



TTI-BUC-KA

Linearised Ka-Band BUCs



The **Ka-band BUC linearised Series** make the signal up conversion from a Modem's L band output into Ka band frequency in order to perform a terrestrial or satellite communication link. The Ka-band BUCs integrate lineariser and are designed for continuous outdoor operation, including up-converter and Ka band SSPA.

These BUCs provide the capability of remote M&C via serial port (RS485/Ethernet), including capabilities like alarms related to temperature and local oscillator, power supply shutdown adjustable gain and forward and reverse output power monitoring.

TECHNICAL SPECIFICATIONS

ELECTRICAL

	5W	8W	10W	20W	40W	60W	120W
Input Frequency range	1 to 2 GHz						
Output Frequency ranges	29 to 31 GHz 25.25 to 27.5 GHz						
Output Spectrum	Not inverted						
Saturated Output Power (min)	37dBm	39dBm	40dBm	43dBm	46dBm	48dBm	51dBm
Linear Output Power (min)	-	36dBm	37dBm	40dBm	43dBm	45dBm	48dBm
Gain	65dB	70dB	71dB	74dB	60dB	60dB	60dB
Gain flatness over 40MHz	± 0.5 dB						
Gain flatness full band	± 2 dB in full band 1GHz / ± 1.5 dB BW=500MHz						
Gain stability over Temp at Constant Frequency	± 2 dB over whole temp. range						
Gain stability at Constant Temp	± 0.5 dB 24h					± 0.25 dB 24h	
IMD	-25dBc @ Psat - 3dB						
SSB Phase Noise	-62dBc/Hz@100Hz -72dBc/Hz@1KHz -82dBc/Hz@10KHz -92dBc/Hz@100KHz -102dBc/Hz@1MHz						
Noise Figure	<15dB						
Input VSWR	< 1.8:1			< 1.5:1			
Output VSWR	< 1.8:1			< 1.5:1			
Spurious	< -60 dBc @ Psat						

INTERFACES & PHYSICAL

	5W	8W	10W	20W	40W	60W	120W
Input RF Connector	N(f), (L-band + Ext. Ref. multiplexed)						
Output RF Connector	WR28 grooved						
Power Supply Connector	(multiplexed on L-band)	MS3112E12-3P					
M&C Connector	MS3112E12-10S						
Monitor & Control	Serial RS485/ Ethernet						
Size (mm)	195x155x45	195x165x85	275x200x150	340x270x180	320x475x220	545x475x220	
Weight	<2.5 Kg	<3.5Kg	<7.0Kg	<13Kg	<25Kg	<35Kg	

POWER SUPPLY

	5W	8W	10W	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	≤95W	≤110W	≤220W	≤ 450W	≤ 900W	≤ 1800W

ENVIRONMENTAL

	5W	8W	10W	20W	40W	60W	120W
Operating temperature	-30°C to +55 °C						
Storage temperature	-40°C to +85°C						
Humidity	100% Condensing						

