

Intelepower RPS250 ≤ 150A Mid Rack Power System



- The compact **Intelepower 150A RPS250** is designed to provide reliable and continuous DC power to communications equipment in the event of mains failure.
- 45RU rack based 150A RPS
- Hot pluggable 50A building blocks permitting online expansion of capacity
- Integral monitoring and control functions with alarm outputs and remote interface capability
- Low Voltage Disconnect, Battery Test Point for capacity testing
- Single fully enclosed equipment rack with acrylic front door and rear panel
- Incorporates premium 10 year design life Yuasa UXH batteries of 250Ah string capacity.
- Complete system footprint of 600mm (W) x 750mm (D)
- Includes delivery and installation into metropolitan areas during business hours.

Description:	Intelepower RPS250 150A Mid Rack Power System
Kit part no:	24723
Output capacity:	8 hours Autonomy @ up to 25A Load 6 hours Autonomy @ up to 30A Load 6 hours Autonomy @ up to 35A Load (+1) 4 hours Autonomy @ up to 45A Load (+1) 4 hours Autonomy @ up to 50A Load (+1)
N+1 option:	Yes
Warranty:	1 year complete system guarantee 4+6 year pro rata warranty on battery component

Electrical Configuration

AC Input Voltage:	415V AC 3 Phase
AC Input Current:	<16.5A Max @ 240V AC (per rectifier)
AC Frequency:	50Hz Nominal
Nominal DC Output Voltage:	48V (Nominal) 54V at 25A (Factory) 43 to 58 VDC (Adjustable)
Rectifiers:	1 x 50A AZ425 (standard) 1 x 50A AZ425 (N+1 option) = total of 2
Max expandable capacity (N+1):	1 x 50A AZ425 rectifier
Mounting Arrangement:	Rectifier sub rack with integral backplane
Batteries:	2 strings of 8 xUXH125-6 (16 units) (48V 250Ah)
Distribution:	Mains: 3 x single pole 20A C60N (6kA) MCBs Battery: 2 x 3 pole 100A NC100H (10kA) MCBs Load: 4 x single pole 32A C60N (6kA) MCBs
Monitoring & control:	1 x AZ328 Monitoring and Control Module
Alarms:	Voltage-free contacts derived from mains and battery MCB; Voltage-free contacts derived from distribution circuit alarm board in sub rack; Summary processed alarm information from AZ328 MCM
System Isolation:	1 x LVD Module (Integral to AZ328)

Mechanical Configuration

Equipment Rack Construction:	Dulux 'Blue Weave' powder coat Full height 45RU 1.6mm sheet-metal rack with 19" rails and 2 shelves. Smoked acrylic lockable door, cabinet kit, & rear panels included.
Dimensions (H xW xD):	2000mm x 600mm x 750mm
Total floor loading:	≤11.4 KPa
Total system mass:	524Kg

Operating Environment

Operating temperature:	25°C optimum – range -10°C to 50°C
Operating humidity:	To 95% noncondensing
Ventilation, install, & maintenance considerations to:	AS 3011 Part 2 AS 2676 Part 2



Like all Century Yuasa - Industrial Division products, Intelepower systems can be supplied as a single unit or as part of a complete DC power system solution tailored to meet your project requirements. **For more information, call Century Yuasa - Industrial Division, 'The Power Managers' on 1300 364 877.**

Due to a policy of continual product development, these product specifications are subject to change without notice.

Supervisory module for the RM 1000 series

Microprocessor based control unit for supervision of internal and external functions in systems comprising RM 1000 rectifiers.

Input power:
18-72V DC

Key features:

- * All information in clear text
- * Self guided operation
- * Battery test function
- * RS 232 interface
- * Additional alarm contacts for external signalling
- * Full adjustmet of all parameters

PCU 10.00



*PPR 10.00 -
Subrack for 1 - 6 rectifier
modules and one supervisory
module.*

PCU 10.00

General:

PCU 10.00 is a microprocessor based alarm and control unit for supervision of up to 13 RM 1000 modules within two subracks. This plug-in module supervises input mains, output voltage, current and condition of the RM 1000 modules and external items as distribution fuses, disconnection contactor for load or battery, battery capacity test, battery symmetry, temperature etc.

Simple menu guided operation at push buttons at the front panel.

Alarms:

- High DC voltage
- Low DC voltage
- Load/battery disconnection
- DC fuse failure
- Module failure
- Mains failure
- Battery failure
- Symmetry failure
- High temperature
- High load

All alarms are indicated with LED's and description of alarm in the display. Four potential free alarm contacts for remote signalling. Additional two open collector outputs for controlling of LVD function (may also be used as extra alarm outputs).

Displays:

2 x 16 character LCD display for monitoring of output data, alarms, messages etc.

