



Ka-band BUC

5W / 12W

Ka Band BUCs for Satellite Communications

High Efficiency & Reliability

Intended for outdoor operation provides high output power in a compact package. Signal up conversion from a Modem's L band output into Ka band frequency in order to perform the satellite communication link.

Power Levels

Low output powers models 5W and 12W. Based on proven reliable solid-state GaAs.

Monitoring & Control

Remote M&C via serial port (RS485/Ethernet), including alarms related to temperature and local oscillator, power supply shutdown, adjustable gain and forward and reverse output power monitoring.



Key Features

- High linearity
- Compact size
- Low power consumption
- Easy to maintain
- Redundant configurations (1:1, 2:1)
- Weatherproof

TECHNICAL SPECIFICATIONS

OPTIONS:

- Internal 10MHz reference
- Ethernet interface
- Extended temperature range
T1(-40°C, +55°C),
T2(-40°C, +60°C)
- Redundant systems
(1:1, 2:1, N:1)
- Remote M&C Panel
- Automatic Control Mode (AGC, ALC)

ELECTRICAL

Input frequency range	1 to 2 GHz
Output frequency range	29 to 30 GHz, 30 to 31 GHz
Output Spectrum	Not inverted

	5 W	12 W
Saturated Output Power (min)	37 dBm	40.8 dBm
Linear Output Power (min) *	34 dBm	38 dBm
Gain	65dB	68 dB
Gain stability at Constant Temp	±0.5 dB 24 h	

Gain flatness over 40MHz	± 0.5 dB
Gain stability over Temp	± 2 dB over whole temp. range (at Constant Frequency)
IMD	-25 dBc @ Psat -3 dB
SSB Phase Noise	-62 dBc/Hz at 100 Hz, -72 dBc/Hz at 1 kHz, -82 dBc/Hz at 10 kHz, -92 dBc/Hz at 100 kHz, -102 dBc/Hz@1 MHz
Noise Figure	<15 dB
Spurious	<-60 dBc @ Psat
Output VSWR	< 1.8:1
Input VSWR	< 1.8:1

* Linear Output Power, defined as per MIL-STD-188-164C, is the power at which the IMD = -25 dBc for two CW signals 5 MHz apart and the spectral regrowth is < -30 dBc @ 1.0 x symbol rate for a single QPSK/OQPSK/8PSK signal.

POWER SUPPLY

	5 W	12 W
Operating Voltage	+18 to +36 VDC +24 VDC nom	+36 to +60 VDC, +48 VDC nom
Power Consumption @ Psat	≤60W	≤110W

INTERFACES & PHYSICAL

Input RF Connector	N (f), (L-band + Ext. Ref. multiplexed) (BUC); WR28 (SSPA)
Output RF Connector	WR28

	5 W	12 W
Power Supply	(multiplexed on L-band)	DC Line: MS3112E12-3P
M&C Connector	MS3112E14-19S	
Size (mm) (inches)	195 x 155 x 45 7.7 x 6 x 1.7	195 x 165 x 85 7 x 6.5 x 3.3
Weight (kg) (lbs)	<2.5 <5.5	<3.5 <7.7

ENVIRONMENTAL CHARACTERISTICS

Operating temperature	-30 °C to +55 °C
Storage temperature	-40 °C to +85 °C
Humidity	100% Condensing

Rev. 2 08/18

Information contained in this document is subject to change without notice.
For more detailed information, please contact: