Modular Block Converter (MBC) Systems Comparison

Modular Solutions for Today's Earth Station

- Ethernet interface: SNMPv1/2/3, HTTP (Web page), firmware updates via secure protocol
- Internal/external auto-switch 5 or 10 MHz reference
- Excellent frequency stability over temperature
- 3 year warranty – All inclusive
- CE, RoHS, WEE and Reach compliant

Active Components

Converters

Power Supplies

Touchscreen

Logic Board

Fans

Ku-Band - Modular Block Converter (MBC) Systems

Type	Downconverters	Downconverters	Upconverters
Input Band	10.70 - 11.75 GHz	11.70 - 12.75 GHz	950 - 1700 MHz
LO Frequency	9.75 GHz	10.75 GHz	12.80 GHz
Output Frequency	950 - 2000 MHz	950 - 2000 MHz	13.75 - 14.50 GHz
Systems Available	1:1 and 1:2 Systems	1:1 and 1:2 Systems	1:1 and 1:2 Systems
Operating Temperature Range	0 °C to +50 °C	0 °C to +50 °C	0 °C to +50 °C

C-Band - Modular Block Converter (MBC) Systems

Type	Downconverters	Upconverters
Input Band	3.40 - 4.20 GHz	950 - 1825 MHz
LO Frequency	5.15 GHz	4.90 GHz
Output Frequency	950 - 1750 MHz	5.85 - 6.725 MHz
Systems Available	1:1 and 1:2 Systems	1:1 and 1:2 Systems
Operating Temperature Range	0 °C to +50 °C	0 °C to +50 °C

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Block Up (BUCs) & Block Down Converters (BDCs) Systems Comparison

- Quality, stability and performance required for demanding applications
- External reference may be diplexed with IF input or supplied via separate coaxial connector for BUCs
- Stable internal reference (20 MHz) or externally referenced (10 MHz) options for BDCs
- INTELSAT/EUTELSAT- compliant phase noise
- Phase-locked oscillator
- CE, RoHS, WEE and Reach compliant
- 3 year warranty – All inclusive

Block Up Converter (BUCs)

Band	C-Band	X-Band	Ku-Band	Ku-Band	Ka-Band
IF/RF/LO Frequencies	950 - 1525 MHz / 5.85 - 6.425 GHz / 4.90 GHz	950 - 1450 MHz / 7.90 - 8.40 GHz / 6.95 GHz	950 - 1450 MHz / 14.00 - 14.50 GHz / 13.05 GHz	950 - 1700 MHz / 13.75 - 14.50 GHz / 12.80 GHz	950 - 2050 MHz / 17.30 - 18.40 GHz / 16.35 GHz
Reference Options	Diplexed with IF Input or External	Diplexed with IF Input or External	Diplexed with IF Input or External	Diplexed with IF Input or External	10 MHz Reference
Temperature Range	-40 °C to +70 °C	-40 °C to +70 °C	-40 °C to +70 °C	-40 °C to +70 °C	-30 °C to +70 °C

Block Down Converter (BDCs)

Band	C-Band	X-Band	Ku-Band	Ku-Band
RF/IF/LO Frequencies	3.40 - 4.20 GHz / 950 - 1750 MHz / 5.150 GHz	7.25 - 7.75 GHz / 950 - 1450 MHz / 6.30 GHz	10.70 - 11.75 GHz / 950 - 2000 MHz / 9.75 GHz	10.95 - 11.70 GHz / 950 - 1700 MHz / 10.00 GHz
Reference Options	Internal or External	Internal or External	Internal or External	Internal or External
Temperature Range	-40 °C to +70 °C	-40 °C to +70 °C	-40 °C to +70 °C	-40 °C to +70 °C
Gain Options	13 dB Gain or 23 dB Gain	13 dB Gain or 23 dB Gain	13 dB Gain or 23 dB Gain	13 dB Gain or 23 dB Gain

Block Down Converter (BDCs)

Band	Ku-Band	Ku-Band	Ka-Band
RF/IF/LO Frequencies	11.70 - 12.75 GHz / 950 - 2000 MHz / 10.75 GHz	12.20 - 13.00 GHz / 950 -1750 MHz / 11.25 GHz	20.20 - 21.30 GHz / 950 - 2050 MHz / 19.25 GHz
Reference Options	Internal or External	Internal or External	Internal
Temperature Range	-40 °C to +70 °C	-40 °C to +70 °C	-40 °C to +70 °C
Gain Options	13 dB Gain or 23 dB Gain	13 dB Gain or 23 dB Gain	23 dB Gain

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GENERAL DYNAMICS
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