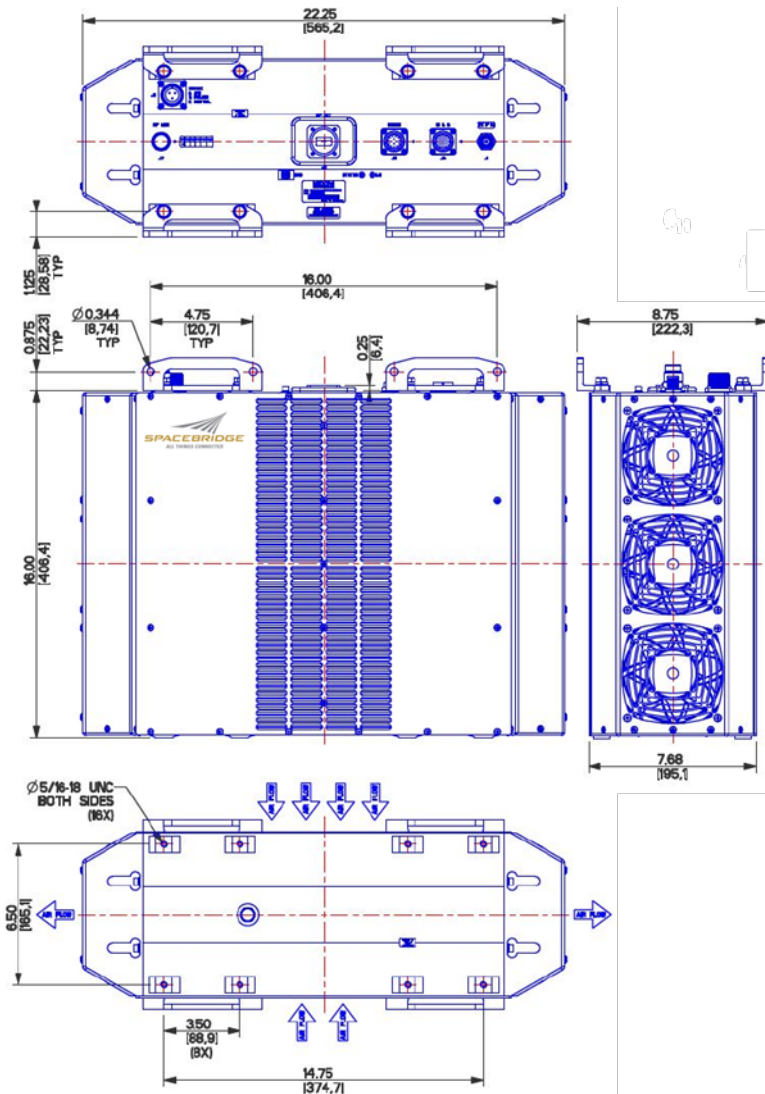


**This compact and powerful 400 W Outdoor BUC, equipped with cutting-edge Gen III GaN technology boasts exceptional RF performance, efficiency and reliability for Single or Multicarrier Applications**



The device offers a wide range of monitoring and control capabilities, all easily accessible through Ethernet, serial RS232 and RS485 interfaces and Form-C dry contacts. It's the best-in-class solution for any demanding mobile or fixed application, designed for all-outdoor installations. This device does not require the additional air conditioning, or shelter. Therefore there is no W/G RF loss than installed in a shelter

## Key Features

- Built-in 1:1 Redundancy, no External Redundancy Controller Required
- High Linearity, efficiency and MTBF
- Internal High-stability 10MHz Reference
- Built-in High Precision true RMS Power Meter
- Web Interface, Telnet, SNMP support
- Output Overdrive Protection
- Output VSWR Protection
- Thermal shutdown

## Options

- REST API
- Handheld Terminal
- Automatic Output Level Control (ALC)

