40 W Ku BUC

FEATURES

- High output power with low power consumption
- Highly integrated design creates higher reliability
- GaN HEMTs results in best-in-class MTBF
- Outdoor design for wide operating temperature range
- Compact and light weight design
- Built-in telemetry facilities for RF power detection, mute control, gain control, high temperature shut-downs and summary alarms
- Designed to meet ETSI, FCC Standards
- RoHS Compliant

APPLICATIONS

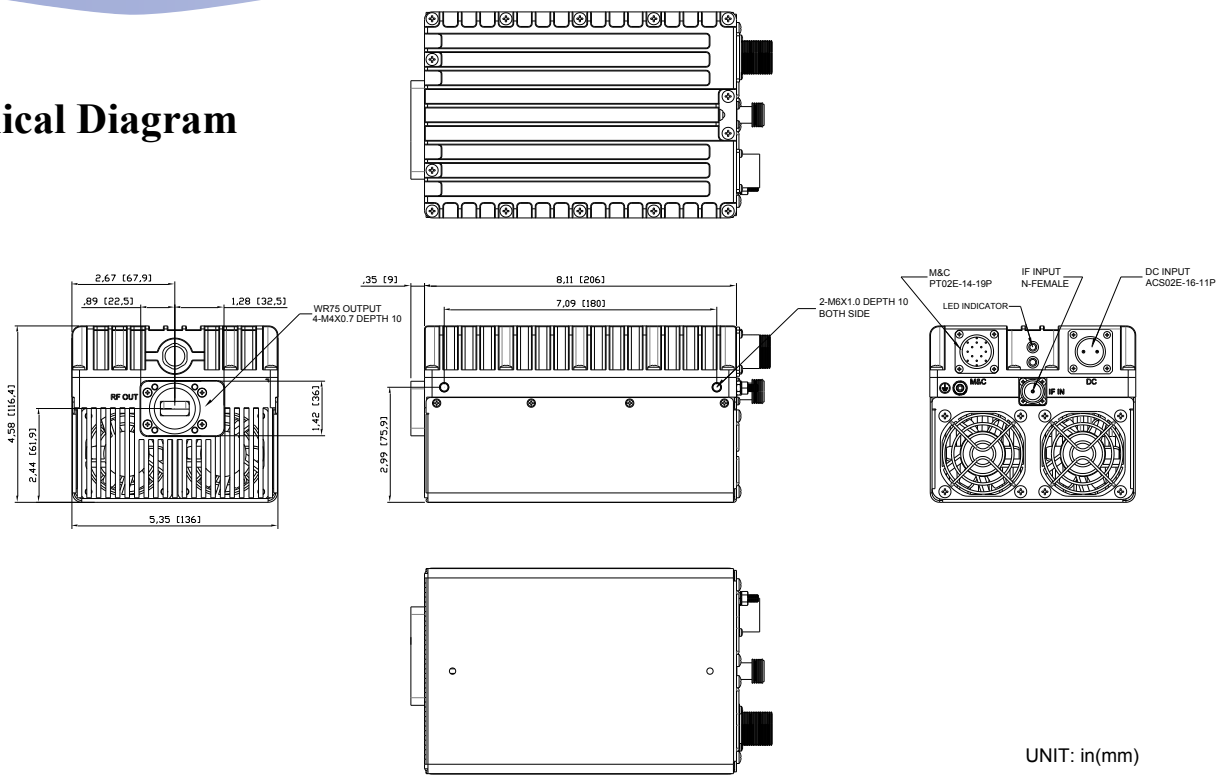
- Mobile Backhaul
- Maritime
- Flyaway SNG Terminals
- Communication-On-Moving
- Transportable VSAT Stations

WaveLab ***Advantage™ BUCs*** *(Block Up Converter) are technically advanced, highly reliable, and very cost effective due to high levels of integration design for high volume production.*

Next generation technologies provide higher output power in smaller, lighter weight packages for being more reliable and using less energy. WaveLab Ku band BUCs can be mounted in most existing customer systems because of their small size.

