

DESCRIPTION

These highly efficient rectifiers offer a range of output voltages and power levels.

Easy to install and compact, these robust, reliable rectifiers are convection cooled and include temperature compensation internal Low Voltage Disconnect (LVD) and Alarm Card with relay outputs as standard.

They can be used as a standalone power source or can be operated in parallel to provide redundancy or higher output ratings.

Internal options including load disconnect, current indicators, alarm and control interface and auto float/boost.

FEATURES

- ◆ Convection Cooled
- ◆ Thermally Protected
- ◆ Wide Range AC Input
- ◆ Power Factor Corrected
- ◆ Input/Output Voltage and Current Protected
- ◆ Output Voltages: 11.5 to 60VDC
- ◆ 85-88% Efficiency
- ◆ Automatic Float/Boost Charge Cycle
- ◆ Alarm and Control Interface Including Active Load Sharing
- ◆ Temperature Compensation
- ◆ Output Current Indicator
- ◆ Built-in Low Voltage Disconnect
- ◆ Internal Alarm Card with Relay Outputs



RECTIFIER MODULES

MAX. POWER	NOMINAL VOLTAGE	OUTPUT CURRENT	RATED VOLTAGE	MODEL NUMBER
696W 348W	48V	12A 6A	58V	RW748U RW348U
638W 290W	24V	22A 10A	29V	RW624U RW324U
508W 290W	12V	35A 20A	14.5V	RW512U RW312U

OPTION/FEATURE CODES

DESCRIPTION/CODE	-10	-11	-20	-21
Temp. Compensation	Y	Y	Y	Y
Auto Float Boost	Y	Y	Y	Y
Alarm & Control I/F	Y	Y	Y	Y
Low Volts Disconnect	N	Y	N	Y
Internal Alarm Card	N	N	Y	Y

NOTES:

1. Add Option Code as suffix to model number. Code -21 is standard, consult sales for other option code availability.
2. Units are supplied as standard with 2m AC line cord (unterminated) and 2 x DC output connectors.

ACCESSORIES

CODE	DESCRIPTION
ACA-TC2	2 meter Temperature Compensation cable.
ACA-TC7	7 meter Temperature Compensation cable.
ACA-DC2	2 meter DC Lead for battery or load.
ACA-Lumb4	4-way Lumberg Macromodule connector.
ACA-Lumb4S	4-way Lumberg Macromodule connector with screw terminals.
ACA-Alarm0.5	0.5 meter RJ45 Alarm/Control interface cable.

SAFETY STANDARDS



UL60950
CSA22.2 NO.60950
EN60950
IEC60950 (Certified)

www.unipowertelecom.com

NORTH AMERICA CALL: 954-346-2442 • EUROPE CALL: +44 (0)1903 768200

SPECIFICATIONS

Typical at Nominal Line, Full Load and 25°C Unless Otherwise Noted.

INPUT

Voltage Range	100-275VAC (Full Output Power)
.....	85-100VAC (Reduced Output Power)
Power Factor	>0.93
Frequency	45-66Hz
Inrush Current Limiting, Max.	<2x Maximum Input Current
Input Protection	HRC Fuses in Phase & Neutral
.....	Automatic shut-down & restart
Maximum Input Current	4A - 300W Models, 8.5A - 5/6/700W Models

OUTPUT

Current & Voltage	See Table
Output Power	300 or 700W
Line & Load Regulation, Max.	0.6%
Holdup Time	>15msec., for 20% output voltage drop
Startup Time	Walk-in delay 2 Seconds (depends on AC input)
Protection	
Current Limit	Adjustable to 50-100% rated current
Over Temp.	Automatic current turndown
Polarity Reversal	Output Fuse with Crowbar Diode
OverVoltage	Adjustable Limit
Peak to Peak Noise, 0-20MHz (unweighted)	<50mV
Wideband Noise, 5kHz - 1MHz (unweighted)	
12V	<2.5mV
24V	<5.0mV
48V	<10.0mV
Voice Band Noise, 100Hz - 5kHz (psophometric)	
12V	<0.5mV
24V	<1.0mV
48V	<2.0mV
Ripple below 100Hz (unweighted)	12V/24V, <5mV; 48V, <10mV
Current Limit	105% Rated Current
Efficiency	85-88% dependent on Model

SAFETY

Standards	UL60950, CSA22.2 No. 60950, EN60950
.....	IEC60950 Amendment 2 Certified

