

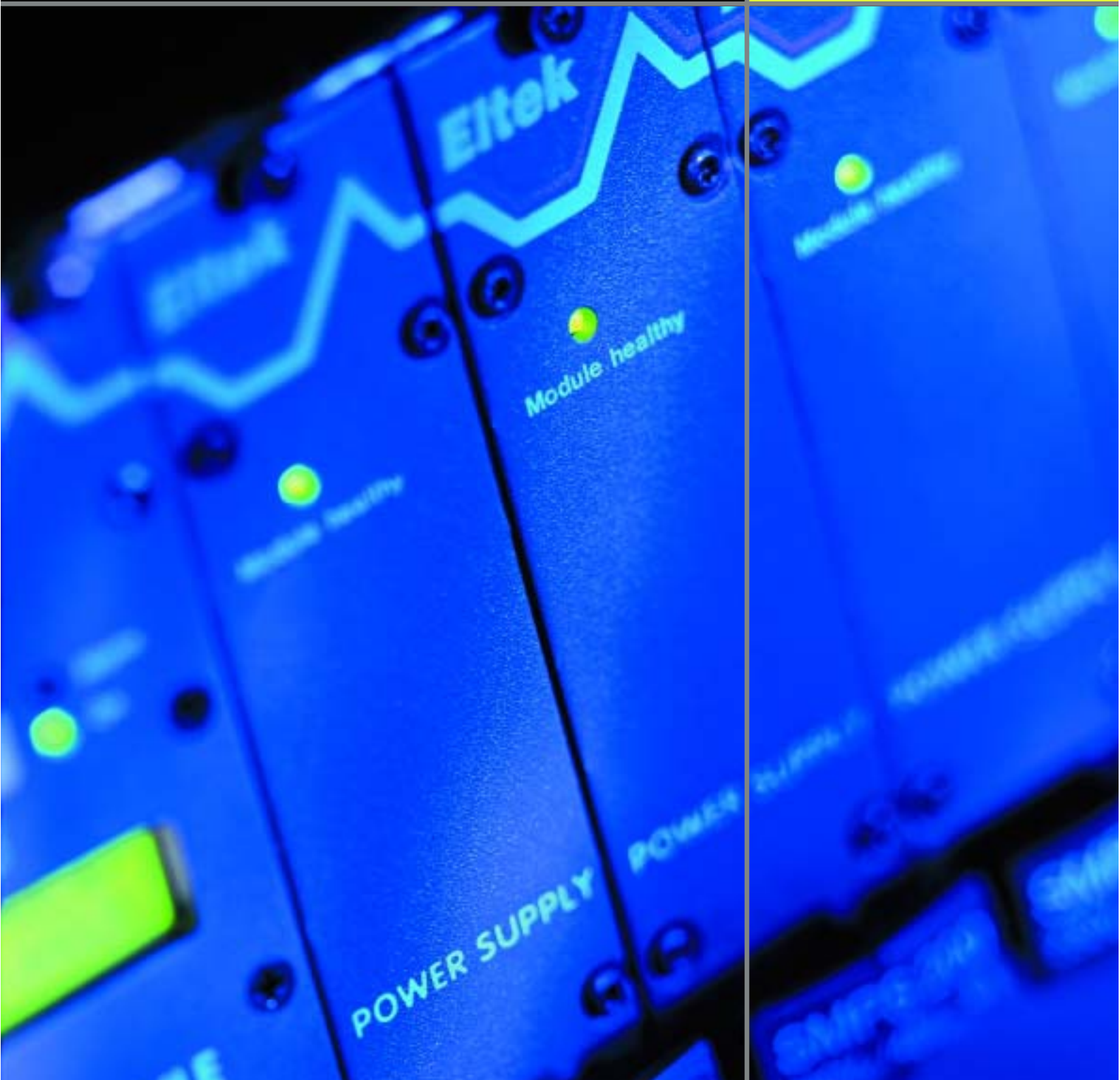
Small power range

With compliments

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MPSU 200



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Maximum power for minimum space

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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 and 280 mm deep Modular Power Supply Unit. The MPSU 200 is based upon the SMPS 200 rectifier module and utilises the AL 175 NT monitoring unit.

