



4W Universal Ka-Band Transceiver

KEY FEATURES

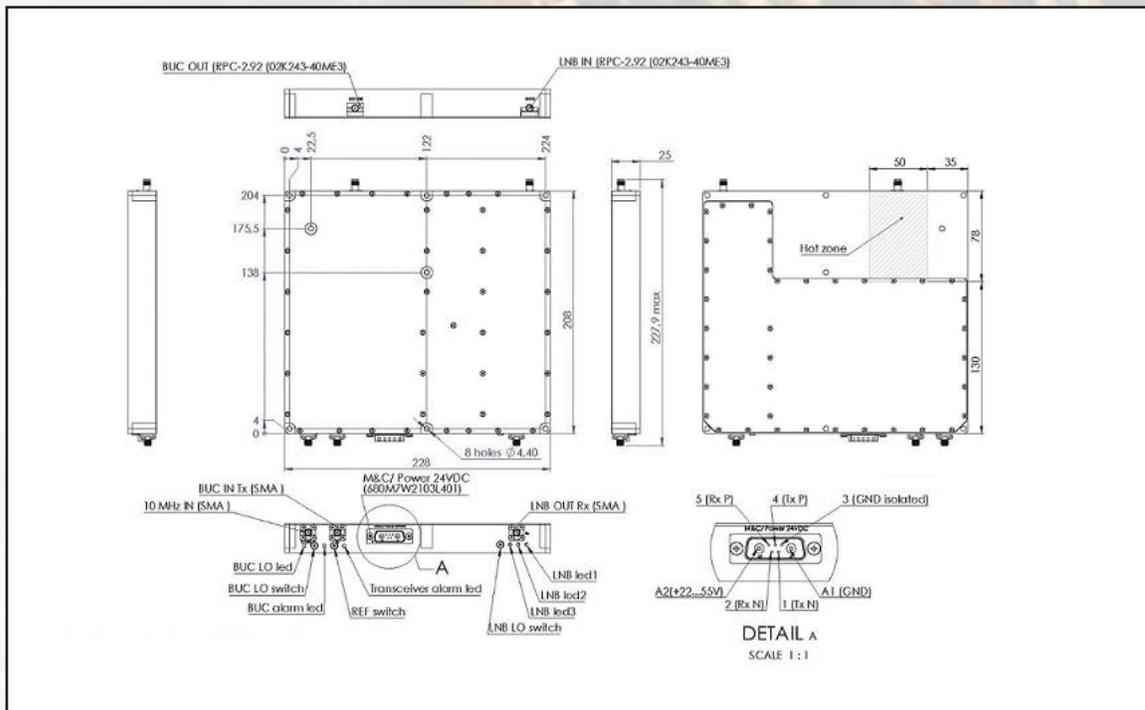
- ◆ Output frequency 27.5-31.0 GHz
- ◆ Input frequencies 17.20-22.20 GHz
- ◆ Tx L.O. (electronically and manually switchable)
26.55, 26.60, 27.20, 27.4, 28.05 and 29.05 GHz
- ◆ Rx L.O. (electronically and manually switchable)
16.25, 16.8, 17.25, 17.4, 18.25, 19.25 and 20.25 GHz
- ◆ Low power consumption (48W max.)
- ◆ M&C - Ethernet control (HTTP and SNMP) and optional RS-232/485 and FSK available for Tx and Rx
- ◆ L.O. lock and amplifier LEDs
- ◆ Internal 10MHz high stability reference autosensing and controllable (optional)

AT4UKAS



This unique first ever 4W Universal Ka-Band Transceiver covers 27.5-31.0 GHz frequency bands in (Tx) transmit, and 17.20-22.20 GHz frequency band in (Rx) receive. The M&C capability enables troubleshooting, monitoring and controlling the Rx and Tx functionality. Autosensing internal 10MHz reference allows to use the unit with any modem.

Mechanical Drawing





4W Universal Ka-Band Transceiver

TECHNICAL SPECIFICATIONS	
Tx	
RF frequency	27.5 - 31.0 GHz
Local oscillator	26.55, 26.60, 27.2, 27.4, 28.05 and 29.05 GHz
IF frequency	950 to 1,950 MHz
Output power, P-Linear @ IMD3=-25 dBc	4W (+36 dBm min.), P-Linear 2.2W (+33.4 dBm min.)
Impedance SMA Connector	SMA, 2.92mm (50Ohms)
Input V.S.W.R.	1.5:1 max.
Gain	63 dB typ.
Spurious	-55 dBc
TX Gain variation	± 0.5 dB over 40 MHz
TX Gain stability over temperature range	± 1.8 dB over full band
Phase noise (Exceeds Intelsat's standard IESS308/309)	-78 dBc/Hz max. @ 1 KHz
	-83 dBc/Hz max. @ 10 KHz
	-94 dBc/Hz max. @ 100KHz
	-108 dBc/Hz max. @ 1 MHz
Rx	
RF frequency	17.20 - 22.20 GHz
IF frequency	950 to 1,950 MHz
Local oscillator	16.25, 16.8, 17.25, 17.4, 18.25, 19.25 and 20.25 GHz
M&C Interface	Ethernet (HTTP and SNMP), optional RS-232/485 & FSK
Noise figure	1.5 dB max.
Gain	55 dB typ.
Gain flatness over any 1 GHz	4.5 dBpp
Impedance SMA Connector	SMA, 2.92mm (50Ohms)
Image rejection	50 dB
Power output P1dB	10 dBm
Phase noise (Exceeds Intelsat's standard IESS308/309)	-78 dBc/Hz max. @ 1 KHz
	-83 dBc/Hz max. @ 10 KHz
	-94 dBc/Hz max. @ 100KHz
	-108 dBc/Hz max. @ 1 MHz
L.O. leakage	-40 dBm
Common	
Operating voltage	22-55 VDC
Power consumption	48W max.
Temperature range (ambient) operating storage	-40 deg C to +60 deg C -55 deg C to +85 deg C
Dimensions & housing	228 (L) x 227.9 (W) x 25 (H) mm 8.98" (L) x 8.97" (W) x 0.98" (H)
Weight	2.3 kg (5.07 lbs) max.