

Antenna Mount SSPA



Super Compact 150W / 200W Ku-Band BUC GaN

The STS150/200Ku Band series is powered by GaN technology and is one of the smallest, lightweight efficient units available today.

With best in class RF characteristics, RF sample port, true RMS power measurements, extensive monitor and control capabilities enabled via Ethernet, Serial and/or Analogue interfaces.

Designed for portable, mobile and VSAT on the move applications. Its small size and weight allows and high thermal efficiency, which makes it a most economical solution for fixed VSAT applications.

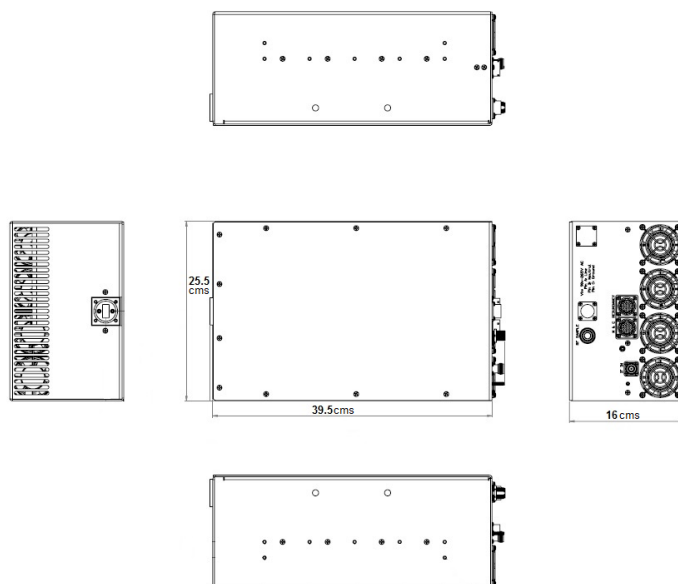
OPTIONS

- Internal 10MHz Reference
- Available in both standard and extended Ku-Band
- Automated Level Control (ALC) option
- Antenna Mounting Kit
- Switchable LO option - Standard and Extended Ku-Band in one unit
- RF overdrive protection
- Input and Output True RMS power detection
- Configuration via RS-232 serial console, packet protocol RS-485 - User friendly HTTP based GUI and SNMP optional
- Redundant ready with no external controller required
- Field upgradeable software
- Status LED

FEATURES

- Extremely high power density - Up to 200W Psat in 12.5Kg 39.5 x 25.5 x 16 cms.
- Superior RF performance:
 - Phase noise 8-10dB better than IESS308/309
 - Psat up to 54dBm
 - Spurious below -60dBc
 - Wide dynamic range of Gain control

OUTLINE



Parameter	150W	200W			
RF Performance					
RF Frequency Range-Available in/switched:	14-14.5GHz	13.75-14.5GHz			
IF Frequency Range	950-1450MHz	950-1700MHz			
LO Frequency	13.05GHz	12.8GHz			
Conversion	Single Conversion; non-inverting				
Saturated Power	52dBm typ	53dBm typ			
Linear Power	49 dBm min	50 dBm min			
Conversion Gain	75dB min, 77dB typ				
Gain Flatness	+/-1dB typ +/-1.5dB max over full band; +/-0.5dB max over any 40MHz				
Gain Stability over temperature	+/-1.5dB over full temperature range				
Gain Stability over input power	3dB typ 4dB max from 10dB back off to rated power				
Gain Control	20dB min dynamic range				
External Reference Frequency	10MHz multiplexed with IF In				
External Reference Required Phase Noise	-130dBc/Hz @ 100Hz	-140dBc/Hz @ 1kHz	-150dBc/Hz @ 10kHz	-155dBc/Hz @ 100 kHz	
Up-Converter Phase Noise	-68dBc/Hz @ 100Hz; -80dBc/Hz @ 1kHz; -90dBc/Hz @ 10kHz			-95dBc/Hz @ 100kHz	-115dBc/Hz @ 1MHz
Linearity: 2 tone IMD Spectral Re-growth	-24dBc at P linear -30dBc for QPSK at 1.5xsymbol rate at Plinear+1dB				
Noise Power Density:	Transmit Band	-85dBm/Hz max			
	Receive Band	-148dBm/Hz max			
Output Spurious: Non-signal related	-60dBc				
Signal related	-55dBc				
Power					
AC Voltage Range	90-265VAC 50-60Hz auto-ranging PFC				
Power Consumption at rated power	850W	1000W			
Power Consumption at 3 dB back off	650W	750W			
48VDC Isolated optional	40-72VDC Isolated				
Mechanical					
Size	39 x 22.5 x 11 cms (47 x 22.5 x 11cms with output circulator)				
Weight	12Kgs				
Cooling	Forced Air				
Operating temperature	-40°C to +55°C				
Relative Humidity	Up to 100% condensing				
Interfaces					
IF Input Connector	N-type female				
RF Output Connector	CPR137 grooved				
RF Sample	N-type female				
AC Power In	MS3112E12-3P				
M&C Interface-Serial, Analog and Ethernet	MS3112E14-19S				
Redundant Interface	MS3112E14-19P				
Part Numbering Information					
AC Power Supply	150W	200W			
	AC1	AC1			