



100W / 125W

SSPBM-X 2200-G series

MIL-STD-188-164A latest revision

Features

- Output power of 100W or 125W in a single compact package
- Waveguide output isolator
- High linearity
- Full M&C capability via RS485 or Ethernet port
- Weatherproof construction
- CE marking

Overview

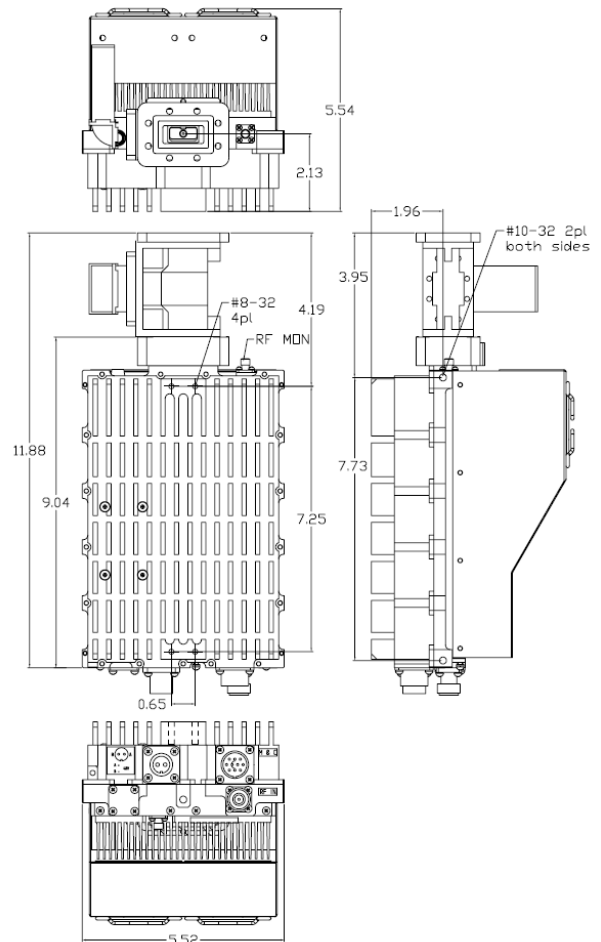
Based on GaN technology the new G-Series X-Band BUCs provide high power density in a compact size. Combined with the traditional Advantech Wireless features, these new series of BUCs provide the ultimate in performance and convenience. The products in the new G-Series X-Band BUCs are available as SSPA or SSPB (BUC). The products available in the new G-Series are for up to 700W. The product described in this bulletin is for a 100W / 125W BUC.

Options

- AC operation
- Ethernet port
- 70 dB Receive Reject Filter (external)
- Internal reference

Accessories

- 70 dB Transmit Reject Filter
- Mounting kits
- External Receive Reject Filter
- Remote M&C panel with optional SNMP
- Flexible and rigid waveguides
- Boom mounting kit
- Replacement fans



General Specifications		100W	125W
Operating Frequency		7.90 – 8.40 GHz	
Output Power	P _{SAT Typ}	+50.0 dBm	+51.0 dBm
	P _{LINEAR}	+46.0 dBm	+47.0 dBm
	P _{LINEAR} is the power at which the IMD specs are met and the power at which the spectral regrowth is <-30 dBc @ 1.0 x symbol rate for QPSK/OQPSK/8PSK modulation		
Gain		70 ± 3 dB	
Gain adjustment range		20 dB in 0.1 dB steps	
Gain flatness over full band		4 dB p-p max	
Gain slope over 40 MHz		1dB p-p dB max	
Gain variation over temperature		± 1.5 dB max	
Input Impedance and VSWR		50 Ω 1.3:1	
Output VSWR		1.25:1	
Noise power density		-85 dBm/Hz in Transmit Band, -112dBm/Hz in Receive Band (7.25 GHz – 7.75 GHz)	
Spurious		-55 dBc max at P _{LINEAR}	
Harmonics		-45 dBc @ P _{LINEAR}	
AM/PM conversion		1 ^o /dB at P _{LINEAR}	
Third order intermod (two tones)		-25 dBc two signal 5 MHz apart at P _{LINEAR} referenced to the total power	
Spectral regrowth		30 dBc @ P _{LINEAR}	
Group delay		Ripple 1 nsec p-p max	
Weight & Dimensions			
Dimensions		11.88"x5.52"x5.54" (L x W x H) (302x140x141 mm)	
Weight		DC operation 13.2 lbs (6 kg) AC operation 19.8 lbs (9 kg)	
Input voltage		DC 48V (40v – 60V) AC 90 – 265 VAC (47 – 63 Hz)	
Power consumption (nominal)		400W@P _{sat} , 350W@ P _{LINEAR}	
Interfaces	Input (L-Band)	N type female	RF output CPR112G
	DC line	MS3102 type	AC line MS3102 type
	RS485/Ethernet	MS3112 type	
Environmental	Temperature	Operating -30°C to +55 °C	Option 1 -40°C to +55 °C Option 2 -50°C to +50 °C
		Storage -55°C to +85 °C	
	Humidity	100% condensing	
	Altitude	10,000' AMSL, de-rated by 2 °C/1000' from AMSL	

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