

SpacePath High Power Density 150/200W C Band BUC



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.

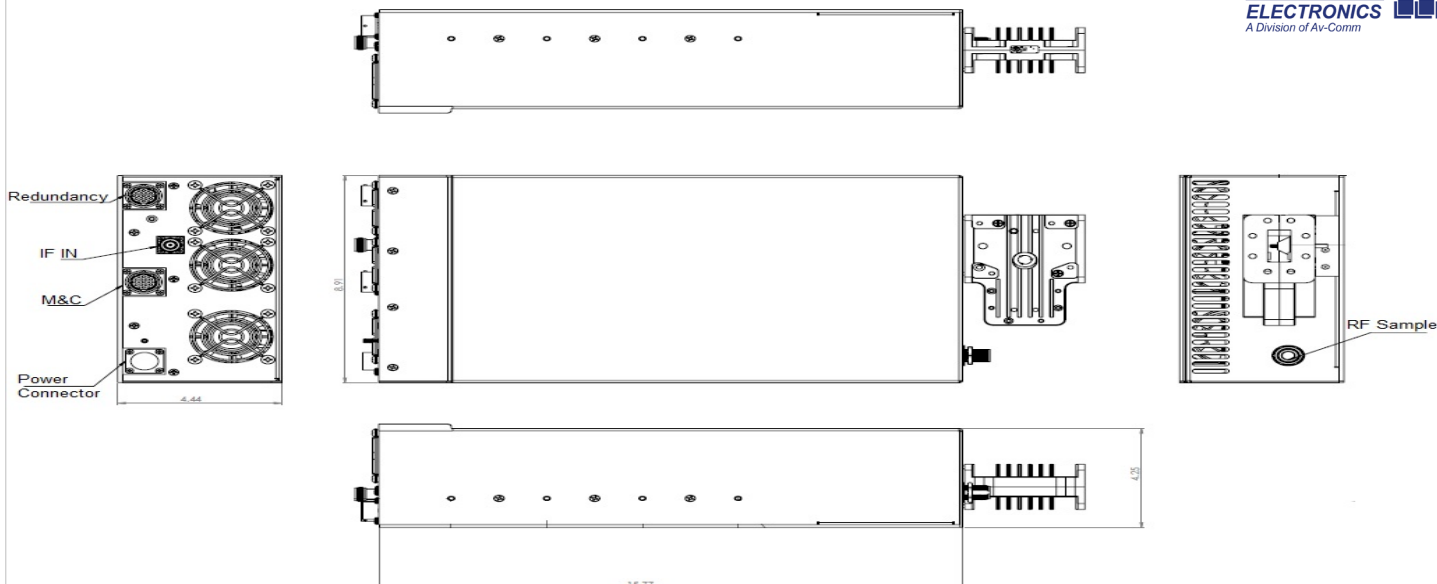
Designed for portable, mobile and VSAT on the move applications. Its small size and weight allows direct feed horn mounting, which makes it a most economical solution for fixed VSAT applications.

OPTIONS

- Internal 10MHz Reference option
- Available in various C-Band frequencies
- Antenna mounting kit
- Automated Level Control (ALC) option
- 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

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



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	-60dBc			
Signal related	-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				
AC Power Supply	150W AC1		200W AC1	