

AnaCom's ELSAT[®] G-Series BUCs have all of the features and reliability of our regular ELSAT[®] BUCs, in a low-cost configuration requiring significantly less power for operation. G-Series BUCs 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 G-Series BUC may be used in a wide variety of communication networks.

G-Series BUCs feature 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

- ✓ Low power consumption
- ✓ Built in test capabilities for improved maintainability and reduced dependence on external test equipment
- ✓ No indoor RF equipment is needed
- ✓ Superior phase noise
- ✓ Powered via the IF cable

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 powered (*or was shut down*)
- ✓ Comprehensive maintenance features for operational effectiveness and minimum outages.
- ✓ Simple installation.

Comprehensive Monitor & Control

The G-Series BUC'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-

Serial protocols:

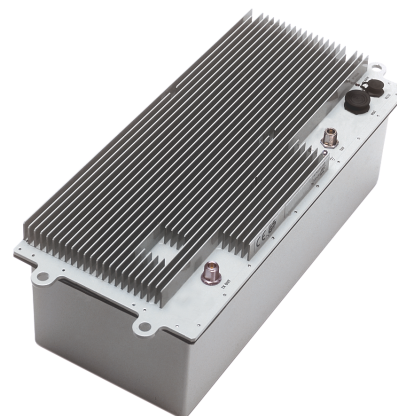
- ✓ RS-232
- ✓ RS-485
- ✓ FSK
- ✓ Supervisor 9

Ethernet protocols:

- ✓ HTTP
- ✓ Telnet
- ✓ SNMP
- ✓ Supervisor 9

Compact, Functional Design

The upconverter, power amplifier, monitor and control and power supply are included in a single enclosure. As the G-series receives power through the IF, no additional cabling is required. 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.



ELSAT® BUC

G-Series C-band

SPECIFICATIONS

		5W	10W	20W
TRANSMIT CHARACTERISTICS	1 dB COMPRESSION POINT (dBm)	37	40	43
	TX GAIN	66	69	72
	TX GAIN RANGE	10 dB variable in 1 dB steps via M&C		
	TX LEVEL FLATNESS	6 dBp-p max / 500 MHz		
	TX GAIN OVER TEMPERATURE	+/- 2dB max		
	TX INPUT IF FREQUENCY	EC = 950 to 1525 MHz	SEC = 950 to 1825 MHz	LMI-EC = 950 to 1650 MHz
	TX INPUT IF IMPEDANCE	50 ohms (75 ohms optional)		
	TX INPUT IF LEVEL	-25 dBm for rated output with nominal gain		
	TX OUTPUT FREQUENCY	EC = 5.850 to 6.425 GHz PC = 6.425 to 6.725 GHz	SEC = 5.850 to 6.725 GHz RC = 5.975 to 6.475 GHz	LMI-EC = 5.725 to 6.425 GHz XC = 6.725 to 7.025GHz
	TX PHASE NOISE	-65 dBc/Hz max @ 100Hz -92 dBc/Hz max @ 100KHz	-75 dBc/Hz max @ 1KHz -100 dBc/Hz max @ 1MHz	-83 dBc/Hz max @ 10KHz
INTERMOD	-33 dBc max (2 carriers, each 9 dB 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 via IFL optional 100 to 250 VAC; 47 to 63 Hz		
	M&C	SNMP, HTTP, Telnet Ethernet, RS-232, RS-485, FSK		
ENVIRONMENTAL	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			
POWER & DIMENSIONS	TYPICAL POWER CONSUMPTION (VA)	55	75	150
	PRIME POWER RECOMMENDATION	110	150	300
	WEIGHT (lbs.)	29		45
	(kg.)	13		20
BUC SIZE:	21.6" x 9.0" x 7" (549 x 229 x 177 mm)		21.6" x 9.0" x 8.2" (549 x 229 x 208 mm)	

*all specifications subject to change

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