

X BAND MINI BUC 80/100W Medium Power Series

ACMB-X

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 Series also includes a temperature alarm and power supply 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, SNMP and FSK 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	Size	Weight
ACMB-X80W-V2	49.0dBm	74dB min	600W @P1dB	320x207x145mm 12.6x8.1x5.7in	10 Kg 22.0 lbs
ACMB-X100W-V2	50.0dBm	74dB min	650W @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	20 dB (0.5dB steps)
Mute	>50 dB
Noise Figure	≤15dB @ maximum gain
Output Noise	≤-80 dBm/Hz (7.25-7.75GHz)
Spurious	<-60dBc @Pout=P1dB
Intermodulation products	<-25dBc (2 tones Δf=5MHz for Pout=P1dB-3dB)

Output Phase noise (IESS-308/309 – 8dB)

100Hz	-70dBc/Hz
1Kz	-78dBc/Hz
10KHz	-88dBc/Hz
100KHz	-110dBc/Hz
External reference (Mux on L-Band input)	10MHz/ 0dBm ± 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

AC Input Voltage	85-264VAC (47-63Hz)
Interfaces	
TX input (L Band+ Ext. Ref)	Type N(F) 50Ω
TX output (X-band)	WR112 CPRG
M&C (RS232/485).....	62IN12E12-14S-4-622
M&C (IP/SNMP)	62IN12E12-8S-4-622
Power supply.....	62IN12E12-3P-4-622

OPTIONS

MP1	48VDC Power Supply
MP2	Internal Reference (Automatic Ext. On presence)
MP3	Op. Temp. -40 to +60°C
MP4	Ethernet Interface (TCP/IP)
MP5	SNMP Agent
MP6	FSK communication multiplexed on L-band
MP7	Custom design

Based on ACORDE DATASHEET acmb-x_mp Ed.09 from 05/10/16

