STS80/100C

Antenna Mount SSPA

Super Compact 80W / 100W C-Band BUC

The STS80/100C series is powered by GaN technology and is one of the smallest, lightweight efficient units available today.

With best in class RF characteristics, embedded output isolator, 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 direct feed horn mounting, which makes it a most economical solution for fixed VSAT applications.

OPTIONS

- Internal 10MHz Reference clock
- Available in Super-Extended, Palapa and Insat C-Band frequencies
- Antenna mounting kit
- Built in auto-ranging AC power supply

FEATURES

- Up to 100W Psat in this super compact lightweight package 3Kg 16.5 x 18.5 x 11.5 cms. (3.5Kg and 26.5 cms with WG circulator)
- Ideal for feed horn mounting
- Low power consumption
- Superior RF performance:
  - Phase noise 10dB better than IESS308/309
  - Psat of 46dBm spurious below –60dBc
  - High Linearity
  - Wide dynamic range of Gain control
- RF Overdrive protection
- Output power measurement - True RMS detector
- Integrated L-Band to C-Band up-converter
- Built-in Output Isolator provides full output VSWR protection
- Configuration via RS-232 serial console, packet protocol RS-485 - User friendly HTTP based GUI and SNMP optional
- 48VDC isolated power supply
- Redundant ready with no external controller
- Field upgradeable software
- Status LED

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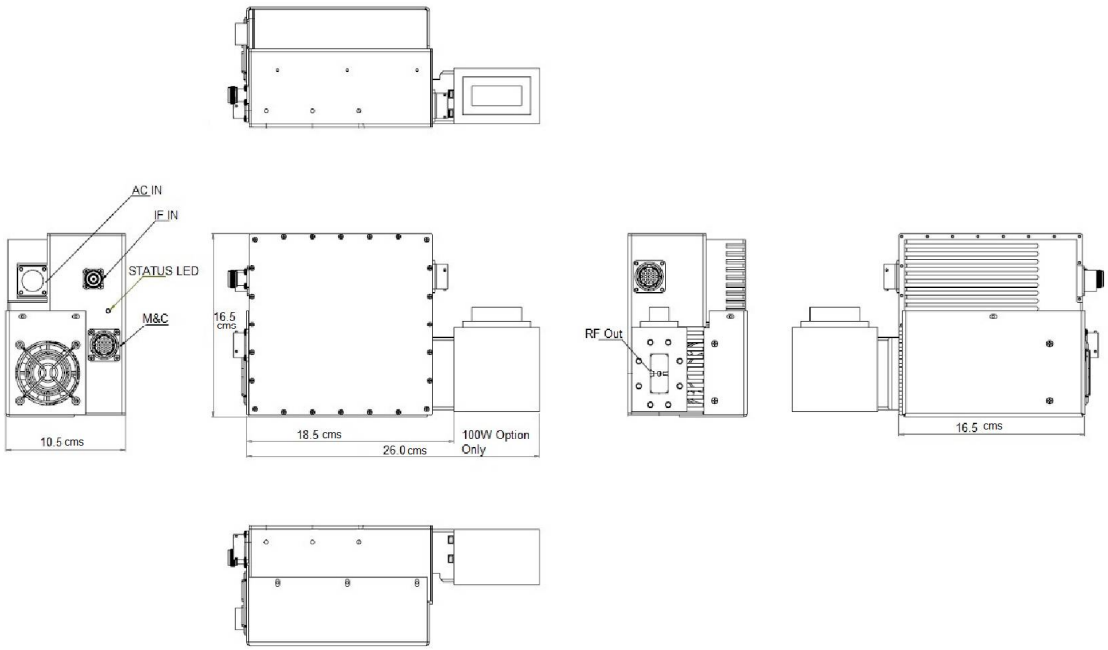
OUTLINE



Parameter	80W	100W
RF Performance		
RF Frequency Range-Available in/switched	5.85-6.425GHz (other frequency options available)	
IF Frequency Range	950-1525MHz	
LO Frequency	4.9 GHz	
Conversion	Single Conversion; non-inverting	
Rated Power	49dBm	50dBm
Conversion Gain	72dB min, 75dB typ	
Gain Flatness	+/-1dB typ +/-1.5dB max over full band; +/-0.5dB max over any 40MHz	
Gain Stability	+/-1.5dB over full temperature range	
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	-70dBc/Hz @ 100Hz; -80dBc/Hz @ 1kHz; -90dBc/Hz @ 10kHz -95dBc/Hz @ 100kHz -115dBc/Hz @ 1MHz	
Linearity: 2 tone IMD Spectral Re-growth	-25dBc at 3dB total power back off from rated power -30dBc at 6dB total power back off from rated power -30dBc for QPSK at 1.5xsymbol rate at 2dB back off from rated power	
Output Spurious: Non-signal related Signal related	-60dBc -55dBc	
Power		
48V DC Voltage Range	36-72VDC Isolated	
AC Voltage Range (Optional)	90-265VAC 50-60Hz auto-ranging	
Power Consumption DC Power In AC Power In	360W at rated power; 320W at 3dB b.o. 380W at rated power; 240W at 3dB b.o.	400W at rated power; 350W at 3dB b.o. 420W at rated power; 380W at 3dB b.o.
Mechanical		
Size	16.5 x 18.5 x 10.5 cms	16.5 x 18.5 x 10.5 cms (26.5 cms with WG circulator)
Weight	3Kg	3.5Kgs with WG circulator
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	CPR137 grooved	
AC Power In	MS3112E10-8P	
RS485-RS232-Ethernet-SNMP	MS3112E14-19S	
Part Numbering Information		
Power Supply Option	80W	100W
DC Isolated	DC1	DC1
AC Auto-ranging	AC1	AC1