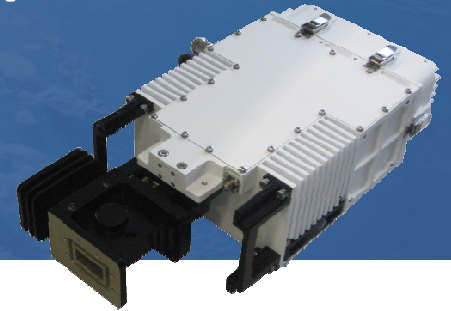


X BAND MINI BUC 10/40W Low Power Series

ACMB-X



The ACMB-X series consists of integrated RF Block Up Converters (BUCs), designed for X-band satellite communication systems. All products in this series have been tested and calibrated between -20°C and +60°C, so they assure very good gain stability with temperature. ACMB-X also includes internal output power detection, temperature alarm and power amplifier shutdown to protect the amplifier from permanent damages in high temperature conditions. Moreover, ACMB-X could be configured with AC or DC power supply, easy to change in field without tools. This MBUC allows communication via serial port (RS232/RS485) but TCP/IP and SNMP could be selected as options.

TRANSMITTER

Input Frequency	950 to 1450 MHz
Input VSWR (50Ω)	< 1.5:1
Output Frequency	7.9 -8.4 GHz
Output VSWR (50Ω)	< 1.3:1
Spectrum Inversion	None

Characteristics @ 25°C	P1dB (min)	Gain	Power Consumption
ACMB-X10W	40.0dBm	60dB min	100W @P1dB
ACMB-X20W	43.0dBm	60dB min	180W @P1dB
ACMB-X40W	46.0dBm	67dB min	300W @P1dB

Gain flatness over 500MHz	±1.5 dB
Gain flatness over 40MHz	±0.5 dB
Gain Stability over 24 hours	≤0.5 dB @ constant temp.
Gain Stability over temperature	±1.5 dB
Attenuation adjustment range	30 dB (0.5dB steps)
Mute	>50 dB
Noise Figure	≤15dB @ maximum gain
Output protection	against infinite VSWR
Sample Output	-40dBc ± 2dB (10/20W version) -45dBc ± 2dB (45W version)
Output Noise RX	≤-100 dBm/Hz (10/20W version) ≤-94 dBm/Hz (40W version)

Spurious	< -60dBc @Pout=P1dB
Harmonics.....	< -50dBc
Intermodulation products	< -25dBc (2 tones $\Delta f=5\text{MHz}$ for Pout=P1dB-3dB))
Local oscillator	6.950GHz
Output Phase noise (IESS-308/309 – 4dB)	
100Hz	-68dBc/Hz
1Kz	-78dBc/Hz
10KHz	-88dBc/Hz
100KHz	-98dBc/Hz
External reference (Mux on L-Band input)	10MHz/ 0dBm \pm 5dB

ENVIRONMENT

Storage Temperature	-40 to +85°C
Operating Temperature	-20 to +60°C
Relative humidity	up to 95%
Operating altitude	up to 3500m

PHYSICAL

DC Input Voltage	48VDC
Interfaces	
TX input (L Band+ Ext. Ref)	Type N(F) 50 Ω
TX output (X-band)	WR112 CPRG
M&C (RS232/485).....	62IN12E12-14S-4-622
M&C	62IN12E12-8S-4-622
Power supply.....	62IN12E12-3P-4-622

OPTIONS

LP1	AC Power Supply 85-265VAC
LP2	DC Power Supply 24VDC
LP3	Internal Reference (Automatic Ext. On presence)
LP4	Op. Temp. -40 to +60°C
LP5	Ethernet Interface (TCP/IP)
LP6	SNMP Agent
LP7	Output Interface N(f) (on 10/20W version)

	DC Supply	AC Supply	DC Supply	AC Supply
ACMB-X10/20W	381x160x85 mm 11.0x6.3x3.3 in	302x160x85 mm 11.9x6.3x3.3 in	4.3Kg/9.5lbs	4.6Kg/10.1lbs
ACMB-X40W	345x160x85 mm 13.6x6.3x3.3 in	391x160x85 mm 15.4x6.3x3.3 in	4.7Kg/10.4lbs	5.0Kg/11.0lbs

Based on ACORDE DATASHEET acmb-x_lp Ed.03 from 05/10/16

