

## Dual Band 6/10/20 W Ka BUC

### FEATURES

- Dual band switchable
- 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

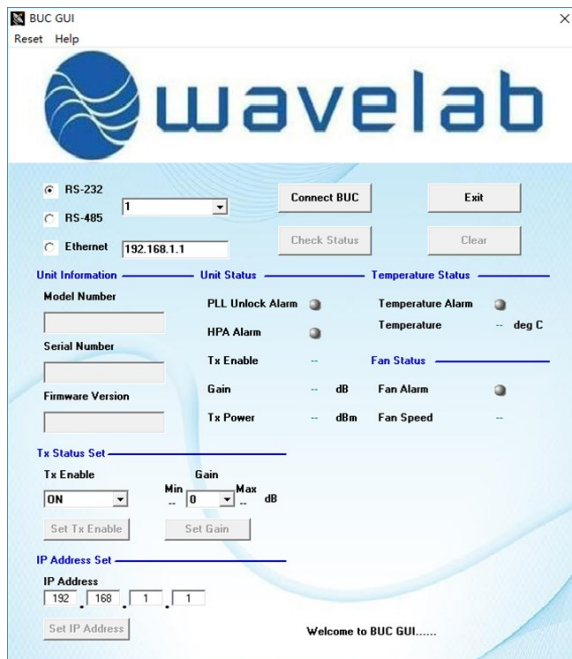
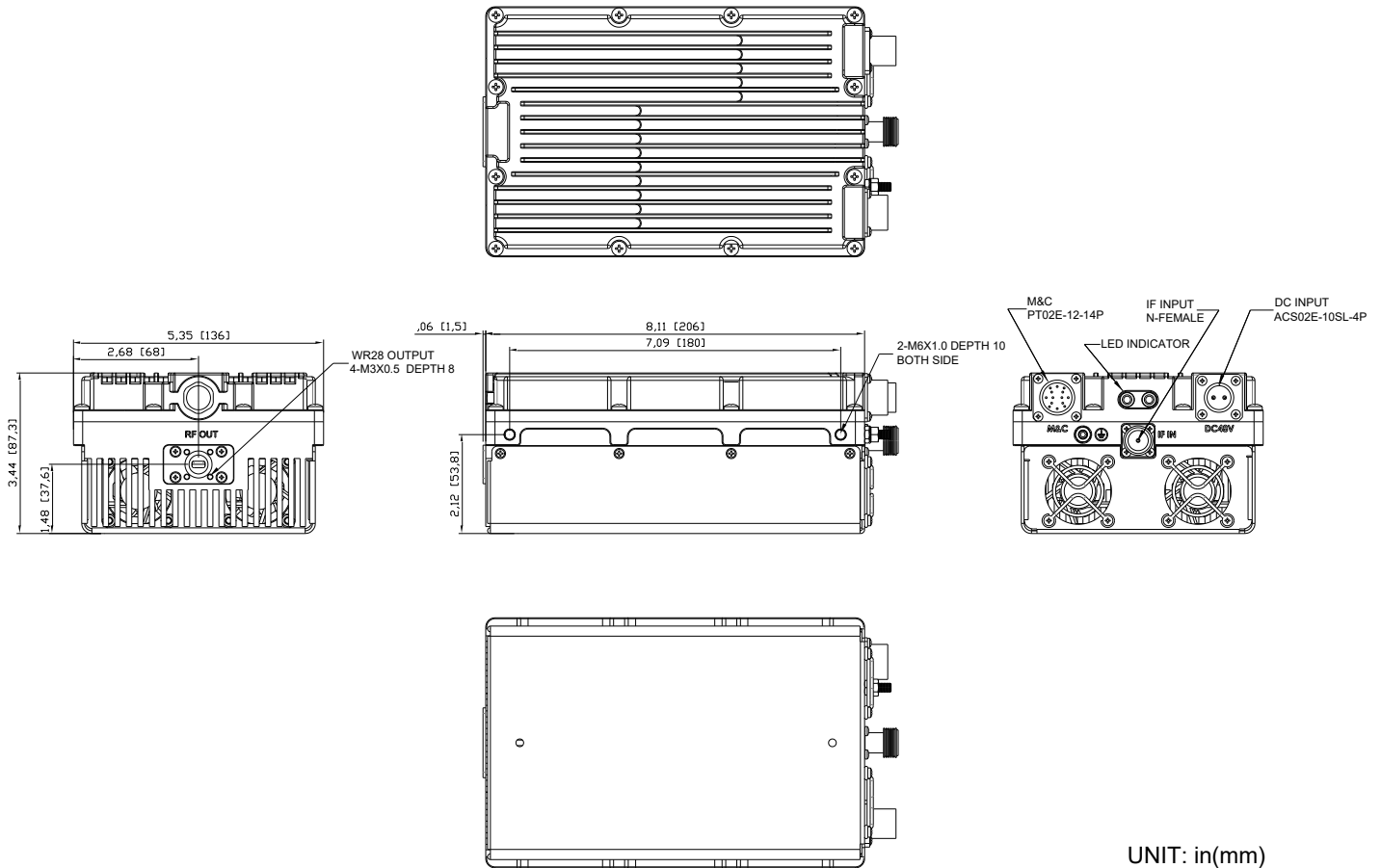


