



6W Universal Ka-Band (27.5 - 31.0 GHz) BUC

KEY FEATURES

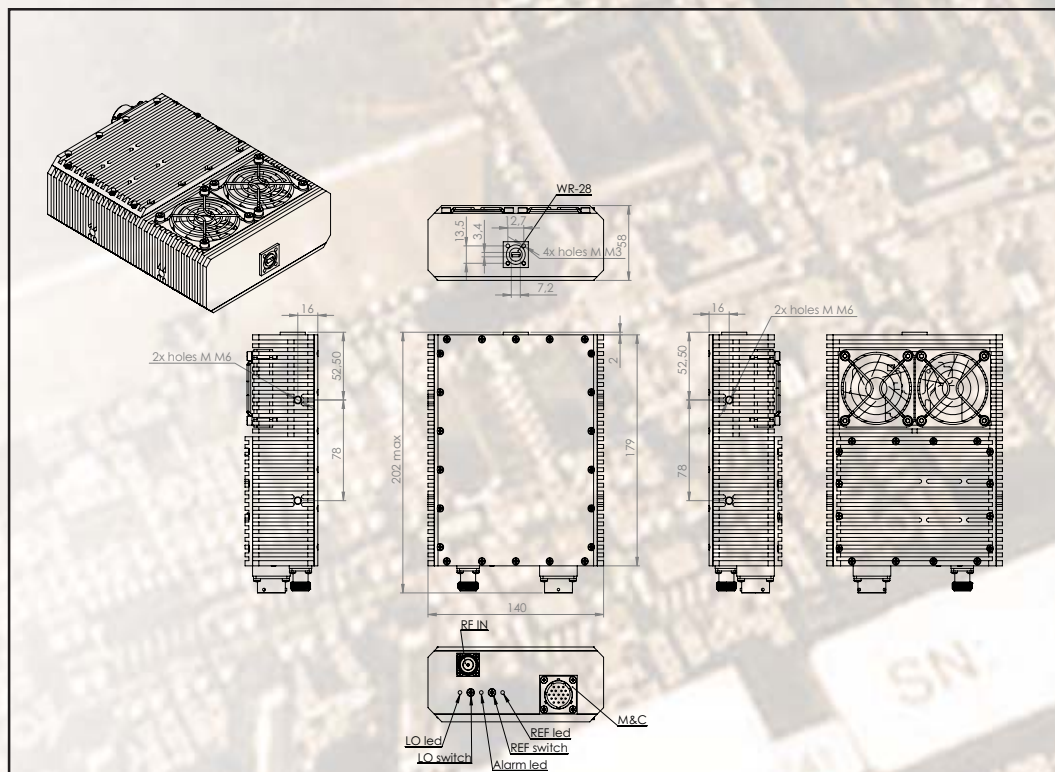
- ◆ Output frequency 27.5-31.0 GHz
- ◆ Based on GaN technology which enables high efficiency, low power consumption and high reliability
- ◆ Quad - L.O. (electronically and manually switchable 26.55, 27.4, 28.05, and 29.05 GHz)
- ◆ Low power consumption (<68W)
- ◆ L.O. lock, amplifier and 10MHz LEDs
- ◆ Field-exchangeable (F/N) IF connector
- ◆ Internal 10MHz reference, autosensing and controllable (optional)
- ◆ M&C - combined RS-232/485, FSK and Ethernet control (HTTP and SNMP)
- ◆ RoHS compliant

ABE6UKA / ABE6UKAF



This unique first ever 6W L-To Full Ka-Band Block Up Converter covers the O3B (27.65-29.1 GHz), Commercial (29.0-30.0 GHz) and Military (30.0-31.0 GHz) frequency bands. M&C (FSK) capability enables trouble shooting, monitoring and controlling the BUC. Unit provides 10MHz reference autosensing feature.

Mechanical Drawing





6W Universal Ka-Band (27.5-31.0 GHz) BUC

TECHNICAL SPECIFICATIONS		
RF frequency		27.5-31.0 GHz
Quad L.O.		26.55, 27.4, 28.05 GHz and 29.05 GHz
IF frequency		950 to 1,950 MHz
Output power		6W (+38 dBm min.)
IF connector		N-type or F-type
Power supply – auto-ranging		+15 VDC~+60 VDC via IF cable 68W max
Output interface		WR-28 Grooved
Gain		62 dB typ. 55 dB min.
TX Gain variation		± 0.5 dB over 40MHz ± 1.8 dB over full band
TX Gain stability over temperature range		± 1.5 dB typ., ± 1.8 dB max.
IMD3 (two tones)		-25 dBc max. 2 signal 5MHz apart at P-LINEAR
Spurious		-55dBc max.
Spectral regrowth (QPSK at 1.5x and OQPSK at 1.0x symbol rate offset with 3dB back-off from rated output power)		-30dBc
Requirement for external reference		via IF cable
frequency		10 MHz (sine-wave)
input power		-5 to +5 dBm @ input port
Phase noise		-55 dBc/Hz max. @ 10 Hz -65 dBc/Hz max. @ 100 Hz -75 dBc/Hz max. @ 1 KHz -85 dBc/Hz max. @ 10 KHz -95 dBc/Hz max. @ 100 KHz
Noise power density	Transmit Receive	-66dBm/Hz (max) -157dBm/Hz (max)
M&C		RS-232 and RS-485, Ethernet (HTTP and SNMP)
FSK		Multiplexed on TX IFL, compatible with Comtech and Paradise
Status LED	RED GREEN GREEN GREEN BLINKING YELLOW YELLOW BLINKING GREEN GREEN BLINKING	SSPA MUTED SSPA OK All OK L.O. 26.55 GHz All OK L.O. 27.4GHz All OK L.O. 28.05 GHz All OK L.O. 29.05 GHz EXTERNAL DETECTED ENABLED
L.O.		
Internal 10 MHz Auto-Detect		
Input V.S.W.R.		2 : 1 max
Output V.S.W.R.		2 : 1 max.
Mute		Shut off the BUC if L.O. unlocked
Temperature range (ambient)		
operating		-40 deg C to +55 deg C
storage		-55 deg C to +85 deg C
Dimensions & housing		179 (L) x 140 (W) x 58 (H) mm 7.0" (L) x 5.5" (W) x 2.28" (H)
Weight		1.99 kg (4.4 lbs) max.