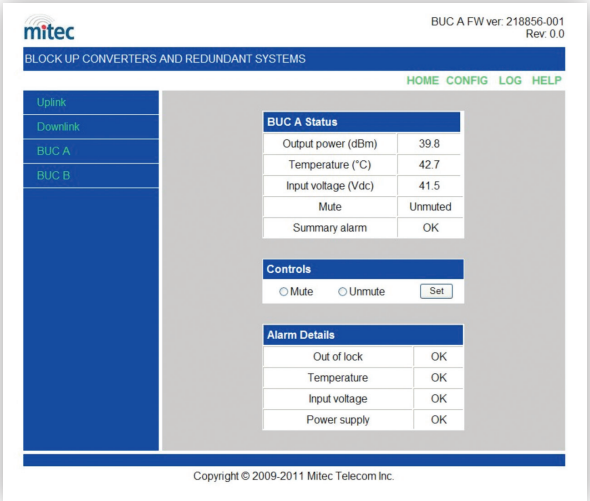
DATASHEET

5-40 W C-BAND MTX BUC

SATELLITE COMMUNICATIONS

THE NEW GENERATION OF MITECVSAT MEDIUM POWER C-BAND BUCs

Comes with a super-compact form factor, is light weight and extremely efficient, which allows it to be mounted directly on the antenna feed.



KEY FEATURES

- Best in class efficiency with a draw of less than 45W for 5W and less than 65W for 10W. Can be powered by the modem; no expensive power supply required.
- Offered in 5 different sub-bands
- FSK Interface via IF connector
- Internal reference Option
- Full M&C Option including RS-232, RS-485, Ethernet and SNMP
- Wide range of supply voltage 18 to 55 VDC for 5-10W and 36 to 55VDC for 20-40W BUC.
- Built In low voltage protection will shut down the BUC when 20-40W is powered from 24VDC
- Status LED

YOUR DAILY EXPERIENCE POWERED BY MITEC VSAT

SALES@MITECVSAT.COM | WWW.MITECVSAT.COM | 1-514-694-8666

mitec VSAT
a division of Alga Mircowave Inc.

5-40 W C-BAND BUC

TRANSMIT CHARACTERISTICS

Output Frequency Range	Band 1: 5.850-6.425 MHz; Band 2: 5.850-6.725 GHz; Band 3: 5.725-6.425 GHz; Band 4: 6.725-7.025 GHz; Band 5: 6.425-6.725 GHz.
Input Frequency Range	Band 1: 950-1525 MHz; Band 2: 950-1825 MHz; Band 3: 950-1675 MHz; Band 4: 1275-1575 MHz; Band 5: 975-1275 MHz.
Local Oscillator Frequency	Bands 1 & 2 : 4.90 GHz; Band 3: 4.75 GHz; Bands 4 & 5: 5.45 GHz
Output VSWR	1.20:1
Linear Gain	Refer to table “Specifications by BUC Power”
Gain Stability Over Temperature	± 1.5 dB nominal; ± 2.0 dB max.
Gain Variation at fixed temperature	Over full band: Bands 1, 4 & 5: ± 2.0 dB; Band 2 : ± 2.50 dB; Band 3: ± 2.25 dB Over 40 MHz: ± 0.5 dB for all bands
Intermodulation	-25 dBc, with 2 equal carriers at 3 dB total power backoff from rated power
10 MHz Reference	0 dBm ±0.5 dB, (External via IF Connector or Internal)
Local Oscillator Phase Noise	-65 dBc/Hz max @ 100 Hz; -75 dBc/Hz max @ 1 KHz; -85 dBc/Hz max @ 10 KHz; -95 dBc/Hz max @ 100 KHz ; -110 dBc/Hz max @ 1 MHz
Output Spurious	Bands 1, 3, 4, 5: -60 dBc; Band 2: -45 dBc
Receive Band Noise Power Density	-150 dBm/Hz max.
Input Impedance	50 Ohms
Input VSWR	1:50:1

INTERFACE

RF Output	Waveguide, CPR137G (Grooved)
IF Input	N-Type Female, 50 Ohms
Power Supply	Standard: DC Via Coaxial Connector; Optional: DC or AC via MS Connector
M&C	Standard: FSK via Coaxial Connector; RS485/RS232/Ethernet optional via MS Connector

ENVIRONMENTAL

Temperature Range (ambient)	-40°C to + 55°C (operating); -40°C to + 75°C (storage)
Humidity	0 to 100% (condensing)
Altitude	10,000 ft ASL

SPECIFICATIONS BY BUC POWER

BUC POWER	RF POWER @ P1DB (dBm)	GAIN MIN. (dB)	POWER DRAW (W)	COOLING	POWER BUC	DIMENSIONS (INCHES)	WEIGHT (LBS/KG)
5W	+37	60	45	Convection	+18 to +55 VDC (Coax Feed)	9.0 x 7.0 x 3.0	8.8/4
10W	+40	63	65	Convection	+18 to +55 VDC (Coax Feed)	9.0 x 7.0 x 3.0	8.8/4
					+48 VDC (non-isolated)	9.0 x 7.0 x 3.0	8.8/4
					+48 VDC (isolated), 110/220 VAC	9.0 x 7.0 x 4.75	12.5/5.7
20W	+43	66	140	Fan	+36 to +55 VDC (Coax Feed)	9.0 x 7.0 x 4.65	10/4.5
					+48 VDC (non-isolated)	9.0 x 7.0 x 4.65	10/4.5
					48 VDC (isolated), 110/220 VAC	9.0 x 7.0 x 6.4	13.7/6.2
40W	+46	68	250	Fan	+36 to +55 VDC (Coax Feed)	9.0 x 7.0 x 4.65	10/4.5
					+48 VDC (non-isolated)	9.0 x 7.0 x 4.65	10/4.5
					48 VDC (isolated), 110/220 VAC	9.0 x 7.0 x 6.4	13.7/6.2

* for a 30W unit consult factory

ORDERING INFORMATION

MTX - FFFF PP - EN - 2 0 1 0

- Redundancy: 0: none; 1: Redundant Ready
- M&C: 0:none; 1: FSK; 5: RS232/RS485/Ethernet
- 10MHz Reference: 0: External; 1:internal
- Main Feed: 2: DC Coax; Feed 3:+48VDC (non-isolated); 4: 48VDC (isolated); 7: 110-220VAC
- Input Connector: N: N-Type F: F-Type
- Power in dBm @ P1dB
- Frequency: 140145: 14.00-14.50 GHz; 137145: 13.75-14.50 GHz

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