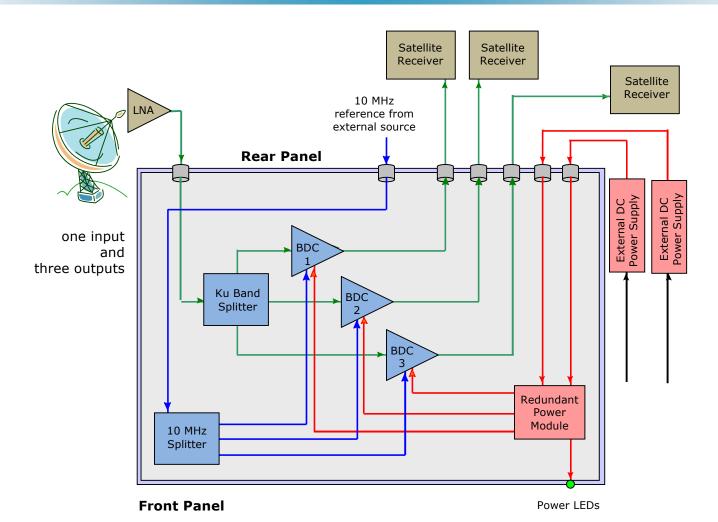


RMB3-KuXERS3

Tri-Band Ku Ext Ref LNB Rack-mountable System with 10 MHz Reference from external source



Tri-Band, Ku Rack system: 1 input, 3 outputs, external 10 MHz Source



Orbital Features:

Specifications

- 3 BDCs with 1 input and 3 outputs (one per BDC). Ku-Band, external reference
- · Available in a wide variety of BDC frequency ranges, gains, input and output connectors
- 1 unit high chassis
- Redundant power supply that is outside of chassis for easy retrofit
- External (separate), 10 MHz reference source

Functional

- Remote monitor and control (optional)
- Global power supply for use anywhere in the world

RMB3-KuXERS3: Ku Tri-band rack system Specifications















ELECTRICAL

<u>INPUT</u>

Frequency: Various - see Orbital BDC brochures
Bandwidth: Various - see Orbital BDC brochures

Noise Figure: 6 dB typical

Ripple: ±0.5 dB max / 27 MHz segment

Input VSWR: 1.5 : 1 typical

OUTPUT

Bandpass: Various - see Orbital BDC brochures

Output VSWR: 1.5 : 1 typical Gain: 0 dB to 30 dB

LO Stability: dependent on 10 MHz reference LO Phase Noise: -85 dBc/Hz @ 1 kHz max

POWER

Voltage: 90 - 264 VAC Frequency: 47 - 63 Hz

Filtering: Transient, over and reverse voltage protected

MECHANICAL

Weight: Approximately

Overall Dimensions: 19" x 1.75" x 20" maximum

Connectors (rear panel):

RF: SMA, N or F female L-band: SMA, N or F female External Reference: BNC or SMA female

ENVIRONMENTAL

Operating Temperature: -40 to +55 degrees Celsius
Relative Humidity: Up to 100% condensation and frost

General Description:

The 1RU, 19 inch rack mount Ku-band block downconverter assembly translates RF inputs in the $10.95{\sim}12.75$ GHz Ku band range to IF outputs in L-band, in three bands.

There is a variety of gains, input, output connectors and frequency ranges that can be selected when ordering.

The 10 MHz reference is input from an external source

One input is split to each BDC is on at all times and has it's own output connector. No switching is necessary.

Orbital Design:

The Tri-band unit integrates three Block Down-Converters (BDCs), into a single rack-mount chassis to cover the entire Ku band. The European ($10.95{\sim}11.70$ GHz), the North American ($11.70{\sim}12.25$ GHz), and the DBS ($12.20{\sim}12.75$), provide full spectrum coverage.

There is no microprocessor, only a simply LED indicator for the power supplies.

External Power supplies:

Power supplies, historically, have the lowest MTBF of the components in a system. The Orbital External power supply configuration was designed to provide inexpensive and rapid power supply replacement. A secondary benefit is the lower operating temperature of the external power supply thus extending its life.

The external power supply needs to be 24VDC, with a minimum current rating of 1.2 Amps. If one fails, the system switches to the other power supply with the LEDs indicating the failure. This enables the customer time to replace power supplies without any down time or without taking the entire rackmounted chassis in for repair.

Internal Power supplies also available.

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