

AnaCom's smaller-sized mBUCs provide the high output power and high reliability of an AnaCom BUC in a compact package suited for use with most mobile and fly-away antennas. mBUCs are designed for continuous outdoor duty in all types of harsh environments. Ideally suited for SCPC, MCPC, DAMA, TDMA, and VoIP applications and designed to interface with any L-band modem, the mBUC may be used in a wide variety of communication networks.

AnaCom's mBUC features web-based and command-line access to Monitor and Control functions accessible via Ethernet, FSK, Telnet, RS-232- and RS-485, and device monitoring over SNMP.

## Features

- ✔ Built in test capabilities for improved maintainability and reduced dependence on external test equipment
- ✔ No indoor RF equipment is needed
- ✔ Superior phase noise
- ✔ Flexible, universal DC power supply (AC optional)

## Built In Test Capability

To improve and simplify maintenance routines, an external terminal (or computer) can be connected to monitor a number of critical parameters without use of additional test equipment. These include:

- ✔ Transmitter power output level
- ✔ TX IF level
- ✔ Power supply voltages
- ✔ TX synthesizer loop voltages
- ✔ Internal Temperature
- ✔ Alarm Details

Controllable functions from the terminal include:

- ✔ TX On/Off
- ✔ TX Gain

## Benefits

- ✔ "Last Touch" controls allow for remote configuration or local (*manual*) configuration
- ✔ Flash memory means that the mBUC always powers up with exactly the same operating conditions as when it lost power (*or was shut down*)
- ✔ Comprehensive maintenance features for operational effectiveness and minimum outages.
- ✔ Simple installation.

## Comprehensive Monitor & Control

The mBUC's Monitor & Control feature allows you to monitor and control the mBUC on the same M&C bus with most indoor equipment such as modems and multiplexers. The Monitor & Control system can be used in combination with the unit's internal metering function to monitor operational parameters.

The M&C can be accessed remotely via-

Ethernet protocols:

- ✔ Internal Webpage
- ✔ Telnet
- ✔ SNMP
- ✔ AnaCom Supervisor 10

Serial protocols:

- ✔ RS-232
- ✔ RS-485
- ✔ AnaCom Supervisor 10

## Compact, Functional Design

The upconverter, power amplifier, monitor and control and power supply are included in a single enclosure. The only cabling required to the indoor equipment are IF and power. An optional ovenized, high stability crystal oscillator can be used to lock the TX synthesizer. Additional temperature and aging compensation are provided by an onboard microprocessor.



# mBUC

## Ku-band Series

## SPECIFICATIONS

		4W	8W	16W	20W	25W	32W	40W
<b>TRANSMIT CHARACTERISTICS</b>	1 dB COMPRESSION POINT (dBm)	36	39	42	43	44	45	46
	TX GAIN (Nominal)	61	64	67	68	69	70	71
	TX GAIN RANGE	20 dB variable in 0.1 dB steps via M&C						
	TX LEVEL FLATNESS	3 dBp-p max / 500 MHz						
	TX GAIN OVER TEMPERATURE	+/- 1.5 dB max						
	TX INPUT IF FREQUENCY	Ku = 950 to 1450 MHz		EKu = 950 to 1450 MHz			SEKu = 950 to 1,700 MHz	
	TX INPUT IF IMPEDANCE	50 ohms (75 ohms optional)						
	TX INPUT IF LEVEL	-25 dBm for rated output with nominal gain						
	TX L.O. FREQUENCY	Ku = 13.050 GHz		EKu = 12.800 GHz			SEKu = 12.800 GHz	
	TX OUTPUT FREQUENCY	Ku = 14.0 to 14.50 GHz		EKu = 13.75 to 14.25 GHz			SEKu = 13.75 to 14.50 GHz	
	TX PHASE NOISE	-60 dBc/Hz max @ 100Hz -90 dBc/Hz max @ 100KHz		-70 dBc/Hz max @ 1KHz -100 dBc/Hz max @ 1MHz			-80 dBc/Hz max @ 10KHz	
	INTERMOD	-32 dBc max (2 carriers, each 9dB backoff from P1dB rating)						
SPURIOUS	-55 dBc max out of band							

<b>REFERENCE</b>	Requirements	Provided on TXIF line by L-band modem
	FREQUENCY	10 MHz (sine-wave)
	INPUT POWER	-5 to +5 dBm (at input port)
	PHASE NOISE	-125 dBc/Hz max @ 100Hz -135 dBc/Hz max @ 1KHz -140 dBc/Hz max @ 10KHz

<b>SYSTEM</b>	ALARM RELAYS	FORM C for Summary Alarm; Isolated
	POWER	4W, 8W 16W-40W 24V DC 48V DC optional external AC
	M&C	SNMP, HTTP, Telnet Ethernet, RS-232, RS-485

<b>ENVIRONMENTAL</b>	TEMPERATURE	-50 to +55°C operational -50 to +75°C storage
	HUMIDITY	95% at 45C
	ALTITUDE	6,500 meters (21,500 ft) max
	RAIN	20 inches per hour
	WIND	150 miles per hour
	VIBRATION	1.0 g random operational, 2.5 g random survival
SHOCK	10 g operational, 40 g survival	

<b>POWER &amp; DIMENSIONS</b>	TYPICAL POWER CONSUMPTION (VA)	45	111	183	230	237	254	360
	PRIME POWER RECOMMENDATION	90	220	366	160	474	508	720
	WEIGHT:	13 lbs. 5.9 kg.						
	BUC SIZE:	10.95" x 7.08" x 4" 278mm x 180mm x 98mm						

all specifications subject to change

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