

DSBCDUP01 and DSBCDUP02 (450-470 MHz or 380-430 MHz)

One and Two Channel Integrated Duplexer System

dbSpectra
Always a Better Value



ELECTRICAL SPECIFICATIONS

Frequency Band	450-470 MHz	380-430 MHz
Maximum TX-TX Spacing	3 MHz	5 MHz
Bandwidth of Passband (TX and RX)	3 MHz	5 MHz
Selectivity 2 MHz from Band edge	> 80 dB	—
Selectivity 3 MHz from Band edge	> 90 dB	—
Selectivity 5 MHz from Band edge	> 100 dB	> 90 dB
Min. Selectivity after 5 MHz from band edge	90 dB	—
2 Channel Insertion Loss TX (includes Isolator & Hybrid)	< 6 dB	< 6 dB
1 Channel Insertion Loss TX (includes Isolator & Hybrid)	< 3.5 dB	< 3.5 dB
System Noise Figure: Antenna to RX Output	< 4 dB	< 4 dB
Antenna Return Loss of Duplexer	> 14 dB	> 14 dB
Output Return Loss of Duplexer (TX or RX side)	> 14 dB	> 14 dB
Net RX System Gain	10 dB min	10 dB min
Amplifier Type	Quadrature Coupled	Quadrature Coupled
Amplifier Noise Figure	< 2 dB	< 2 dB
Amplifier IP3	> +40 dBm	> +40 dBm
Isolation: RX to RX	> 20 dB	> 20 dB
Isolation: TX to TX	> 50 dB	> 50 dB
Maximum Transmit Power Input (both ports)	100 W Continuous	100 W Continuous
Power Requirement (90-249 VAC Model)	50/60 Hz, < 30 watts	50/60 Hz, < 30 watts
Power Requirement (18-75 VDC Model)	< 25 watts	< 25 watts

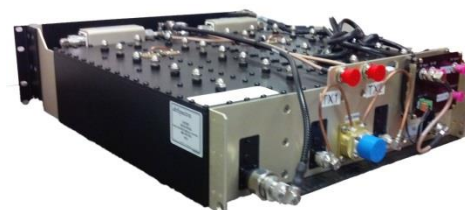
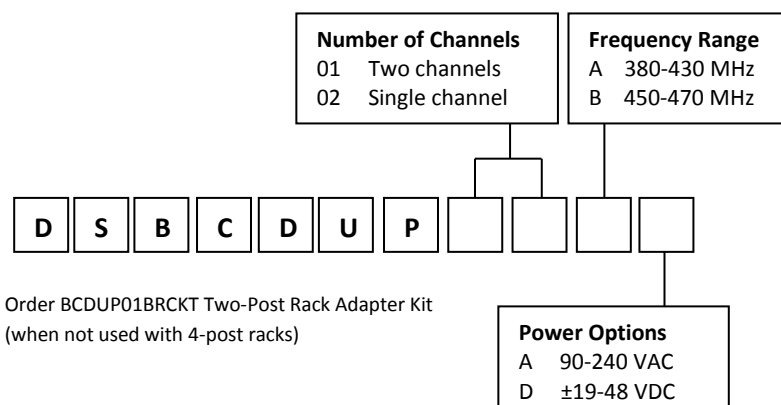
MECHANICAL SPECIFICATIONS

Test Port Input	BNC - Female
TX Connector	N-Type Female
RX Connector	BNC Female (2)
Antenna Input Connector	7-16 DIN Female
PIM Requirements	Tolerant
Mounting Configuration	EIA 19" rack mounting

DIMENSIONS

Width	19 in EIA
Height	5.25 in (3 RU)
Depth	18 in
Weight	51 lbs.

ORDERING INFORMATION



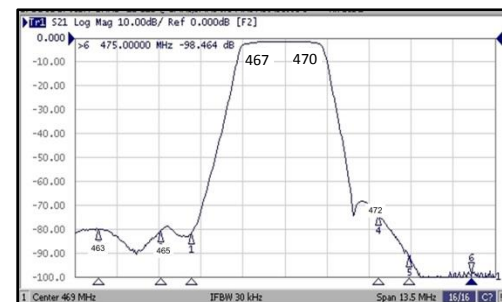
FEATURES AND BENEFITS

- Allows use of one antenna and cable to reduce site costs
- One or two channel models available
- Milled filter construction provides superior selectivity
- Low noise amplifier for improved receiver performance.
- Dual stage isolators for IM prevention
- Two channel models include integrated hybrid combiner
- Compact – only 3 RU

CAVITY SELECTIVITY CURVES



Transmitter Filter (450-470 MHz Model)



Receiver Filter (450-470 MHz Model)