

## Antenna Mount SSPA



### Super Compact 300W / 400W C-Band BUC GaN

The STS300/400C 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.

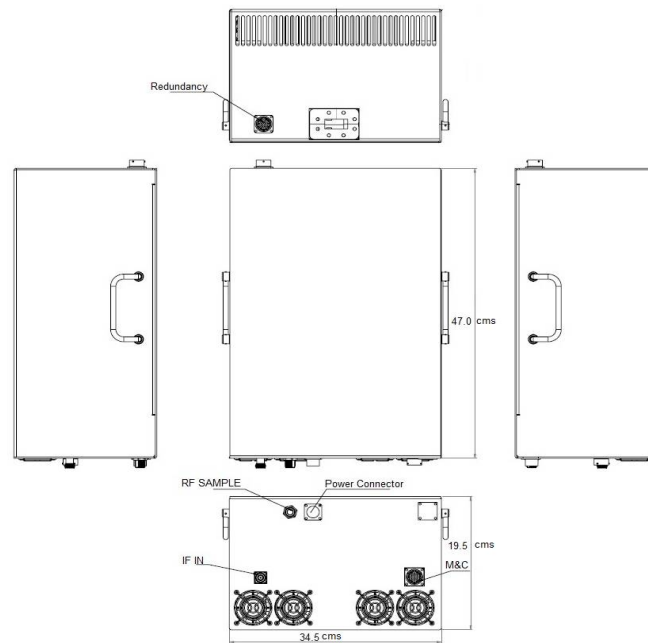
#### OPTIONS

- Internal 10MHz Reference clock
- Available in various C-Band frequency options
- Automated Level Control (ALC) option
- 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
- 48VDC isolated power supply
- Redundant ready with no external controller
- Field upgradeable software
- Status LED

#### FEATURES

- Extremely high power density - Up to 400W Psat in 19Kg 47 x 34.5 x 20 cms.
- Field replaceable power supply
- Superior RF performance:
  - Phase noise 8-10dB better than IESS308/309
  - Psat up to 56dBm
  - Spurious below -60dBc
  - Wide dynamic range of Gain control

# OUTLINE



Parameter	300W	400W			
<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	4.9GHz				
Conversion	Single Conversion; non-inverting				
Saturated Power	55dBm/300W typ	56dBm/400W typ			
Linear power	52dBm min	53dBm 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	
Noise Power Density: Transmit Band	-85dBm/Hz max			-150dBm/Hz max	
Noise Power Density: Receive Band					
Output Spurious: Non-signal related	-60dBc				
Output Spurious: Signal related	-55dBc				
<b>Power</b>					
AC Voltage Range	190-265VAC 50-60Hz auto-ranging PFC				
Power Consumption at rated power	1400W		1600W		
Power Consumption at 3 dB back off	1100W		1200W		
<b>Mechanical</b>					
Size	47 x 34.5 x 19.5 cms				
Weight	19Kg				
Cooling	Forced Air				
Operating temperature	-40°C to +55°C				
Relative Humidity	Up to 100% condensing				
<b>Interfaces</b>					
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				
<b>Part Numbering Information</b>					
AC Power Supply	AC1		AC1		