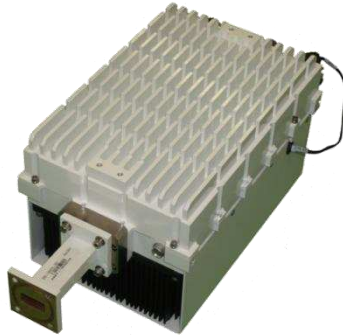




16W / 20W / 25W / 30W / 40W / 50W
SSPBM-K 2200-G series



EXTRA-Lightweight

Features

- Output power of 16W to 50W in a single compact package
- High linearity
- Full M&C capability via RS485 or Ethernet port
- Weatherproof construction
- CE marking

Overview

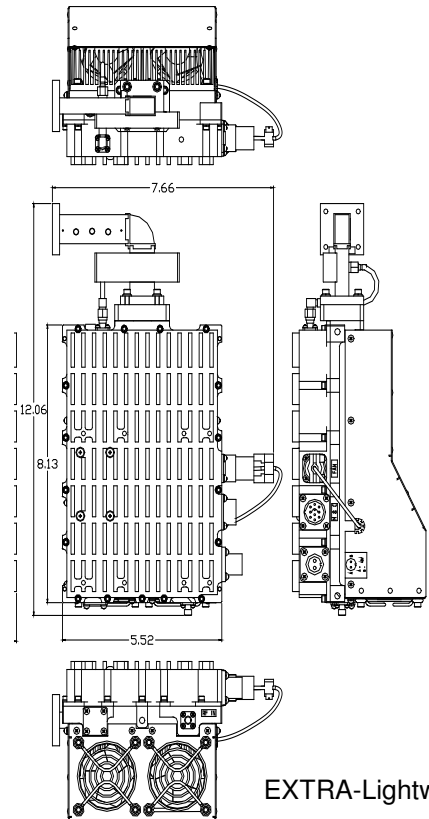
Based on GaN technology the new G-Series Ku-Band BUCs provide high power density in a compact size. Combined with the traditional Advantech features, these new series of BUCs provide the ultimate in performance and convenience. The products in the new G-Series Ku-Band BUCs are available as SSPA or SSPB (BUC). The first products available in the new G-Series are for 30W to 200W. The product described in this bulletin is for a 20W / 50W BUC.

Options

- Ethernet port
- Internal reference *with* auto-sensing
- Waveguide Output Isolator
- External RX Reject filter, 35 dBc rejection
- EXTRA-Lightweight

Accessories

- Mounting kits
- Remote M&C panel with optional SNMP
- Flexible and rigid waveguides
- Boom mounting kit
- Replacement fans



EXTRA-Lightweight

16W / 20W / 25W / 30W / 40W / 50W Ku-Band SSPB GaN



General Specifications		16W	20W	25W	30W	40W	50W
Operating Frequency				KS 14.00 – 14.50 GHz KX 13.75 – 14.50 GHz			
L-Band input (BUC)				KS 950 – 1450 MHz KX 950 – 1700 MHz			
Output Power	P _{SAT} (typical)	+42.0 dBm	+43.0 dBm	+44.0 dBm	+45.0 dBm	+46.0 dBm	+47.0 dBm
	P _{LINEAR}	+38.0 dBm	+39.0 dBm	+40.0 dBm	+41.0 dBm	+42.0 dBm	+43.0 dBm
		P _{LINEAR} is the power at which the IMD specs are met and the spectral regrowth is <-30 dBc @ 1.0 x symbol rate for QPSK/OQPSK/8PSK modulation QPSK/OQPSK/8PSK modulation					
Gain	SSPB (BUC) SSPA	68 dB min 58 dB min					
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		1 dB p-p dB max					
Gain variation over temperature		± 1.5 dB max					
Input Impedance and VSWR		50 Ω 1.3:1					
Output VSWR		2:1 (with optional Output Isolator) 1.25:1					
Noise power density		-80 dBm/Hz in Transmit Band, -150 dBm/Hz in Receive Band (10.95 GHz – 12.75 GHz)					
Spurious		-55 dBc max at P _{LINEAR}					
AM/PM conversion		<1.0°/dB at P _{LINEAR}					
Third order IMD (two tones)		-25 dBc two signal 5 MHz apart at P _{LINEAR}					
Spectral regrowth		30 dBc @ P _{LINEAR}					
Group delay		Ripple 1 nsec p-p max					
Local Oscillator freq.		KS 13.05 GHz		KX 12.8 GHz			
Phase Noise		-53 dBc/Hz at 10Hz -63 dBc/Hz at 100Hz -73 dBc/Hz at 1000Hz		-83 dBc/Hz at 10 kHz -93 dBc/Hz at 100 kHz			
External Reference Frequency		10 MHz		Optional; Internal 10MHz reference			
Phase noise (max)		-120 dBc/Hz at 10Hz -135 dBc/Hz at 100Hz -150 dBc/Hz at 1000Hz		-155 dBc/Hz at 10 kHz -160 dBc/Hz at 100 kHz			
Weight & Dimensions							
Dimensions		L x W x H 8.13"x6.22"x6.09" (206.5x158x154.7 mm) <i>Valid for basic model, without options included</i> EXTRA-Lightweight: L x W x H 8.13"x5.52"x5.0" (206.5x140x127 mm)					
Weight		9.2 lbs. (4.2 kg) - <i>Valid for basic model, without options included</i> 6.6 lbs. (3 kg) - <i>Option EXTRA-Lightweight</i>					
Input voltage		DC 48V (40v – 60V) AC 90 – 265 VAC (47 – 63 Hz) - <i>note: not available for EXTRA-Lightweight</i>					
Power consumption (typical)		280W@Psat, 230W@ P _{LINEAR}					
Interfaces		Input (L-Band) DC line	N type female MS3102 type	RF output AC line	WR75 Grooved MS3102 type		
		Basic Model: MS3112 type RS485 MS3112 type RS485/Ethernet (optional) EXTRA-Lightweight : MS3112 type RS485					
Environmental		Temperature	Operating -30°C to +55°C Option 1 -40°C to +60°C Option 2 -50°C to +50°C Storage -55°C to +85°C	Basic Model: RS485 / RS232 or Ethernet (optional) EXTRA-Lightweight : RS232 / RS485 only			
		Humidity	100% condensing				
		Altitude	10,000' AMSL de-rated by 2 °C/1000' from AMSL				

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