



DESCRIPTION

The RD250/250 series is a dual voltage 12/24VDC, 10/10 amp rackmount power system with multiple power distribution outputs specifically designed for use within the access, security, CCTV, and the mass notification segments of the life safety industry. The network option monitors, reports, and controls power system functions over a local or wide area network.

Available with either two, eight, or sixteen, continuous or switched power outputs, each output is fused at 3A and individually protected against electrical surges caused by lightning or transients on the external wiring (SurgeShield™).

The unit is selectable on each of the two power supplies for either 12 or 24VDC (default factory setting is to provide one power supply set to 12V and one power supply set to 24V.) The switched power output on each supply is user selectable for either failsafe or failsecure (ON-OFF) operation when the fire alarm input is initiated (default factory setting is failsafe).

Comprehensive fault detection and reporting, with programmable fault delays, is provided along with datalogging capability of fault occurrence, battery usage time and current power supply status.

Designed to fit neatly into standard equipment racks, features include: removable terminal strips for field wiring, enhanced input and output surge suppression, automotive blade fuses for improved reliability, a front removable face plate for serviceability, and a 16 gauge steel 2U rack mount chassis.

SPECIFICATIONS

Parameter	RD Rating		Unit
	FP0250	FP0250	
Input Voltage	120 / 230*	120 / 230*	VAC
Input Power (max)	282	282	Watts
Output Voltage	12 or 24	12 or 24	VDC
Output Current	20 or 10	20 or 10	Amps
Battery Charge Capacity	80	80	Ah
Efficiency	88	88	%
Output Ripple	120	120	mVp-p
Line Regulation	0.1	0.1	±%
Load Regulation	2	2	±%
BTU Rating	218		BTU/Hr
Power Outputs	2, 8, 16		
Distributed Power Outputs	8 or 16		5A/output
Fire Alarm Interface	Yes		
2U Mechanical Dimensions	19.00"W x 3.5"H x 14"D		
Weight	21 lb.		

*Factory default 120VAC. Must be user configured for 230VAC

ORDERING

Standard Part No.	Description	Bulk Out	Aux Out
RD250/250	20A/12V or 10A/24V (x2)	2	
RD250/250-8	20A/12V or 10A/24V (x2)	2	8
RD250/250-16	20A/12V or 10A/24V (x2)	2	16

Network Part No.	Description	Bulk Out	Aux Out
RD250/250N	20A/12V or 10A/24V (x2)	2	
RD250/250-8N	20A/12V or 10A/24V (x2)	2	8
RD250/250-16N	20A/12V or 10A/24V (x2)	2	16

OVERVIEW

- Agency Listed for Access Control, Security, CCTV, and Mass Notification
- **FlexPower®** Feature Set
 - ◆ **SurgeShield** Individual output surge protection
 - ◆ **SureCharge** Microprocessor controlled battery charging
 - ◆ **PowerCom** Power Supply programming / monitoring software
 - ◆ **PwrHealth** Intelligent battery charging and battery state monitoring
 - ◆ **VSelect** Installer selectable output voltage
 - ◆ **TruWatt** Delivers twice the current at 12V than at 24V
 - ◆ **Reliability+** Full fault protection / high efficiency / fiberglass pcb
 - ◆ **GreenSmart** RoHS compliant, lead free, energy efficient design
 - ◆ **DataLink** Network communication interface option
- **Rackmount Features**
 - ◆ Rated for continuous duty, at full data sheet ratings
 - ◆ Multiple outputs for system power and direct lock control
 - ◆ Microprocessor dual rate charging restores battery sets from 4 to 80Ah
 - ◆ Fire alarm interface (FAI) with latchmode for Canada
 - ◆ Configurable fail-safe / fail-secure modes of operation
 - ◆ Comprehensive fault detection and reporting
 - ◆ 12 or 24 VDC selectable per output by positional jumper
 - ◆ Removable jumper for individual output disconnect
 - ◆ Enhanced input and output surge suppression
 - ◆ Programmable system and AC fault alerts
 - ◆ User enabled earth ground and battery presence jumpers
 - ◆ Front removable chassis face plate for serviceability
 - ◆ Automotive blade fuses for improved reliability
 - ◆ Removable 3 wire grounded AC line cord
- **Lifetime Warranty**

AGENCY LISTINGS

- ◆ UL 294 / UL 603 / UL 864
- ◆ UL1076 / UL 1481 / UL 2044 / UL 2572
- ◆ ULC S318 / ULC S319 / ULC S527
- ◆ CSA C22.2 #107.1 / CSA 22.2 #60950
- ◆ FCC Part 15, Subpart B / CSFM Approved

FLEXPOWER® STANDARD FEATURES

SureCharge The microprocessor controlled charging process used by the FlexPower power supply guarantees both proper charging current for the battery and fastest charge time. The constant current charger provides a linear, predictable charge time for any lead acid, gel battery set from 4 to 80 amperes without stress or damage to the battery.

