

## Antenna Mount SSPA



### Super Compact 20W / 40W C-Band BUC

The STS20/40C 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

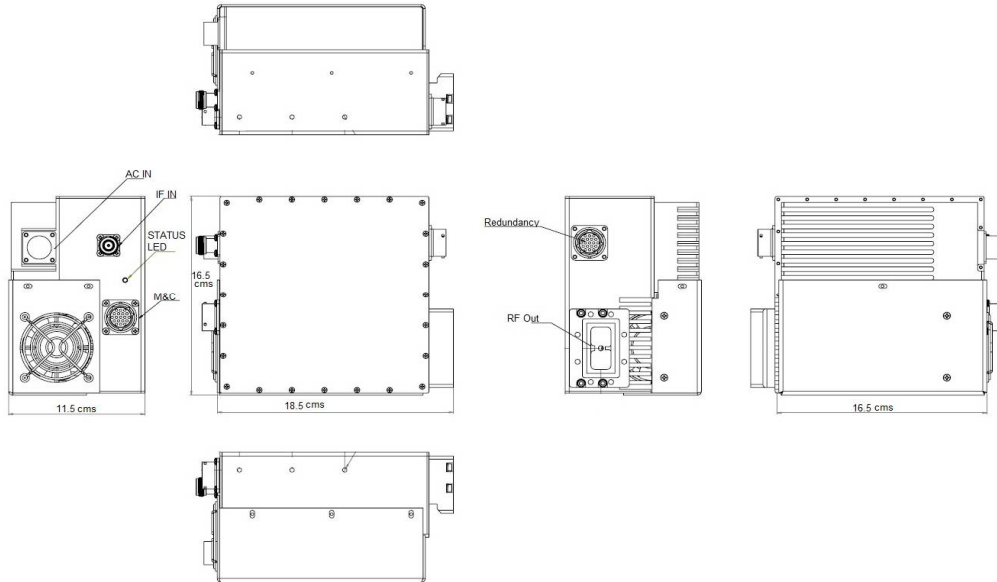
- Internal 10MHz Reference clock
- Available in Super-Extended, Palapa and Insat C-Band frequencies
- Antenna mounting kit
- Built in auto-ranging AC power supply

#### FEATURES

- Up to 40W P1dB / 50W Psat in this super compact lightweight package 3Kg 16.5 x 16.5 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 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

# OUTLINE



Parameter	20W	40W		
<b>RF Performance</b>				
RF Frequency Range-Available in/switched	5.85-6.425GHz (other frequency options available)			
IF Frequency Range	950-1525MHz			
LO Frequency	4.9 GHz (other options available)			
Conversion	Single Conversion; non-inverting			
Output Power at 1dB compression point	43dBm min	46dBm min		
Saturated Power	44dBm typ	47dBm typ		
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			
<b>Power</b>				
48V DC Voltage Range	32-72VDC Isolated			
AC Voltage Range (Optional)	90-265VAC 50-60Hz auto-ranging			
Power Consumption DC Power In/AC Power In	140W/150W	220W/230W		
<b>Mechanical</b>				
Size	16.5 x 16.5 x 11.5 cms			
Weight	3Kgs			
Cooling	Forced Air			
Operating temperature	-40°C to +60°C			
Relative Humidity	Up to 100% condensing			
<b>Interfaces</b>				
IF Input Connector	N-type female			
RF Output Connector	CPR137 Grooved			
AC Power In	MS3112E10-8P			
RS485-RS232-Ethernet-SNMP	MS3112E14-19S			
<b>Part Numbering Information</b>				
Power Supply Option	20W	40W		
DC Isolated	DC1	DC1		
AC Auto-ranging	AC1	AC1		