

FEATURES

- ▶ 12W Ka-band Output in a 9-lb Package
- ▶ Industry Leading Efficiency with 140W Power Draw
- ▶ Identical Mounting Package to Ku-band Matchbox for Easy Conversion



Ka-Band Matchbox Block Upconverter

The Wavestream Advantage:

- Higher output power with less energy usage.
- Compact product footprint to meet critical space and weight limitations.
- Proven reliability and efficiency.
- Reduced lifecycle maintenance costs.

The 12W Ka-band Matchbox Block Upconverter (BUC) leads the industry in linear power for a 9-lb feedmount ready package, to ensure maximum available power at the feed flange. In a compact 10.4" L x 5.4" W x 5.1" H package with the same mounting points as Wavestream's Ku-band Matchbox BUCs (16 W/25 W/40 W), Wavestream has created a truly modular approach for dual-band capable mobile, flyaway, and VSAT terminals.

The Ka-band Matchbox is available in two prime DC power levels and offers 30 dB of step attenuation, serial RS-485, RS-232 or optional Ethernet control interface, and choice of IF.



RF Specifications

Transmit Frequency	30.0-31.0 GHz
IF Frequency	1000-2000 MHz
Frequency Reference (10 MHz on IF)	0 dBm+/-5 dB
Saturated Output Power	41 dBm nominal
Linear Output Power *Power at which all other RF requirements are met	36 dBm
Small Signal Gain	50 dB nominal
Gain Variation (1 GHz)	-3 dB p-p
Intermodulation Maximum third-order intermodulation product relative to combined power of two carriers	-25 dBc
Spectral Regrowth (at Linear Power) For QPSK and OQPSK modulation at 1.0x rate offset from carrier	-30 dBc
Output Spurious	-60 dBc

DC Power

DC Power (typical) At linear output power	140W
Prime Power	28 V, 48 V

Interfaces

Input IF Connector	Type N Female
IF Input Impedance	50 ohms
Output RF	WR-28
Output VSWR	1.5:1
DC & Monitor & Control Connector	12-Pin Military Circular
IF Input VSWR	2:1 max
Monitor and Control Protocol	Serial RS-485 (SA-bus), Ethernet Option, Step Attenuator

Ka-Band Matchbox Block Upconverter

12W

Physical

Size (includes connectors) 10.4"L x 5.4"W x 5.1"H

Weight 9.4lbs

Operating Temperature (Ambient Air) -40° C to +60° C

Options

AC/DC Converter, 90-264 VAC, 50-60 Hz

RS-232

Base Model Number

MBB-KAM012



Digisat International Inc.
4195 W. New Haven Ave., Suite 15
Melbourne, FL 32904
USA
+1-321-676-5250
Email: sales@digisat.org
<http://www.digisat.org>