SurgeShield Provides additional protection for each individual power output, leading to less down time due to electrical surges or transients caused by lightning or power line disturbances on the external wiring.

PowerCom/PowerCom-USB LifeSafety Power's proprietary software interface for communication with FlexPower equipment through a DATALINK or USB connection. PowerCom is used for power supply monitoring, programming, and reporting.

The NL1 DATALINK network module enhances PowerCom's capability with remote diagnostics, battery management, trouble / service email alerts via LAN/WAN, and remote on/off reset control.

The DL1 USB cable and a computer laptop USB connection, enables PowerCom-USB to be used by service personnel for onsite power supply programming and system diagnostic evaluation.

VSelect One single switch for configuring the output between 12 and 24VDC eliminates field errors and allows for the reduction and simplification of service inventory by eliminating the necessity of stocking units in each voltage.

TruWatt Output power capability of the power supply remains constant regardless of the output voltage setting. For example, a FlexPower 250 watt supply will provide 10 amps at 24VDC and 20 amps at 12VDC, allowing the same number of locking devices to be used at either the 12 or 24V setting.

Reliability+ All power supplies within the FlexPower system are fully fault protected and feature fiberglass printed circuit boards rather than paper-based to protect the electronics from water and other corrosive elements found in industrial settings. High efficiency power supply design promotes low heat generation leading to a longer service life.

GreenSmart All members of the FlexPower family are RoHs compliant, lead-free, and meet the latest state, federal and European requirements for energy efficiency.

DataLink - Smart Power Management Communication Interface

Monitor, program, control, and report key power supply functions by computer or local/wide area network using a browser interface or LifeSafety Power's PowerCom® remote management software.

Power supply network connection requires the optional NL1 network module. Power supply computer connection requires the optional DL1 USB cable.

FIRE ALARM INTERFACE (FAI)

- **Activation Methods**
 - ◆ DC voltage: 9 to 33VDC, 3 to 15mA
 - ◆ Dry contact NO/NC
- **Latch Enable:** NC contact set or switch (typically for Canadian use)

FAULT DETECTION AND REPORTING

The comprehensive fault detection and reporting mechanism of the FPO series provides for both local and remote fault reporting.

Independent form C relay contacts are provided to report AC and system fault conditions to remote or auxiliary equipment.

Detected Fault Conditions:

- **AC Power**
 - ◆ AC loss, AC low
 - ◆ AC Presence, master power switch
- **DC Power and System**
 - ◆ Abnormal or loss of power supply operation
 - ◆ Over current, over temperature condition
 - ◆ DC output high, low
 - ◆ Battery Presence, Earth Ground (user optional)
 - ◆ Reversed battery condition, blown fuse or loss of output voltage on selected accessory boards (detected on the power supply)

POWER DISTRIBUTION

- *Eight or sixteen power distribution outputs, individually selectable for either continuous or switched DC output. The switched output is controlled by the FAI input.*
- **3A fused per output**
 - ◆ Fusing may be increased if desired by installer for greater power capability - see manual for further information
- **Visual Indicators**
 - ◆ DC Presence: Green LED per output
 - ◆ Fault Condition: Yellow LED per 8 output bank
- **Removable terminals: accepts #12 to #24 AWG**

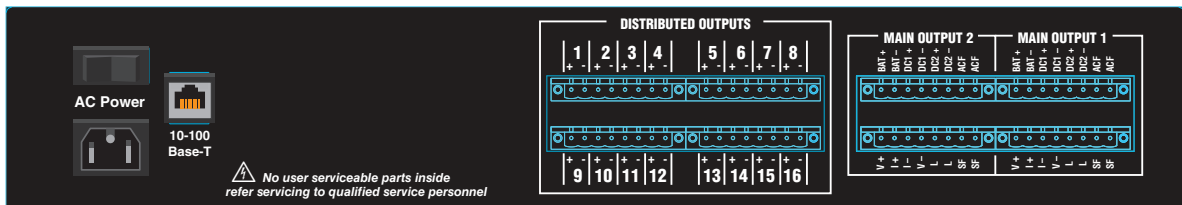
NETWORK OPTION*

Network Interface for Monitoring / Reporting / Controlling

- *Enables network connectivity via LAN / WAN for remote diagnostics, battery management, and trouble / service email alerts*
- *PowerCom software provides 24/7 power status monitoring of*
 - ◆ System integrity
 - ◆ Battery condition
 - ◆ Cabinet temperature
- *Network & email alerts for*
 - ◆ AC / System fault conditions
 - ◆ Switch to back-up power
 - ◆ Degraded battery
 - ◆ Fire Alarm Interface (FAI) or external event activation
 - ◆ Time-to-service reminders
- *100 event time & date stamp buffer*
 - ◆ Excel compatible reports
- *SNMP interface v1, v2, v3*
 - ◆ Allows network access of real time system parameters under SNMP

*Network systems are factory configured

RD Series rear panel



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