

AnaCom's pBUC Block Up-Converters provides the high output power reliability of our Baby BUC in a flatter package ideal for mobile and fly-away antennas, even in situations involving extreme temperatures and high vibrations. pBUCs 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 pBUC may be used in a wide variety of communication networks.

AnaCom's pBUC 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 BUC always powers up with exactly the same operating conditions as when it last power (*or was shut down*)
- ✓ Comprehensive maintenance features for operational effectiveness and minimum outages.
- ✓ Simple installation.

Comprehensive Monitor & Control

The pBUC's Monitor & Control feature allows you to monitor and control the BUC 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.



pBUC
Ku-Band Series

SPECIFICATIONS

	8W	16W	20W	25W	32W	40W	
TRANSMIT CHARACTERISTICS	1 dB COMPRESSION POINT (dBm)	39	42	43	44	45	46
	TX GAIN	64	67	68	69	70	71
	TX GAIN RANGE	10 dB variable in 1 dB steps via M&C					
	TX LEVEL FLATNESS	4 dBp-p max / 500 MHz					
	TX GAIN OVER TEMPERATURE	+/- 1 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.	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 FREQUENCY STEP SIZE	1 MHz M&C controlled					
	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	-25 dBc max (2 carriers, each 6dB backoff from P1dB rating)					
SPURIOUS	-55 dBc max out of band						

REFERENCE	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
	INTERNAL REFERENCE OPTION	10 ⁻⁸ over rated temperature

SYSTEM	ALARM RELAYS	FORM C for Summary Alarm; Isolated
	POWER	48V DC optional external AC
	M&C	SNMP, HTTP, Telnet Ethernet, RS-232, RS-485

ENVIRONMENTAL	TEMPERATURE	-50 to +55°C operational -50 to +75°C storage
	HUMIDITY	95% at 45C
	ALTITUDE	6500 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

	8W	16W	20W	25W	32W	40W	
POWER & DIMENSIONS	TYPICAL POWER CONSUMPTION (VA)	111	189	256	266	372	392
	PRIME POWER RECOMMENDATION	220	380	500	532	750	784
	WEIGHT:	15.2 lbs. 6.9 kg.					
BUC SIZE:	12.6" x 10.3" x 4.4" 320mm x 262mm x 112mm						

*all specifications subject to change

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