



Super Compact 250W /300W /400W /500W Ku-Band BUC GaN

The STS250/300/400/500 Ku 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.

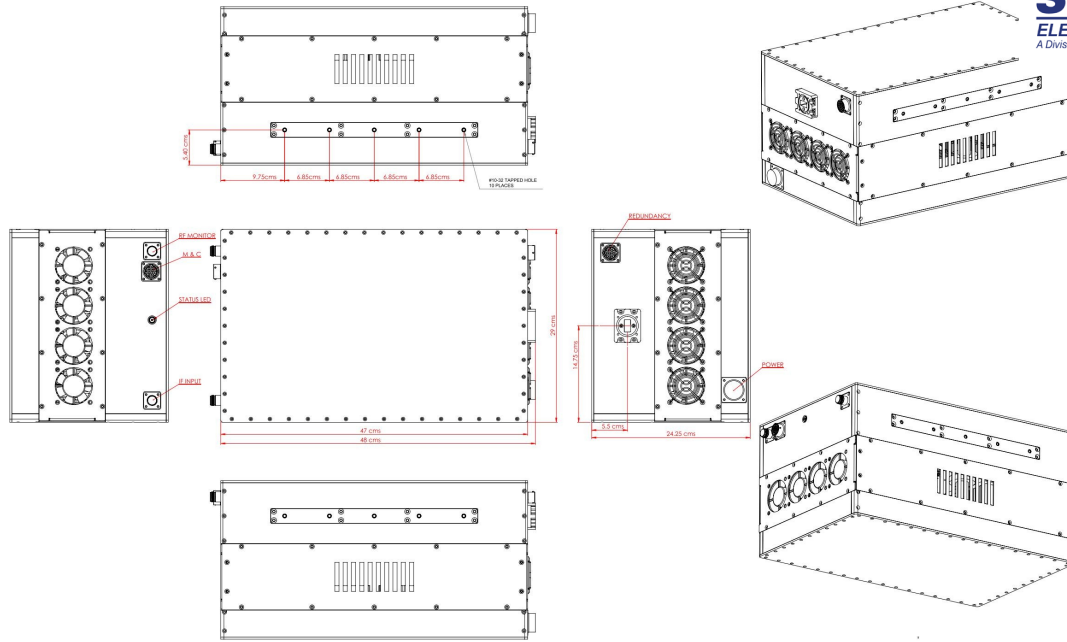
OPTIONS

- 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 500W Psat in 34Kg 48 x 29 x 24.25 cms.
- Superior RF performance:
 - Phase noise 8-10dB better than IESS308/309
 - Psat up to 56 dBm
 - Spurious below -60dBc
 - Wide dynamic range of Gain control

OUTLINE



Parameter	250W	300W	400W	500W
RF Performance				
RF Frequency Ranges-Available in/switched		14-14.5GHz	13.75-14.50GHz	
IF Frequency Range		950-1450MHz	950-1700MHz	
LO Frequency		13.05GHz	12.8GHz	
Conversion		Single Conversion; non-inverting		
Saturated Power	54dBm typ	55dBm typ	56dBm typ	57dBm typ
Linear Power	51dBm min	52dBm min	53dBm min	54dBm min
Conversion Gain		75dB min, 77dB typ		
Gain Flatness		+/-1dB typ +/-1.5dB max over full band; +/-0.4dB max over any 40MHz		
Gain Stability over temperature		+/-1.5dB over full temperature range		
Gain Control		20dB min dynamic range		
External Reference Frequency		10MHz 0dB +/-5dB multiplexed with IF In		
External Reference Required Phase Noise		-130dBc/Hz @ 100Hz -140dBc/Hz @ 1kHz -150dBc/Hz @ 10kHz -155dBc/Hz @ 100kHz		
Up-Converter Phase Noise		-68dBc/Hz @ 100Hz -80dBc/Hz @ 1kHz -90dBc/Hz @ 10kHz -95dBc/Hz @ 100kHz -115dBc/Hz @ 1MHz		
Linearity: 2 tone IMD		-25dBc at P linear		
Spectral Re-growth		-30dBc for QPSK at 1.5 x symbol rate at Plin		
Noise Power Density: Transmit Band		-85dBm/Hz max		
Receive Band		-148dBm/Hz max		
Output Spurious: Non-signal related		-60dBc		
Signal related		-60dBc		
Power				
AC Voltage Range		190-265VAC 50-60Hz Auto-Ranging PFC		
Power Consumption at rated Power	1700W	2000W	2300W	2500W
Power Consumption at 3dB back off	1400W	1700W	2000W	2300W
Mechanical				
Size		48x29x24.25cms		
Weight		34KG		
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		WR75 grooved		
AC Power In		MS3112E12-3P		
M&C Interface-Serial, Analog and Ethernet		MS3112E14-19S		
Redundancy Interface		MS3112E14-19P		