



Ka BUCs

5W / 12W / 20W / 40W / 60W / 120W

New Generation of Ka Band BUCs for Broadcast Satellite Communications

High Efficiency and Reliability

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

Broad Range of Power Levels

Wide range of output powers available, from 5 Watts up to 120 Watts. Based on proven reliable solid-state technology and high efficiency power supplies in order to provide the best performance.

Monitoring and 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
- Low size and weight
- Low power consumption
- Easy to maintain
- Redundant systems available
- Weatherproof

TECHNICAL SPECIFICATIONS

ELECTRICAL

OPTIONS:

- Internal 10MHz reference
- Remove Linearizer
- Ethernet interface
- Extended temperature range (from -40°C to +60°C)
- Handheld
- Redundant systems
- Remote M&C Panel
- Forward and reverse output power monitoring (from 20W)
- Automatic Control Mode (AGC, ALC)

Input frequency range	1 to 2 GHz					
Output frequency range	29 to 31 GHz, 29 to 30 GHz, 30 to 31 GHz					
Output Spectrum	Not inverted					
	5W	12W	20W	40W	60W	120W
Saturated Output Power (min)	37dBm	40.8dBm	43dBm	46dBm	48dBm	51dBm
Linear Output Power (min) *	-	38 dBm	40dBm	43dBm	45dBm	48dBm
Gain	65dB	68dB	68dB	68dB	70dB	70dB
Gain stability at Constant Temp	± 0.5 dB 24h				± 0.25 dB 24h	
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@1MHz					
Noise Figure	<15 dB					
Spurious	< -60 dBc @ Psat					
	5W	12W	20W	40W	60W	120W
Output VSWR	< 1.8:1		< 1.5:1			
Input VSWR	< 1.8:1		< 1.5:1			

* Linear Output Power, defined as per MIL-STD-188-164B, 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

	5W	12W	20W	40W	60W	120W
Operating Voltage	+18 to +36VDC +24VDC nom	+36 to +60VDC, +48 VDC nom (optional 110/220 VAC)			Single-Phase 220V AC ±10%, 50Hz±5%	
Power Consumption @ Psat	≤60W	≤110W	≤220W	≤ 450W	≤ 900W	≤ 1800W

INTERFACES & PHYSICAL

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

	5W	12W	20W	40W	60W	120W
Power Supply Connector	(multiplexed on L-band)	DC Line: MS3112E12-3P		AC Line: MS3102R10SL-3P		
M&C Connector	MS3112E14-19S			MS3112E14-19S RJF21G		
Size (mm)	195x155x45	195x165x85	260x165x124	340x270x180	320x475x220	545x475x220
(inches)	7.7x6x1.7	7.7x6.5x3.3	10.2x6.5x4.8	13.4x10.6x7	12.6x18.7x8.6	21.5x18.7x8.6
Weight (kg)	<2.5	<3.5	<7	<13	<25	<35
(lbs)	<5.5	<7.7	<15.4	<28.6	<55	<77

ENVIRONMENTAL

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

Information contained in this document is subject to change without notice. For more detailed information, please contact comercial@ttinorte.es

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