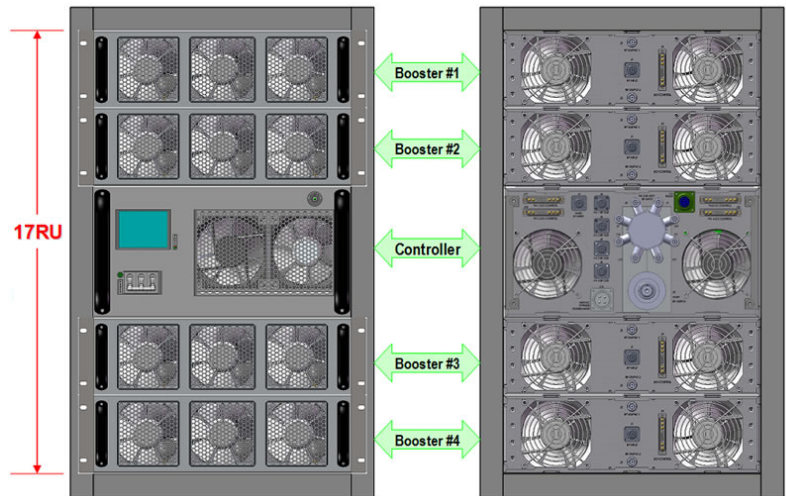


Solid State Matched Band High Power Amplifier

6014 – MBS6C6KZN
3100 – 3500 MHz / 12000 Watts Pulse

The MBS6C6KZN (SKU 6014) is suitable for high power S-Band pulse applications. This rack mount amplifier utilizes pulse power devices that provide high gain and excellent Pulse output power performance. Long-term reliability and high efficiency are achieved by employing advanced broadband matching networks and combining techniques, high quality PFC power supply, EMI/RFI filters, machined housing, and all qualified components. Empower RF's ISO9001 Quality Assurance Program assures consistent performance and the highest reliability.

- Solid-state Class AB linear pulse design
- Instantaneous broadband
- Suitable for Pulse applications
- Built-in control, monitoring & protection circuits
- 50 ohm input/output impedance
- High reliability and ruggedness
- Isolator output protection



ELECTRICAL SPECIFICATIONS @ 440 VAC, 3Φ, 25°C, 50 Ω System

Characteristics	Rating	Min	Typ	Max	Units
Frequency Response	BW	3100		3500	MHz
Power Output @ Pulse conditions Duty Cycle = 16% Pulse Width = 2 – 50 μSec Duty Cycle = 10% Pulse Width = 2 – 300 μSec	P _{PULSE}	12,000		17,000	Watt
Input Power for Rated Output	P _{IN}	10			dBm
Power Gain @ 12000 W Pulse	G _P	62			dB
Pulse power variation (relative to mid pulse power) @ Pulse Width = 300μSec	P _{PPV}			±0.75	dB
Pulse power variation (relative to mid pulse power) @ Pulse Width = 50μSec	P _{PPV}			±0.5	dB
Harmonics	H		-70	-60	dBc
Spurious Signals	Spur		-70	-60	dBc
Supply Voltage, 3 Phase (50/60 Hz)	V _{AC}	360	440	480	Volt
Switching Speed (On/Off)	SW			1	μSec
RF Rise time and Fall time	T _{RISE} / T _{FALL}		50	100	nSec
AC Input Power Efficiency	EFF	18	20		%

MECHANICAL SPECIFICATIONS

Parameter	Value	Unit
Dimensions W x H x D (R17U)	19 x 29.7 x 24 (including rear connectors)	Inch
Weight	300	lb.
RF Input Connector	N-Type Female	
RF Output Connector	Wr-284 Wave Guide	
AMP control connector (RS-422)	Circular D38999/24WD35PN	
AC Input connector	Circular D38999/24WE6PN	
Cooling	Built in forced-air system	
LCD	Touch screen Digital Display, including Fwd/Rev Power indication (dB or Watt scale), On/Off, Standby mode, Fault indication, Rear panel Full Duplex RS422 remote interface	

