STS150/200C

Antenna Mount SSPA

Super High Power Density 150W / 200W C-Band BUC

The STS150/200C 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 option
- Available in various C-Band frequencies
- Antenna mounting kit
- Automated Level Control (ALC) option

FEATURES

- Extremely high power density - Up to 200W Psat in this super compact lightweight package 12Kg 39 x 22.5 x 11 cms. (47cms with output circulator)
- Superior RF performance:
  - Phase noise 8-10dB better than IESS308/309
  - Psat up to 54dBm spurious below –60dBc
  - High Linearity
  - Wide dynamic range of Gain control
- RF Overdrive protection
- Input and Output power measurement true RMS power detection
- Configuration via RS-232 serial console, packet protocol RS-485 - User friendly HTTP based GUI and SNMP
- 48VDC isolated power supply
- Redundant ready with no external controller
- Field upgradeable software
- Status LED

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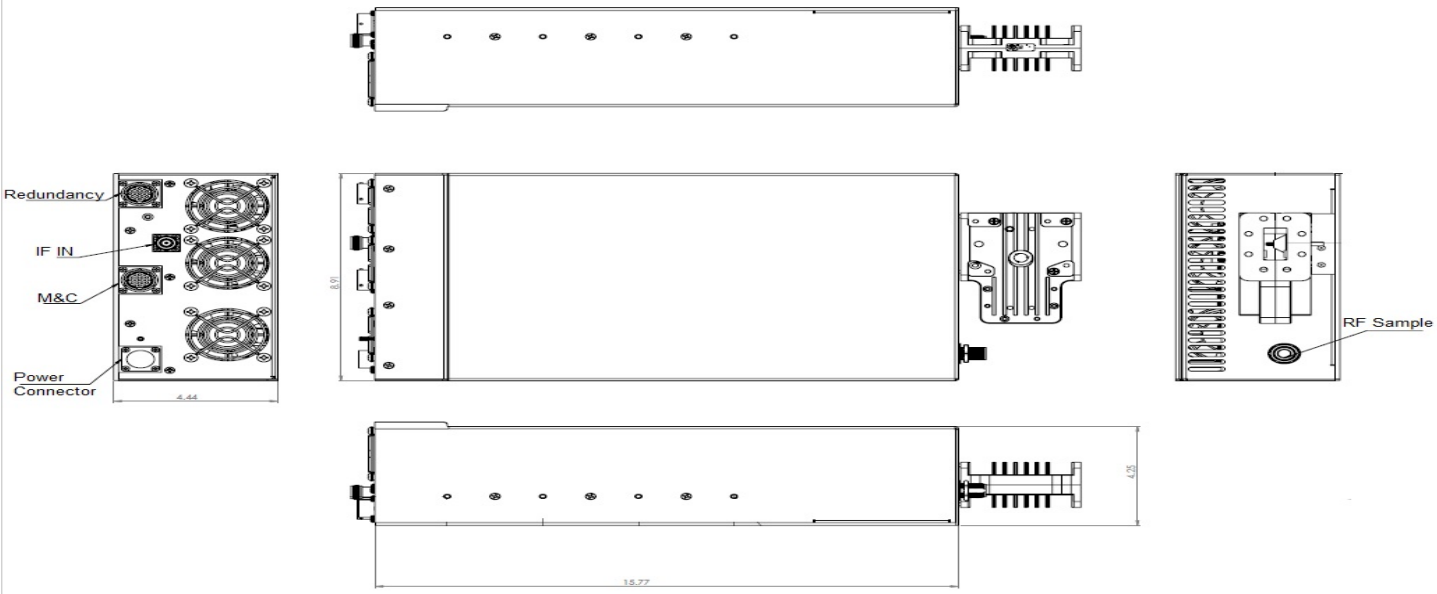
OUTLINE



Parameter	150W	200W
RF Performance		
RF Frequency Range-Available in/switched:	5.85-6.425GHz (other frequency options available0	
IF Frequency Range	950-1525MHz	
LO Frequency	4.9GHz	
Conversion	Single Conversion; non-inverting	
Saturated Power	52dBm typ	53dBm typ
Linear power	49dBm min	50dBm 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	-25dBc at P linear -30dBc for QPSK at 1.5xsymbol rate at Plinear+1dB	
Noise Power Density: Transmit Band Receive Band	-85dBm/Hz max -150dBm/Hz max	
Output Spurious: Non-signal related Signal related	-60dBc -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	150W	200W
AC Power Supply	AC1	AC1