

# Rack Power

# Product Specifications

ANZ#: Z076, January 17, 2003

RM- Series Switch-Mode Rack Power Systems	
Total Power	3000 Watts
Input Voltages	90-264 VAC
Number of Outputs	One - Five

## SPECIAL FEATURES

- Universal AC input
- Low profile standard 19" rack-mountable
- Active PFC front end circuit
- Active current sharing for accurate load share
- Overload and short circuit protection
- 34 different output modules
- Redundant setup with hot plug feature

## ELECTRICAL SPECIFICATIONS (PER SHUTTLE)

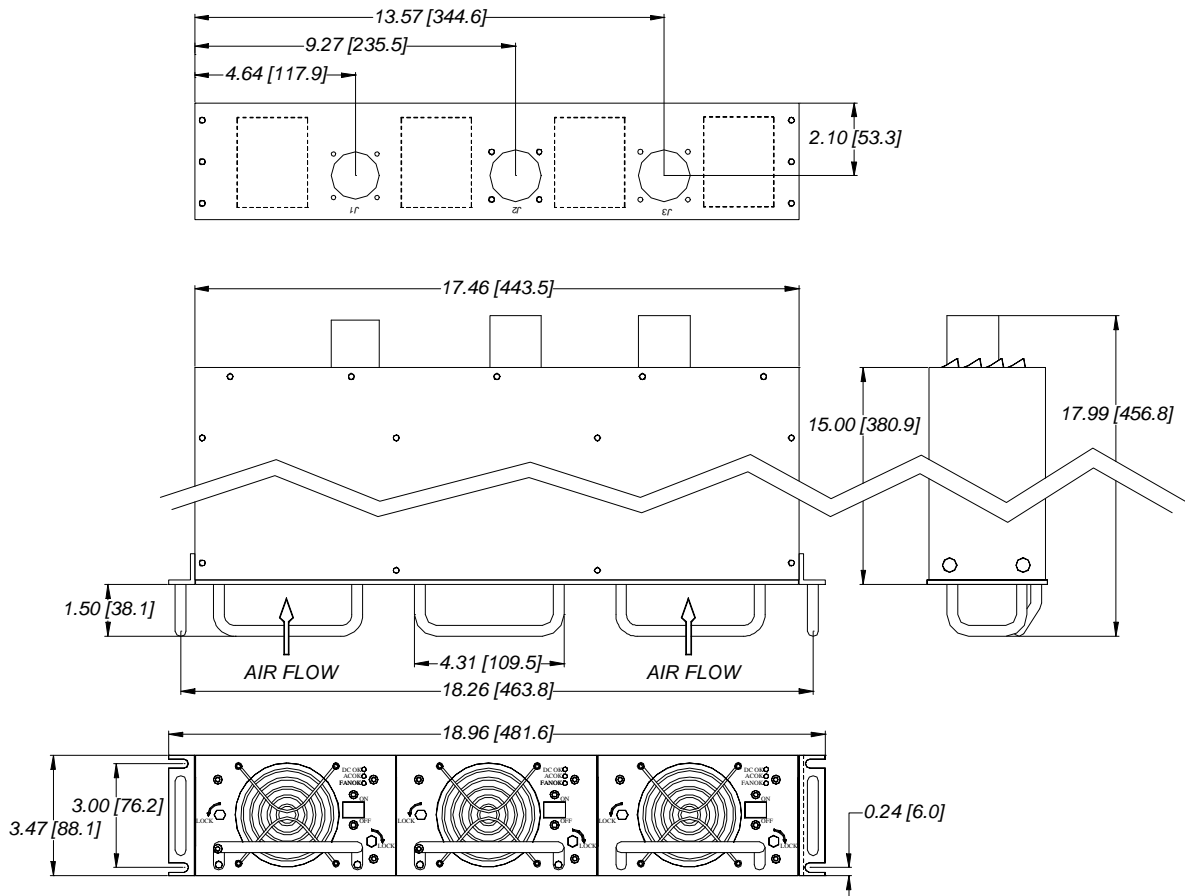
Input range	85 to 264 VAC, Full range
Frequency	47 to 440 Hz
Inrush current	40.0 Amps maximum at 230VAC, cold start, 25° C
Input current	12Amps maximum at 90VAC
Efficiency	75% typical at 230VAC and maximum load
Power Factor	> 0.99
EMI filtering	FCC part 15J class B, CISPR 22 class B
Maximum power	1000W, 230VAC input or 700W, 115VAC input
Voltage regulation	±2 - 5%, vary depending on models
Leakage Current	3.5mA typ. at 230VAC
Hold up time	20mS minimum at 120VAC nominal
Protection	Over-voltage, Short circuit and over current protection, thermal protection.