*WaveLab Advantage™ BUCs (Block Up Converter) are technically advanced, highly reliable, and very cost effective due to high levels of integration design for high volume production.*

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

SPECIFICATIONS			
RF	6 W	10 W	20 W
Transmit Frequency	29 - 30 GHz, 30 - 31 GHz 29.5 - 30 GHz		
IF Frequency	950 - 1950 MHz, 1000 - 2000 MHz (Optional) 950 - 1450 MHz		
External Reference	10 MHz, 0 ± 5 dBm		
Saturated Output Power	≥38 dBm	≥40 dBm	≥43 dBm
Rated Output Power	37.8 dBm	40 dBm	43 dBm
Linear Output Power	34.8 dBm	37 dBm	40 dBm
IMD3 at Linear Output Power	≤ -25 dBc		
Small Signal Gain	65 dB	67 dB	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/1000 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	≤ -60 dBc		
POWER SUPPLY			
Power Supply	+36 to +72 VDC, +18 to 36 VDC (Optional)		
Power Supply Draw @Rated Output Power	70 W	120 W	180 W
Power Supply Draw @Linear Output Power	55 W	90 W	120 W
INTERFACES			
RF Output Connector	WR28-G (Grooved)		
RF Output VSWR	1.25:1		
IF Input Connector	Type N Female		
IF Input VSWR	1.5:1		
Power Supply Connector	ACS02E10SL-4P		
Monitor and Control Connector	PT02E-12-14P, RS-485, RS-232 & Ethernet (Telnet)		
LED Indicators	LEDs off: Equipment functioning properly Yellow LED on: PLL unlock alarm		
PHYSICAL PARAMETERS			
Size	206*136*88 mm		
Weight	3.3 Kg		
Operating Temperature	-40 to +70℃	-40 to +60℃	
Humidity	0 - 100% (Condensing)		
Altitude	0 - 3000 m ASL		

## Mechanical Diagram



### 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.

Specifications are subject to change without notice.

## Ordering Number

**W L B - K A X Y Y - 2 0 P 0 W - A 0**

**X:** Frequency range

- **D** - Dual band including L and H bands
- **L** - Low band 29 - 30 GHz
- **M** - Middle band 29.5 - 30 GHz
- **H** - High band 30 - 31 GHz
- **T** - Triple band including L, M, and H bands

**YY:** Power in WATTS

- **06** - 6 Watts, **10** - 10 Watts, **20** - 20 Watts

**P:** Power supply

- **0** - +36 to 72 VDC
- **1** - +18 to 36 VDC

### **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