

## 20/40 W C-Band BUC

#### **FEATURES**

- Advanced GaN technology
- High output power with low power consumption
- Highly integrated design with higher reliability
- GaN HEMTs results in best-inclass 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 shutdowns 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<sup>™</sup> 20/40 W C-band BUCs (Block Up Converter) are technically advanced, highly reliable, and very cost effective due to high levels of integration design for high volume production.

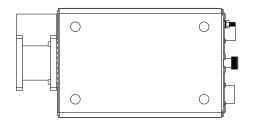
Next generation technologies provide higher output power in smaller, lighter weight packages for being more reliable and using less energy. WaveLab C band BUCs can be mounted in most existing customer systems because of their small size.

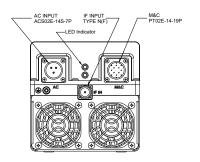


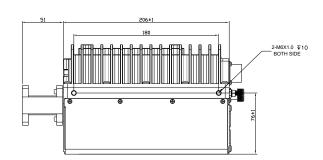
	SPECIFICATIONS	
RF	20 W	40 W
Transmit Frequency	5.850 - 6.425 GHz, 5.850 - 6.725 GHz	
IF Frequency	950 - 1525 MHz, 950 - 1825 MHz	
Local Frequency	4900 MHz	
External Reference	10 MHz, 0 ± 5 dBm	
Saturated Output Power	43.5 dBm	46.5 dBm
Rated Out Power	43 dBm	46 dBm
Linear Out Power	43 dBm	46 dBm
IM3 at Linear 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/575 MHz, 4 dB p-p/875 MHz	
Gain Stability (Over temperature at fixed frequency)	± 1.5 dB	
Gain Adjustment Range	0 - 20 dB (Step: 0.1 dB)	
Phase Noise	≤ -65 dBc/Hz @100 Hz, ≤ -75 dBc/Hz @1 KHz ≤ -85 dBc/Hz @10 KHz, ≤ -95 dBc/Hz @100 KHz	
Output Spurious @Rated output power	≤ -55 dBc	
POWER SUPPLY		
Power Supply	85 - 265 VAC, 47 - 63 Hz	
Power Supply Draw - at Rated Output Power	160 W	250 W
INTERFACES		
RF Output Connector	WR137 (Grooved)	
RF Output VSWR	1.25:1	
IF Input Connector	N-Type Female	
IF Input VSWR	1.5:1	
Power Supply Connector	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	206*136*136 mm	
Weight	5 Kg	
Operation Temperature	-40 to +60°C	
Humidity	0 - 100% (Condensing)	
Height	0 - 3000 m	

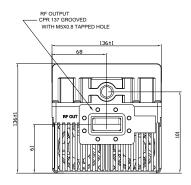


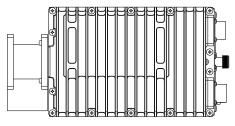
## **Mechanical Diagram**



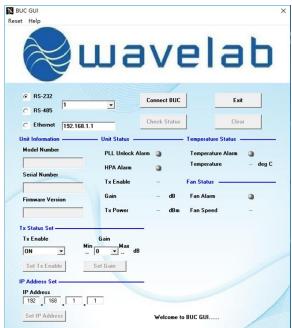








UNIT: mm Tolerance: ±1



#### 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 - C X Y Y - 0 0 A 0 W - A 0

### X: Frequency Range

• **S** - 5.850 - 6.425 GHz

• **E** - 5.850 - 6.725 GHz

YY: Power in Watts

• 20 - 20 W

• 40 - 40 W

#### 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

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