### Technical Specifications

RF CHARACTERISTICS		
Frequency Band	Ku-band Appendix-30B-15	Kx-band
P <sub>Sat</sub> , Rated Output Power	56 dBm / 400 W min	
P <sub>Lin</sub> , Linear Power as defined by MIL-STD-188-164C	53 dBm / 200 W min	
Small Signal Gain	76 dB min, 80 dB typ	
Gain Flatness over full frequency range	± 1.5 dB max	
Gain Flatness over any 40 MHz	± 0.5 dB max	
Gain Control	20 dB min dynamic range, 0.1 dB steps	
Gain Stability over full Temperature range	± 1.5 dB max	
P <sub>Out</sub> stability with ALC, over temperature and P <sub>In</sub> variation	± 0.5 dB max	
RF Frequency range	12.75-13.25 GHz	13.75-14.5 GHz
IF Frequency Range	950-1450 MHz	950-1700 MHz
LO Frequency	11.8 GHz	12.8 GHz/13.05 GHz, selectable
External Reference Frequency	10 MHz, sinusoidal, multiplexed with L-band (IF In)	
External Reference Level	-10 dBm to +5 dBm	
External Reference SSB Phase Noise, max	-110 dBc/Hz @ 10 Hz; -125 dBc/Hz @ 100 Hz; -140 dBc/Hz @ 1 kHz; -155 dBc/Hz @ 10 kHz; -165 dBc/Hz @ 100 kHz; -165 dBc/Hz @ 1 MHz;	
Up-Converter SSB Phase Noise, max	-50 dBc/Hz @ 10 Hz; -65 dBc/Hz @ 100 Hz; -80 dBc/Hz @ 1 kHz; -90 dBc/Hz @ 10 kHz; -100 dBc/Hz @ 100 kHz; -115 dBc/Hz @ 1 MHz	
Integrated Double-Sided Phase Noise	2° RMS max	
Output Spurious: In-band	<-13 dBm	
Out-of-band	Complies with ETSI EN 301 428/430 and MIL-STD188-164C	
Harmonics at P <sub>Lin</sub>	<-60 dBc	
Linearity: IMD measured with 2 equal tones 5 MHz	< -24 dBc at total combined Power=P <sub>Lin</sub> <-30 dBc at 6dB total power back-off from P <sub>Sat</sub>	
Spectral Regrowth at P <sub>Lin</sub>	<-30 dBc for QPSK/OQPSK MODCODs at 1.0xSymbol Rate away with 35% Roll-off	
AM/PM Conversion	2.0°/dB max at P <sub>Lin</sub>	
Noise Power Density	Tx passband (12.75-13.25 GHz)< - 80 dBm/Hz Rx band (10.7-12.25 GHz) <- 143 dBm/Hz	Tx passband (13.75-14.5 GHz)< - 80 dBm/Hz Rx band (10.7-12.75 GHz) <- 155 dBm/Hz
POWER		
AC Voltage Range	208-265 VAC	
Frequency Range	47 Hz-63 Hz	
Power Factor	>0.95	
Power Consumption at P <sub>Sat</sub>	2425 VA	
Power Consumption at P <sub>Lin</sub>	2100 VA	
ENVIRONMENTAL		
Cooling systems	Forced Air	
Operating (Storage) Temperature	-40°C to +55°C (-55°C to +85°C)	
Relative Humidity	100%, up to 4”of rain precipitation/hour	
Altitude	10,000 ft (3,000 m) AMSL	
Adiabatic Derating (Altitude Temperature Derating Factor)	2°C/1000 ft	
Environmental Rating (Ingress Protection)	IP67	
Mean Time Before Failure (MTBF)	>50,000h, as per Telcordia SR 332, Issue 4, Ground Benign, Temperature +23°C	
INTERFACES		
IF Input connector	50 Ohm N-type (F)	
Input VSWR	1.5:1 max	
RF Output Connector	WR75 grooved, UNC 2B 6-32 threaded holes	
Output VSWR	1.3:1 max	
RF Sample	N-type (F)	
AC Power In	ACS02E16-10P	
M&C Interfaces: Ethernet, Serial RS-242 & RS-485, Form-C	PT02E14-19P	
Redundancy	PT02E14-15P	
MECHANICAL		
Dimensions (LxWxH)	22.25”x 8.9”x 16”	
Weight	105 lb	