

Antenna Mount SSPA



Super Compact 16W / 100W X-Band BUC

The STS16/20/25/40/80/100X series 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.

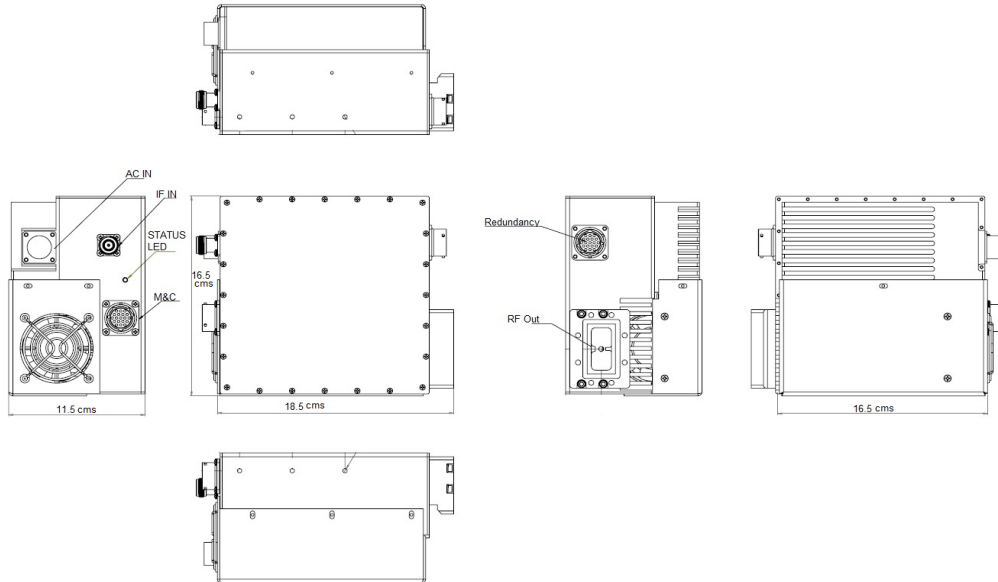
OPTIONS

- Internal 10MHz Reference clock
- Antenna mounting kit
- Built in auto-ranging AC power supply

FEATURES

- Up to 100W Psat in this super compact lightweight package
2.5Kg 16.5 x 18.5 x 11.5 cms.
- Ideal for feed horn mounting
- Low power consumption
- Superior RF performance:
 - Phase noise 10dB better than IESS308/309
 - P1dB of 46dBm min
 - Spurious below -60dBc
 - Wide dynamic range of Gain control
- Output power measurement - True RMS detector
- Integrated L-Band to X-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

OUTLINE



Parameter	
RF Performance	
RF Frequency Range-Available in/switched	7.9-8.4GHz
IF Frequency Range	950-1525MHz
LO Frequency	6.95 GHz Single Conversion; non-inverting
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	-26dBc at 3dB total power back off from P1dB -30dBc for QPSK at 1.5 x symbol rate at 2dB back off from P1dB
Output Spurious: Non-signal related	-60dBc
Signal related	-55dBc
Power	
48V DC Voltage Range	32-72VDC Isolated
AC Voltage Range (Optional)	90-265VAC 50-60Hz auto-ranging
Mechanical	
Size	16.5 x 16.5 x 11.5cms
Weight	2.5KG
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	CPR112 Grooved
AC Power In	MS3112E12-3P
RS485-RS232-Ethernet-SNMP	MS3112E14-19S

Spacepath Part Number	Output Power (W)	Psat (dBm/W)	Prated (dBm/W)	Plinear (dBm/W)	P Cons at Prated	P Cons at Plin	GaAs/GaN
STS16XX1DU	16W	43/20	43/20	39/8	120W	100W	GaAs
STS20XX1DU	20W	44/25	43/20	40/10	130W	110W	GaN
STS25XX1DU	25W	45/31	44/25	41/12	140W	130W	GaN
STS40XX1DU	40W	46/40	46/40	43/20	190W	150W	GaN
STS80XX1DU	80W	49/80	49/80	46/40	320W	270W	GaN
STS100XX1DU	100W	50/100	50/100	47/50	340W	300W	GaN