Isolation

Input to Output	3000VAC
Input to Chassis (VDR to chassis removed)	2500VAC
Output to Chassis	1500VAC

EMI

ESD	CISPR 24
Radiated RF	CISPR 22
AC Harmonics	EN61000-3-2
AC Flicker & Fluctuations	EN61000-3-3

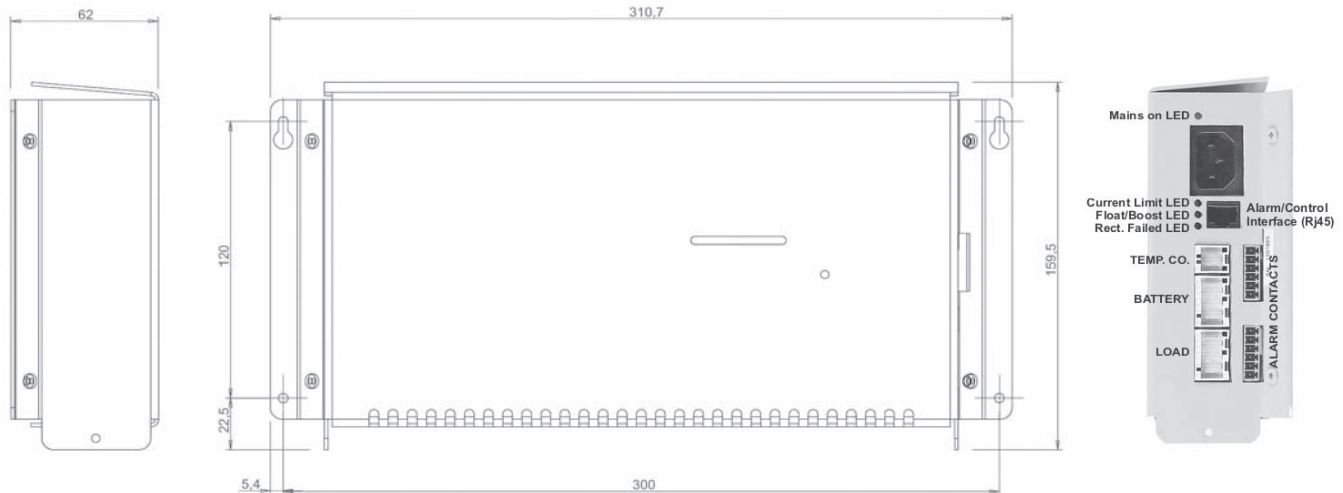
ENVIRONMENTAL

Operating Temp. Range	300W models, -10°C to +60°C
.....	500W, 600W & 700W models, -10°C to +50°C
Storage Temp. Range	-20°C to +70°C
Humidity	5% to 95%, Non-Condensing
ESD	CISPR 24
Altitude	up to 2500m
.....	Derate maximum ambient by 4°C per 1000m above sea level
Cooling	Natural Convection

PHYSICAL SPECIFICATIONS

Dimensions, Inches (mm)	6.41 H x 12.24 W x 2.44 D
.....	(163 x 311 x 62)
Weight	3.3 lbs. (1.5 kg.)
Shipping Dimensions, Inches (mm)	9.25 H x 14.84 W x 4.80 D
.....	(235 x 377 x 122)
Shipping Weight	5.3 lbs. (2.4 kg.)

OUTLINE DRAWING



LVD SETTINGS

MODEL	ADJUSTMENT RANGE	MAX. CURRENT
RW748U	38.0 - 48.0V	12A
RW348U	38.0 - 48.0V	10A
RW624U	19.0 - 24.0V	22A
RW324U	19.0 - 24.0V	10A
RW512U	9.5 - 12.0V	35A
RW312U	9.5 - 12.0V	20A

Dimensions in mm

Standard Features

Output current indicator	Ten segment red LED "dot" display.
Temperature Compensation	Output voltage slope adjustable 0.1 to 0.2%/°C.
Auto Float/Boost	Rectifier enters boost mode at power up. When battery current reduces to float threshold limit (adjustable from 0.1A to 40% MRC), unit reverts to float voltage setting.
	When in boost but out of current limit, rectifier will automatically switch back to float after about 4 hours.
	If battery current exceeds the float threshold limit when the rectifier is in float mode it will automatically switch to boost mode.

rw-ds-revC1-01-17-08