

Super Compact 250 / 300 / 350 / 400W Ku-Band BUC GaN

The STS250/300/350/400Ku 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.

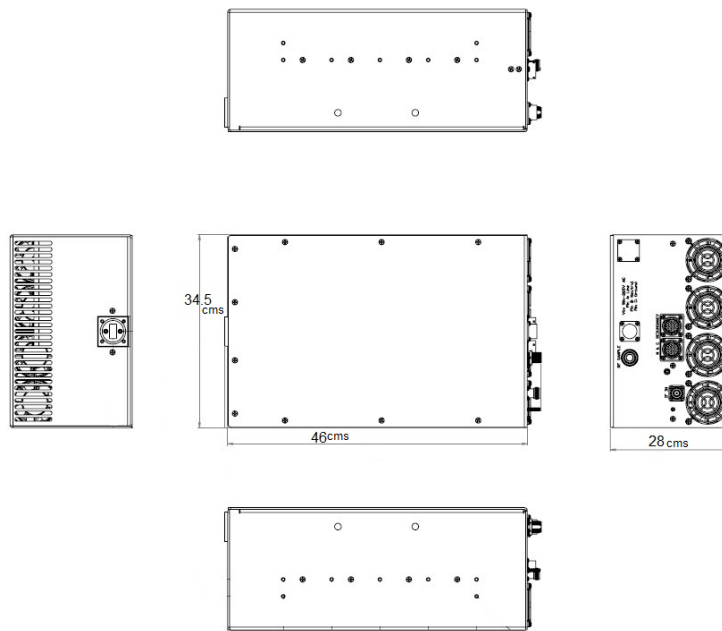
OPTIONS

- Internal 10MHz Reference
- BUC or SSPA optional
- Automated Level Control (ALC) option
- Antenna Mounting Kit
- Switchable LO option - Standard and Extended Ku-Band in one unit
- External Rackmount Remote M&C Panel
- 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
- Field replaceable detachable power supply

FEATURES

- Extremely high power density - Up to 400W Psat in 25Kg 46 x 34.5 x 28 cms.
- Superior RF performance:
 - Phase noise 8-10dB better than IESS308/309
 - Psat up to 55.5 dBm
 - Spurious below -60dBc
 - Wide dynamic range of Gain control

OUTLINE



Parameter	250W	300W	350W	400W
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	54dBm typ	55dBm typ	55.5dBm typ	56 dBm typ
Linear Power	51dBm min	52dBm min	52.5dBm min	53dBm typ
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
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	190-265VAC 50-60Hz auto-ranging PFC			
Power Consumption at rated power	1500W	1750W	2000W	
Power Consumption at 3 dB back off	1200W	1400W	1700W	
Mechanical				
Size	46 x 34.5 x 28 cms			
Weight	25Kg			
Cooling	Forced Air			
Operating temperature	-40°C to +60°C			
Relative Humidity	Up to 100% condensing			
Interfaces				
IF Input Connector	N-type female			
RF Output Connector	WR75 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				
IRT Part Number	250W	300W	350W	
AC Power Supply	AC1	AC1	AC1	