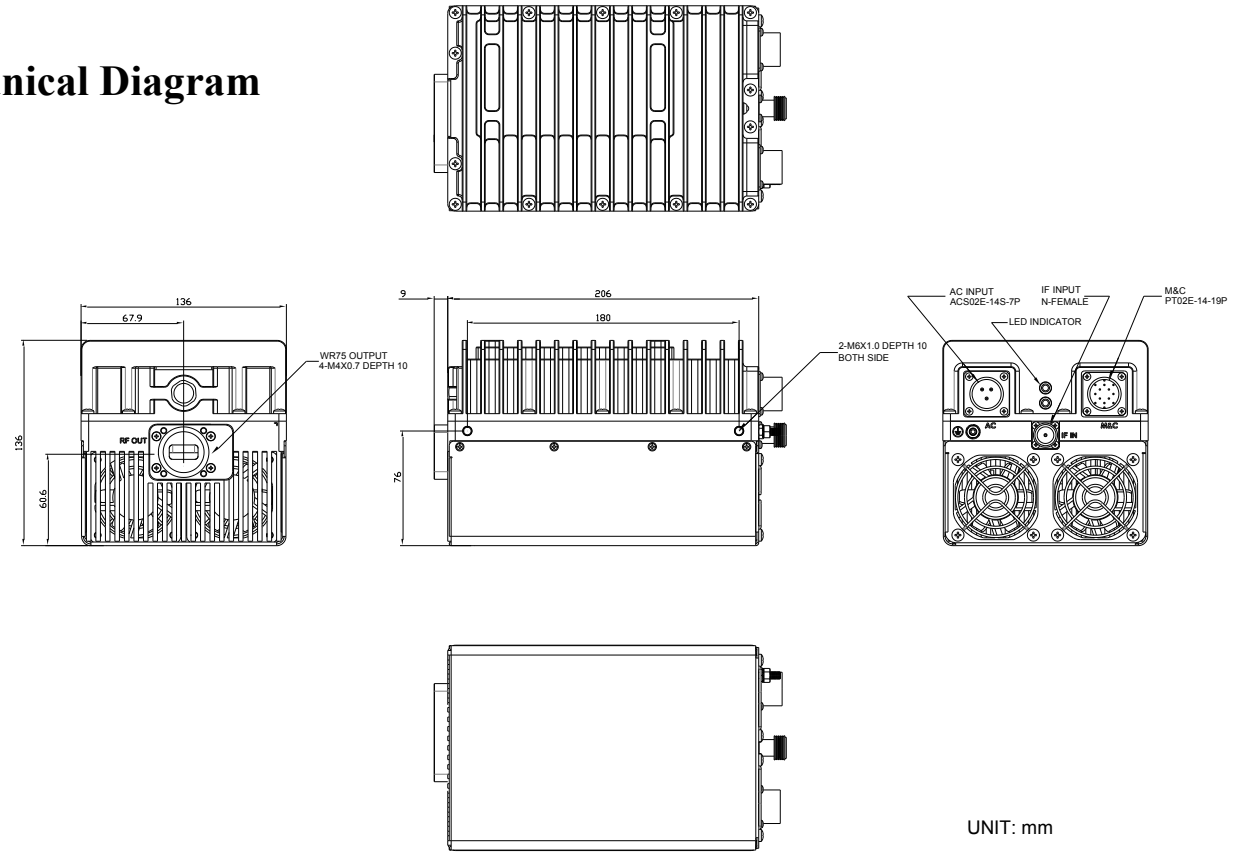
SPECIFICATIONS		
RF	**40 W**	
Transmit Frequency - Extended Band Optional	14.0 - 14.5 GHz 13.75 - 14.5 GHz	
IF Frequency - Extended Band Optional	950 - 1450 MHz 950 - 1700 MHz	
External Reference	10 MHz, 0 ± 5 dBm	
Saturated Output Power	46.5 dBm	
Rated Output Power	46 dBm	
IM3 - 3 dB Back-off from Rated Output Power	≤-25 dBc	
Small Signal Gain	70 dB	
Gain Variation (Over frequency at fixed temperature)	1 dB p-p/ 36 MHz, 3 dB p-p/ 500 MHz, 4 dB p-p/ 750 MHz	
Gain Stability (Over temperature at fixed frequency)	±1.5 dB	
Gain Adjustment Range	20 dB (Step: 0.1 dB)	
Phase Noise	-63 dBc/Hz @100 Hz, -73 dBc/Hz @1 KHz -83 dBc/Hz @10 KHz, -93 dBc/Hz @100 KHz	
Output Spurious	-55 dBc (Max)	
POWER SUPPLY		
Power Supply	+36 to +72 VDC, 86 to 265 VAC (Optional)	
Power Supply Draw - at Rated Output Power - 3 dB Back-off from Rated Output Power	DC 300 W 270 W	AC 380 W 330 W
INTERFACES		
RF Output Connector	WR75-G (Grooved)	
RF Output VSWR	1.25: 1	
IF Input Connector	N-Type Female	
IF Input VSWR	1.5: 1	
Power Supply Connector	DC: ACS02E16-11P; AC: ACS02E-14S-7P	
Monitor and Control Connector	PT02E-14-19P, for RS-485 & RS-232 & Ethernet (Telnet)	
LED Indicators	LEDs off: Equipment functioning properly Yellow LED on: PLL unlock alarm	
PHYSICAL PARAMETERS		
Size	DC: 206*136*116 mm; AC: 206*136*136 mm	
Weight	DC: 4 Kg; AC: 5 Kg	
Operation Temperature	-40 to +60 ℃	
Humidity	0 - 100% (Condensing)	
Altitude	0 - 3000 m ASL	

