

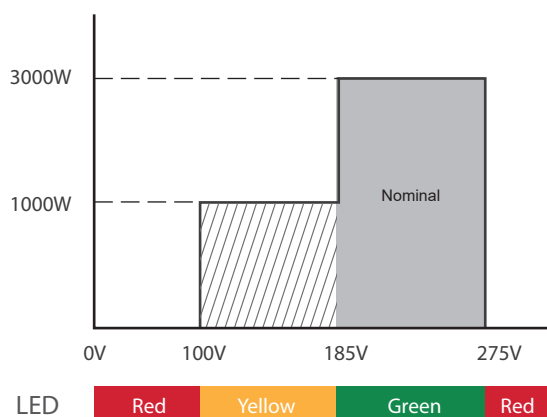
Feature:

- Innovative single phase input stage with wide input range (100-240Vac, Max 3KW per module)
- Power factor > 0.99 Sinusoidal input current
- Comply international EMC and safety standard
- High efficiency > 95%
- Light weight (2.1 Kg) & high power density
- Microprocessor based
- Active or passive load sharing
- Wide operation temp. -40°~70°C



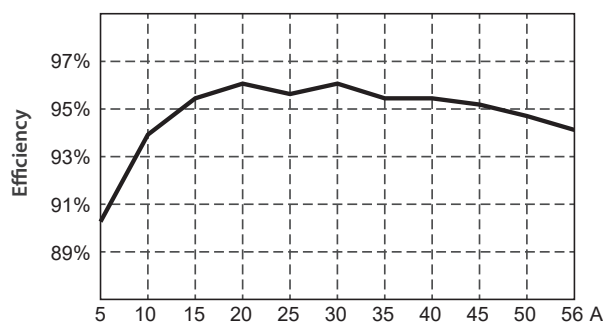
RA-3048	
Input	
Voltage	Wide Input Range: 100-275 VAC, Max 3kW (100-184 VAC at de-rated output power)
Current (maximum)	16 ARMS
Frequency	45-66 Hz
Power Factor	>0.99 at 50-100% load
Input Protection	Fuse
THD	<5% at full load; satisfies requirements of EN61000-3-2
Efficiency	> 95% (Load 40%~80%)
Surge Protection	IEEE C 62.41 / IEC 61000-4-5 / IEC 61000-4-4
Output	
Voltage	54 Vdc (adjustable range : 45-58 VDC)
Static Regulation	±1.0% (10-100% load)
Current (maximum)	62.5 A (@ 48 VDC)
Power (Max)	3000W @ 220VAC; 1000W @ 100VAC
Current sharing (10-100% load)	±5% of maximum current from 10 to 100% load sharing from CE-R1
Protection	Overvoltage-only faulty unit shuts down; Overcurrent-can sustain short circuit at output terminals indefinitely; Over-temperature - gradual reduction of current limit if heat-sink temperature exceeds pre-set limit
Dynamic Regulation	±5.0% for 10-90% or 90-10% load variation, output voltage regulation time < 2.5%. +/-1% within 2ms of step change.
Output Noise	<2mVrms Psophometric weighting; < 10mVrms 10kHz - 100MHz; < 100mV peak to peak 0~30MHz bandwidth
Ripple	< 100 mV peak to peak, 30 MHZ bandwidth
Other Specifications	
Surge Protection	IEC 61000-4-4 / IEC 61000-4-5 / IEEE C62.41
EMC	Emission : EN 61000-6-3; EN 61000-3-2; EN 61000-3-3. Immunity: EN61000-6-1; EN 61000-6-2.
Inrush Current	<28.5 Arms peak at nominal mains voltage
Voltage Withstand Test	3.0 KVAC - input and output (4.25 KVDC primary- secondary)
Safety	UL 60950-1, UL62368-1 3rd , IEC62368-13rd , EN62368-1 3rd
Isolation	1.5 KVAC -input to earth, 500 VAC -output to earth
Environmental	
Acoustic noise,full load	< 55 dBA @ Tambient = 40°C
Operating temperature	Operating range -40°C ~ 70°C; derated power at 50°C ~ 70°C ; humidity 5-95% RH non-condensing
Storage temperature	-40 to +85°C ; humidity 0-99% RH non-condensing
Cooling	Fan (front to back airflow, temperature and output current regulated speed)
Mechanical	
Dimension (W x H x D)mm	144 x 41 x 328 mm
Weight	2.1 kg (4.6 lbs)

