POWER SUPPLY SOURCE DC1500

- 48 V, 1 500 W power supply source with network supervision
- Remotely supervised 48 V voltage power supply source with the possibility of connecting backup batteries and charging
- Remote supervision and control allow a simple control of the source and its incorporation into the central supervision systems
- Easy installation and maintenance
- Communication and control by standard protocols (HTML, SNMP, NTP, SYSLOG)

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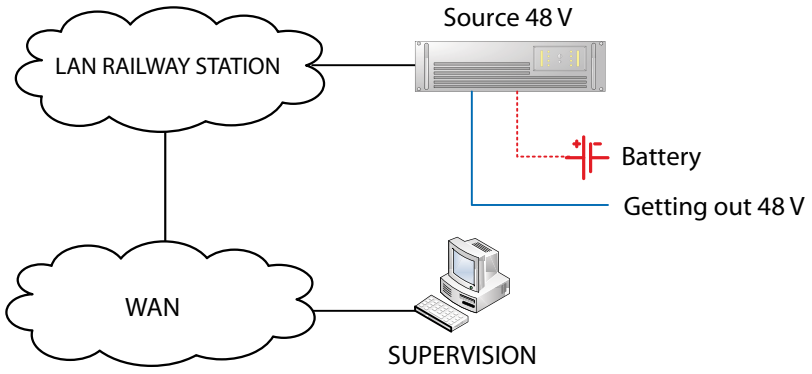
General description
48 V 1 500 W power supply source has been designed for the power supply of telecommunication systems . It allows connection of the external lead backup batteries, their charging and automatic disconnection in case of discharge (function of the Uninterruptible Power Supply System – UPS). In addition it allows switching of individual outputs, measuring of voltage, measuring of currents and temperature. The source state can be checked by www browser from the source internal websites and from the superior system by SNMP. In the same way the source can be controlled. The source contains an internal real time clock synchronized with NTP protocol allowing to save operating conditions history by means of SYSLOG protocol.

Basic technical description
The source is built in the cabinet designed for the installation into 19" rack, height of 3U and depth 40 cm (without connectors), weight of the source is 14kg. On the front side there are Ethernet connectors ETH 1 and ETH 2 (the first one for connecting into the system of remote supervision, the second one for connecting of the service technician), LED indicating the current state of the source, LCD display showing details and two buttons for local control of battery disconnecting switch. In addition the front panel includes circuit breakers for individual outputs, accumulator and 230 V input. The rear panel includes connectors for connecting outputs and accumulator and the euro plug to connect 230 V power supply.

The source has been designed for connection to the network with the nominal voltage of 230 V 50 Hz. Protection of the input voltage is provided by the circuit breaker with rated current of 10 A and characteristics C. The inner source modules are capable to operate in the range between 100 and 264 V AC without switching. During a large voltage drop the consumption from the net-



Interconnection diagram of the source with environment

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work can increase, causing 230 V circuit breaker to drop out. The voltage measured in the source is 230 V and the measured value is available both on the control websites of the source and in the information for the supervisory system. If the 230 V input is beyond the pre-set range, the source will notify this. The source does not have any network switch as it is designed for a continuous use.

Three output circuits of 48 V with rated current of 10 A, for the external accumulator and 230 V circuit are protected by standard circuit breakers installed on the source front panel . Both poles (plus and minus) of 48 V outputs and the external accumulator are disconnected by the circuit breaker. The state of all circuit breakers is scanned by an auxiliary indication contact.

Basic technical parameters

Dimensions	19“module height 3U and depth 40 cm (without connectors), width (without handles) 43 cm, height 13 cm The source is designed for installation into 19“ distributor (rack), vents on front and side panels must not be covered.
Weight	14 kg
Cover	IP20
Working temperature range	0 to 45 °C
Storage temperature range	–20 to 60 °C
Humidity	20 to 90 % not condensing
Input rated voltage	230 V ±10 %, 50 Hz
Input current maximum	10 A
Output rated voltage	54 V (2,25 V/accumulator cell)
Accumulator disconnector voltage	43,5 V (1,8 V / cell)
Output rated current	3× 10 A
Tolerance of output voltage	±3 %
Effectiveness (with rated output 1 500 W)	85 %
Connecting connectors	LAN (Ethernet) – 2× RJ45
	230 V intake – EURO-plug
	48 V output – 3 pairs of two pin plugs PA256/7,62 – conductor cross section max. 2,5 mm^2
	External accumulator – six pin plug PA256/7,62 – conductor cross section max. 2,5 mm^2 (for connecting of accumulator the use of 3 parallel cables with diameter of 2,5 mm^2 for each accumulator pole connected to the accumulator terminal clip is suggested)
	The auxiliary outputs (in the basic version not connected) – 2 two pin plugs PA256/7,62 Cable plugs PA256/7,62 are a part of the source delivery
	Grounding terminal