## ENVIRONMENTAL

Operating temperature:	0 to 60 ° C
(De-rating : 2.5% of total power per ° C)	
Storage temperature:	-40 to 85 ° C
Humidity (Non-Condensing):	5% to 95%
Cooling:	Forced air
Vibration Frequency:	5 to 50 Hz
MTBF:	>250,000 Hours at full load and 25°C ambient conditions (MIL-217F)

## SAFETY

UL1950	- Comply
EN60 950	- Comply
CE	- Certified



## AVAILABLE DC/DC OUTPUT MODULE SELECTIONS

### SINGLE OUTPUT MODULES

Module Code	Volts (V)	Amps(Nom.)	Total (W)
A	1.5	50.0	75
B	2.0	50.0	100
C	2.2	50.0	110
D	3.0	50.0	150
E	3.3	50.0	165
F	5.0	40.0	200
G	5.2	40.0	208
H	6.0	34.0	204
I	9.0	21.0	189
J	10.0	20.0	200
K	11.0	18.0	194
L	12.0	17.0	204
M	14.0	15.0	210
N	15.0	14.0	210
O	18.0	12.0	216
P	20.0	10.0	200
Q	24.0	9.0	216
R	28.0	7.5	210
S	30.0	7.0	210
T	33.0	6.4	211
U	36.0	6.0	216
V	42.0	5.0	210
W	48.0	4.5	216
X	54.0	4.0	216
Y	56.0	3.8	213
Z	60.0	3.5	210

### TRIPLE OUTPUT MODULES

Module Code	Volts (V)	Amps(Nom.)	Total (W)
1	5.0	15.0 (20.0 pk)	100
	12.0	9.0 (14.0 pk)	
	+ 5.0	1.0	
2	5.0	15.0 (20.0 pk)	100
	12.0	9.0 (14.0 pk)	
	-5.0	1.0	
3	5.0	15.0 (20.0 pk)	100
	12.0	9.0 (14.0 pk)	
	+12.0	1.0	
4	5.0	15.0 (20.0 pk)	100
	12.0	9.0 (14.0 pk)	
	-12.0	1.0	
5	5.0	15.0 (20.0 pk)	100
	24.0	4.0 (14.0 pk)	
	+5.0	1.0	
6	5.0	15.0 (20.0 pk)	100
	24.0	4.0 (14.0 pk)	
	-5.0	1.0	
7	5.0	15.0 (20.0 pk)	100
	24.0	4.0 (14.0 pk)	
	+12.0	1.0	
8	5.0	15.0 (20.0 pk)	100
	24.0	4.0 (14.0 pk)	
	-12.0	1.0	

## MECHANICAL DRAWING

### Input connector (J1): MS3102A22-9P

Pin A: Neutral  
 Pin B: Ground  
 Pin C: Line

### Output connector (J2, J3): MS3102F24-28S

See table below for output pin assignment

J2 and J3 Output Pin Assignment			
<b>A</b>	+5VDC	<b>N</b>	N/C
<b>B</b>	+5VDC	<b>P</b>	+5VDC Sense
<b>C</b>	+5VDC RTN	<b>Q</b>	+5VDC Sense RTN
<b>D</b>	+5VDC RTN	<b>R</b>	+12VDC Sense
<b>E</b>	+12VDC	<b>S</b>	+12VDC Sense RTN
<b>F</b>	+12VDC	<b>T</b>	-12VDC Sense
<b>G</b>	+12VDC	<b>U</b>	-12VDC Sense RTN
<b>H</b>	+12VDC RTN	<b>V</b>	DC-OK
<b>J</b>	+12VDC RTN	<b>W</b>	DC-OK RTN
<b>K</b>	+12VDC RTN	<b>X</b>	OVER-TEMP
<b>L</b>	-12VDC	<b>Y</b>	OVER-TEMP
<b>M</b>	-12VDC RTN	<b>Z</b>	N/C

- This output pin assignment table is for existing model, E01-021

- Some engineering surcharges might apply when different output voltage combination is required.