Power output de-rating vs. input voltage :



Efficiency :

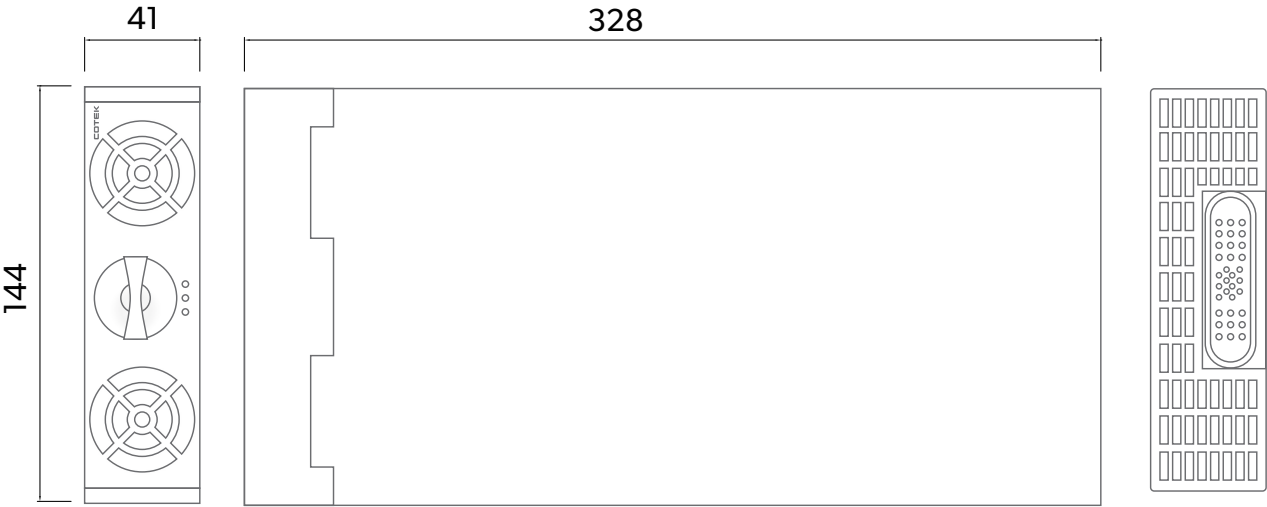
Load 40-80% Efficiency 95%
Full Load Efficiency 94%



System Information :

System	Content	Output Spec.
M Platform (5 Way) 	RA-3048 (SMR) x 5 CE-R1 x 1 AC Input Breaker x 1 Battery Breaker x 2 DC Load Breakers x 10 (100A x 2, 50A x 6, 30A x 2) SPD x 1 RS232 x 1 Load Breaker Alarm DIP Switch x 1	Max. 15000 W
S Platform (3 Way) 	RA-3048 (SMR) x 3 CE-R1 x 1 AC Input Breaker x 1 Battery Breaker x 2 (100A) DC Load Breakers x 4 (50A) RS232 x 1 Load Breaker Alarm DIP Switch x 1	Max. 9000 W
CE-R1 	Display & Settings	N / A

■ Mechanical Drawings :



■ LED Indicators:



RA-3048 LED indications:

- "Power" (green color) indicates if the module is ON or OFF
- "Warning" (yellow color) indicates an abnormal situation
- "Alarm" (red color) indicates an alarm situation

LED	Status	Description
Power (Green)	ON	Module is powered up normally
	OFF	Mains are unavailable
Warning (Yellow)	Flashing	■ Rectifier in power derate mode ■ Input voltage out of range, flashing at overvoltage ■ flashing at high voltage ■ flashing at low voltage ■ flashing at overvoltage ■ flashing at high temperature ■ flashing at power limit ■ flashing at current limit ■ flashing at fan failure
	ON	Rectifier adopts Equalize
	OFF	No abnormal situation is present
Alarm (Red)	ON	■ Module is in Shut-down Mode due to low mains, high internal temperature, or high output voltage ■ Internal module failure (malfunction) ■ Fan failure (single or double fan malfunction)
	OFF	No alarm situation is present