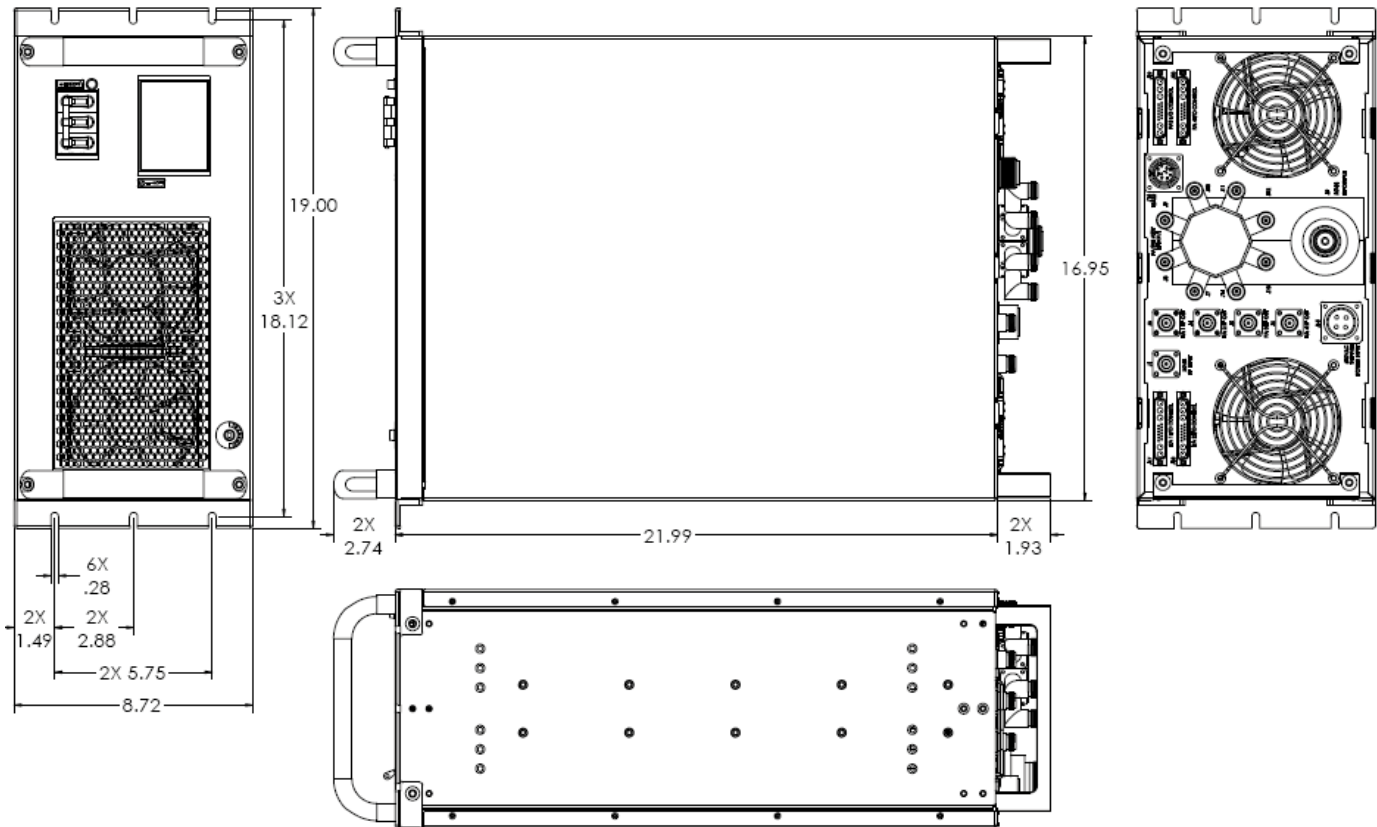
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ENVIRONMENTAL SPECIFICATIONS

Parameter	Symbol	Min	Typ	Max	Unit
Operating Ambient Temperature	Tc	0		+40	°C
Non-operating Temperature	Tstg	-40		+85	°C

PROTECTIONS

Input Overdrive	+15 dBm			Max
Load VSWR @ nominal peak power	3 : 1 any angle & magnitude			Nom
Thermal Overload	75°C shutdown			Max
Duty Cycle Control	16%			Max
Pulse Width	Duty Cycle = 16%	Max Pulse Width = 50 μSec		
	Duty Cycle = 10%	Max Pulse Width = 300μSec		

OUTLINE DRAWING – R5U (CONTROL UNIT, Qty 1 Drawer)


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OUTLINE DRAWING – R3U (AMPLIFIER UNIT, Qty 4 Drawers)

