS 200) output power feeds up to six load outputs and two separate battery banks. Top access for cabling.



MPSU 200 with plug-in glass fuse distribution

With the plug-in glass fuse distribution installed, 1200 W (6 x SMPS 200) output power feeds up to 14 load outputs and two separate battery banks. Front access cabling with special connectors.

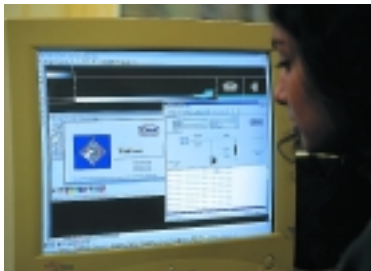


MPSU 200 with external load distribution

With an external load distribution installed, 1600 W (8 x SMPS 200) output power feeds a single load output and two separate battery banks. External distribution units can be provided upon request. Front access cabling with special connectors.



Available options include those above, otherwise please contact Eltek for further details.



WinPower Silver

Local or remote monitoring and control for the MPSU 200 is simplified through the use of WinPower Silver. This Windows based system transforms your PC into an active screen displaying the MPSU 200 dynamic status. Critical data is presented on the main screen with direct access to system settings and interrogation via clear drop down sub-menus.

Secured access

Programmable passwords allow access to user and service levels. Authorised personnel can thereby be given access to change system parameters or set-up, while other personnel are restricted to read-only access.

Technical specifications

MPSU 200	MCB distribution	Glass fuse distribution	External distribution
System configuration	Up to 6 SMPS 200		Up to 8 SMPS 200
Rectifier modules	AL 175NT		
Control unit	AL 175NT		
Battery MCB's	2x30 Amps, top connection	2x30 Amps, front connection	2x30 Amps, front connection
Load MCB's	6 MCB's		External
Load glass fuses		14	External
Mains configuration	110 VAC or 230 VAC single phase. Rear connection		
Max. system current (54 VDC)	22.8 ADC	22.8 ADC	30.4 ADC
Low voltage disconnect		Battery Disconnect	
Weight distribution	1.85kg (4.1lbs)	1.15kg (2.55lbs)	0.8kg (1.76lbs)
Electrical data- Mains input	Varistor protection inside each rectifier		
Surge protection	45-66Hz		
Line frequency	According to EN 61000-3-2		
Harmonic distortion			
110 VAC	88-132 VAC		
Input range	Shutdown below 85 VAC		
Low input voltage	< 3.3 Amps at full load and 110 VAC		
Input current			
230 VAC	184-276 VAC		
Input range	Shutdown below 176 VAC		
Low input voltage	< 1.5 Amps at full load and 230 VAC		
Input current			
Electrical data- DC output	48 VDC		
Output voltage	3.8 Amps at 53.5V		
Output current per module	±5% from average current between modules		
Active current share	>10ms		
Hold-up time	< 100mVpp		
Ripple voltage	< 2 mVrms, according to CCITT		
Psophometric noise	High voltage shutdown		
Output protection			
General data	UL-recognized, CE-Marked		
Approvals	Emission: EN 50081-1, Immunity: EN 50082-2, ETS 300 386-2		
EMC	EN 60950 / IEC 950		
Safety	Input/Ground: 1.5 kVAC, Input/Output: 3.0 kVAC, Output/Ground: 1kVDC		
Isolation voltages	IP 20		
Enclosure	-10°C to +55°C (+14°F to +131°F)		
Operating temperature	-40°C to +85°C (-40°F to +185°F)		
Storage temperature	Convection cooled		
Ventilation	Green LED for ON/OFF indication (SMPS 200)		
Rectifier indications	LCD display and keypad for local monitoring and control (AL 175NT)		
Control unit indications	WinPower Silver for monitoring and control using a PC		
User interface	Through direct RS-232 connection, modem connection or SNMP through TCP/IP		
Remote communication	2.2 kg (4.85lbs)		
Weight chassis	3U high x 19" wide x 280mm (11") or 305mm (12") deep		
Dimensions			
SMPS 200	110VAC +/-20%		
Input voltage range	230VAC +/- 20%		
	48V nominal (45 to 59V adjustable)		
Output voltage	3.8 Amps at 54V		
Max output current	-10°C to +55°C (+14°F to +131°F)		
Operating range	Convection		
Cooling	>88%		
Efficiency	IP 20		
Housing	1kg (2.2lbs)		
Weight	Current limited output		
Protection	Short circuit protected output		
	Selective high output voltage shutdown		
AL 175NT	48 VDC		
Input voltage	1kg (2.2lbs)		
Weight	Automatic/manual boost charging, Automatic battery test, Symmetry monitoring, Temperature compensated charge voltage, Alarm log with time and date, Modem call back, Relay test, Site information, Charge current limitation, Low voltage disconnect		
Functions	High/low battery voltage, Low voltage disconnect, Mains failure, Rectifier failure, Critical rectifier failure, Load/battery fuse trip, Battery test failure, Symmetry alarm (optional), Battery temperature alarm, System/common alarm		
Alarms	Battery temperature, Output voltage, Battery current, Rectifier current, Load current (calculated)		
Measured values	Software with pComm or WinPower Silver		
Software			



Location	Company	Telephone	Fax
Norway	Eltek Energy AS	+47 32 20 32 00	+47 32 20 32 10
Americas	Power Conversion Products, LLC	+1 815 459 9100	+1 815 459 9118
Asia/Pacific	Eltek Energy Pte Ltd.	+65 6 7732326	+65 6 7753602
China	Eltek Energy Ltd.	+852 28982689	+852 28983189
Europe	Eltek Energy UK Ltd.	+44 1442 219355	+44 1442 45894
Middle East	Eltek Middle East	+971 4 887 1176	+971 4 887 1175