Communication:

Serial interface RS 232 for remote control from PC with PowCom. (PowCom - Windows based communication program for remote control of any Powec power supply system.) Additional RS 485 for internal communication to other microprocessor based device.

Alarm memory:

The at any time 40 last events at the system will be saved in the internal memory with date and time and can be read in the display.

Battery test:

Automatic or manual test of the batteries by means of decreasing the floating voltage.

Measurement of voltage, current, time, Ah and symmetry voltage of 1-3 battery branches.

Programmable levels for time, Ah, end voltage and max. symmetry deviation.

Automatic return to normal float voltage at pre-set time, Ah or end voltage.

Battery failure to be indicated if voltage falls to pre-set end voltage or if the symmetry deviation is too big.

The result of the last 10 battery test will be saved in the internal memory and can be transferred to PC with PowCom

Load / battery disconnection:

Automatic disconnection of battery or load to prevent deep discharge of the battery. Adjustable thresholds for disconnection and reconnection. As an alternative the disconnection can be a partial time controlled disconnection of the load.

Temperature compensated charging:

The charging voltage is automatically compensated according to ambient temperature. Programmable compensation factor. Separate threshold for temperature alarm.

Other data:

Ambient temp.: -25 - +55°C

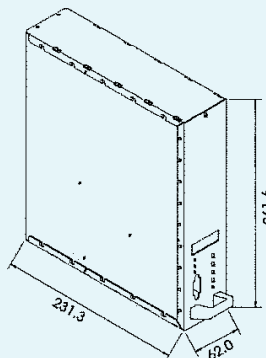
Storage temp.: -50 - +85°C

Vibration: IEC 721-3-3

Shock: IEC 721-3-2

Dimensions- 62 x 262 x 232 mm (WxHxD)

Weight: Approximately 0,5 kg



Modular power supply PMP

PMP 11.48

The PMP 11.48 is a plug-in rectifier with power factor correction.

The electrical design is based on the resonance switch mode approach - soft switching.

Optimized for telecom applications.

Input:
230V AC

Output:
48V DC

Fits into PPR 10 subrack, which can incorporate up to 7 rectifiers.

Key features:

- * Input overvoltage shut down
- * Thermal protection
- * Active load sharing
- * Hot swappable
- * Natural convection cooling
- * Low weight, 3,1 kg



*PPR 10
Subrack for PMP 10
and PMP 11 rectifiers*

PMP 11.48

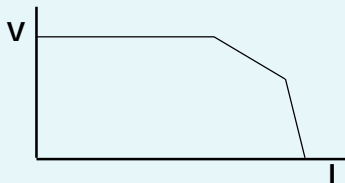
Input:

Module:	Voltage:	Current (max.pow):	Soft start:	Fuse:
PMP11.48	205-250V AC ±10% single phase 44-66Hz	<6.8A	<10A peak max.5ms	8A

Power factor: >0.99 at max. load
 AC transient: 3000V/2J
 EMC: EN 50081-1 and EN 50082-2
 Connection: IEC-320/C14

Output:

Partno.:	Model:	Voltage/Power:
ZM2304108	PMP11.48	45V DC - 56V DC/1100 W



Power: Max. 1100W, constant output power from 50-57,7V DC
 Tolerance: $V_{out} \pm 1\%$, constant voltage regulation.
 Transient-response: ±5% at load variation 10-90% or 90-10%, recovery time 10ms.
 Load sharing: <5% of nominal current
 Ripple: <100mV p-p (B.W. 30MHz)
 Psophometric: <2mV, according to CCITT norms.
 EMC: EN 50081-2 and 50082-2
 Connection: DIN 41612F
 Power: Max. 1100W, constant output power from 45-56V DC

Other technical data:

Efficiency: >91%
 Safety: EN 60950, class 1
 Protection: Short circuit proof, automatic current limiting, selective shut down of modules at excess output voltage.
 Thermal protection shutting module down at inlet air > 55°C automatic reset at 50°C.
 Input overvoltage shut down at input >300V. Automatic reset at input <275V.

Alarms: High voltage/shut down
 Low voltage/module failure.
 Each alarm has an LED indicator on the front panel and common potential free contact for external signalling.

Insulation: Reinforced insulation, tested at:
 4.25 KV DC primary-secondary
 2.12 KV DC primary-ground
 750 V DC secondary-ground

Enclosure: IP20
 Radiated EMC: EN 50081-1
 Audible noise: <35dBA
 Ambient temp.: -25 - +55°C
 Storage temp.: -40°C - +85°C
 Cooling: Natural convection
 Vibration: IEC 721-3-3
 Shock: IEC 721-3-2
 Dimensions: 62 x 261.6 x 231.3 mm (W x H x D)
 Weight: 3,1 kg
 Mounting: In subrack PPR 10.00, up to 7 modules per shelf.