Mechanical Diagram (DC)



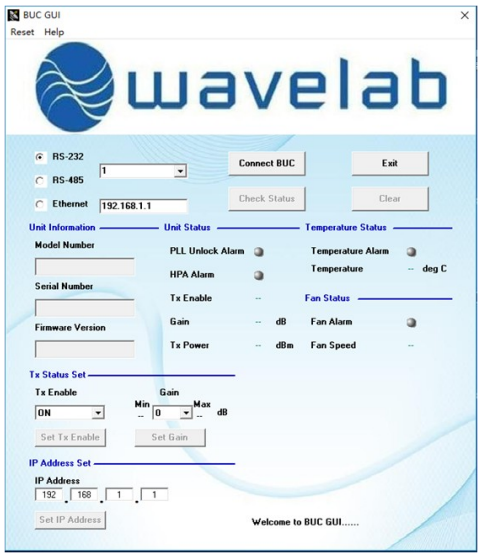
UNIT: in(mm)

Mechanical Diagram (AC)



UNIT: mm

Specifications are subject to change without notice.



WaveLab BUC GUI

It provides various methods of the remote M&C including Ethernet (Telnet), RS-485 and RS-232.

Users may check unit information and status, and change the setting of Gain and TX Enable.

Ordering Number

W L B - K U X 4 0 - 0 0 P 0 W - A 1

X: Frequency range

- **S** - standard band 14.0 - 14.5 GHz
- **E** - extended band 13.75 - 14.5 GHz

P: Power supply

- **0** - +36 to +72 VDC
- **A** - 86 to 256 VAC

WaveLab Inc.

Address: 12007 Sunrise Valley Drive. Suite 450 Reston, Virginia 20191 USA

Phone: +1-703-8603522

Fax: +1-703-8609322

WaveLab Telecom Equipment (GZ) Ltd.

Address: No. 6 Jinbi Road, Guangzhou Economic & Technological Development District, 510730 CHN

Phone: +86-20-28396481

Fax: +86-20-82229262