Flexible and expandable

The high output power and low weight unit ensures efficient utilisation 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 minimises 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 optimised through the utilisation 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 either through Battery Disconnect or non-essential load disconnect. Disconnect is typically operated after a certain time period or voltage level.

SNMP for remote and central monitoring: The MPSU 200 can be monitored and controlled via a Network Management System (NMS) such as SNMPc, Tivola 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.

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



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.

High Power Density

The wide input voltage range is 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 53.5 V.

AL175NT monitoring unit



The AL 175 NT has a user friendly, menu driven, interface that provides advanced set-up, monitoring and configuration possibilities. Operation of the AL175NT is possible through a front panel keypad with LCD Screen or via RS232 communication with a PC.

Remote monitoring

The wide range of alarm and control facilities is also available through remote supervision, either via modem, or through a TCP/IP adapter. Configurable alarm outputs with voltage free contacts can also be used for remote monitoring.

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, 1200W (6xSMPS 200) output power feeds up to six load outputs and two separate battery banks.



MPSU 200 with plug-in glass fuse distribution

With the plug-in glass fuse distribution installed, 1200W (6xSMPS 200) output power feeds up to 14 load outputs and two separate battery banks.



MPSU 200 with external load distribution

With an external load distribution installed, 1600W (8xSMPS 200) output power feeds a single load output and two separate battery banks. External distribution units can be provided upon request.



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



Winpower 700

Local or remote monitoring and control for the MPSU 200 is simplified through the use of Winpower 700. 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			
Rectifier modules	Up to 6 SMPS 200		Up to 8 SMPS 200
Control unit	AL 175 NT		
Battery MCB`s	2x30A, top connection	2x30A, front connection	2x30A, front connection
Load MCB`s	6 MCB`s		External
Load glass fuses		14	External
Mains configuration	230 Vac single phase. Rear connection		
Low voltage disconnect	Battery and/or load dependant upon factory configuration		Battery Disconnect
Electrical data- Mains input			
Input range	184-276 Vac		
Low input voltage	Shutdown below 176ac		
Surge protection	Varistor protection inside each rectifier		
Line frequency	45-66Hz		
Input current	< 1,5 A at full load and 230Vac		
Harmonic distortion	According to EN 61000-3-2		
Electrical data- DC output			
Output voltage	48Vdc		
Output current per module.	3,8A at 53,5V		
Max. system current (53,5Vdc)	22,8Adc	22,8Adc	30,4Adc
Active current share	±5% from average current between modules		
Hold-up time	>10mS		
Ripple voltage	<100mVpp		
Psophometric noise	<2 mVrms, according to CCITT		
Output protection	High voltage shutdown		
Efficiency	>87% at 100% load and nominal input voltage		
General data			
EMC	Emission: EN 50081-1, Immunity: EN 50082-2, ETS 300 386-2		
Safety	EN 60950 / IEC 950		
Isolation voltages	Input/Ground: 1.5 kVac, Input/Output: 3.0 kVac, Output/Ground: 1kVdc		
Enclosure	IP 20		
Operating temperature	-10°C to +55°C / 14°F to 131°F		
Storage temperature	-40°C to +85°C / -40°F to 185°F		
Ventilation	Convection cooled		
Rectifier indications	Green LED for ON/OFF indication (SMPS 200)		
Control unit indications	Graphical display and 3 keypads for local monitoring and control (AL 175NT)		
User interface	Winpower 700 for monitoring and control using a PC		
Remote communication	Through direct RS232 connection, modem connection or SNMP through TCP/IP		
SMPS 200			
Input voltage range	230Vac +/-20%		
Output voltage	48V nominal (45 to 59V adjustable)		
Max output current	3.8A at 53.5V		
Operating range	-10°C to +55°C / 14°F to 131°F		
Cooling	Convection		
Efficiency	>88%		
Housing	IP 20		
Weight	1kg / 2,2lb		
Protection	Current limited output Short circuit protected output Selective high output voltage shutdown		
A 175 NT			
Input voltage:	48Vdc		
Weight:	1kg / 2,2lb		
Functions	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, Information from two last battery tests, Low voltage disconnect.		
Alarms	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.		
Measured values	Battery temperature, Output voltage, Battery current, Rectifier current, Load current (calculated).		

