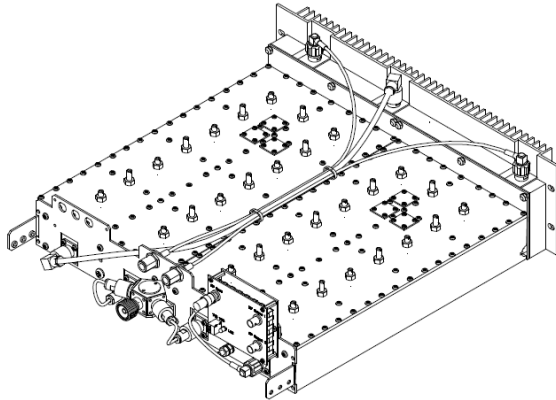


DSDUP01 and DSDUP02 800 MHz Band One and Two Channel Integrated Duplexer System Built-in 2-Channel Receive Multicoupler with Low Noise Amplifier

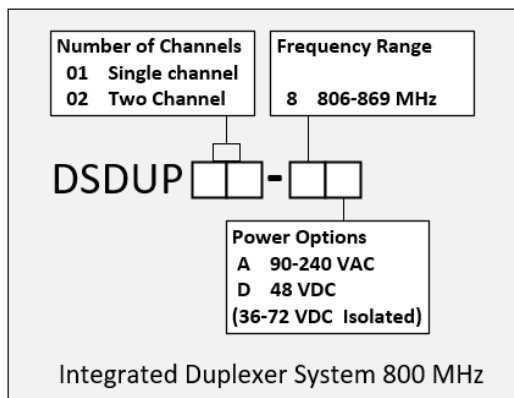


Rear view of Integrated Duplexer System shows rear-panel connections, heatsink front panel

Features and Benefits

- ❖ Enables use of one antenna and feedline for simultaneous transmit and receive. Integrated system includes built-in RX Multicoupler with Low Noise Amplifier (LNA) and splitter for two receive channels.
- ❖ Single-channel and two-channel models are available. Two-channel model includes 2-Way hybrid combiner.
- ❖ Transmitter connection(s) include RF isolators for transmitter intermodulation (IM) prevention.
- ❖ Milled-filter construction provides excellent selectivity in compact 3RU assembly.

Ordering Information



Duplexer filters must be factory tuned; provide frequency information at time of order. Duplexer includes mounting brackets for four-post mounting. For two-post mounting, order DSDUP01BRCKT Kit for 2-Post Rack.

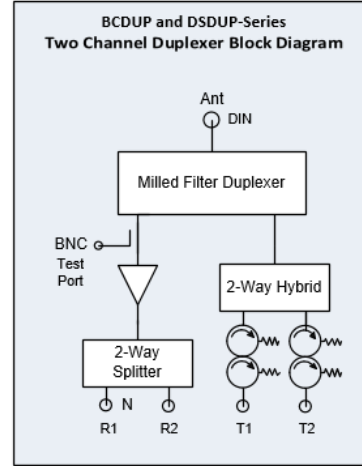
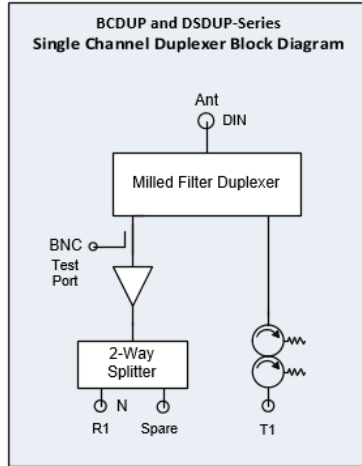
Specifications

Electrical Specifications	
Frequency Band	806-824 MHz (RX) 851-869 MHz (TX)
Minimum TX-TX Spacing	No Minimum
Bandwidth of Passbands (TX and RX)	18 MHz
TX Filter Isolation at 824 MHz RX	>100 dB
RX Filter Isolation at 851 MHz TX & 776 TX	>110 dB
TX Insertion Loss One-Channel	< 3 dB
TX Insertion Loss Two-Channel	< 6.0 dB
Isolation RX-RX (Two Channel)	>20 dB
Isolation TX-TX (Two Channel)	>50 dB
Return Loss –All Ports	> 14 dB
Receive System Noise Figure	< 3 dB
Net RX System Gain	>12 dB
Amplifier Type	Quadrature Coupled
Amplifier Noise Figure	< 1.5 dB
Amplifier IP3	> +40 dBm
Maximum Transmitter Power Input (continuous, each port)	100 W
Power Requirement – AC Model	90-240 VAC 50/60 Hz (25 Watts)
Power Requirement – DC Model	48 VDC < 0.5A (24 Watts) (±36-72 VDC, Isolated)
Mechanical Specifications	
RX Test Port	BNC - Female
TX Connector (s)	N-Type Female
RX Connector(s)	BNC Female
Antenna Connector	7/16 DIN Female
Grounding Connector	¼-20 Stud 1" length
Mounting Configuration	EIA 19" rack mounting 3 RU
Dimensions	19"W x 19" D x 5.25"
Weight / Shipping Weight	38 Lbs. / 43 Lbs.
PIM-hardened Design	

DSDUP01 and DSDUP02 800 MHz Band One and Two Channel Integrated Duplexer System Built-in 2-Channel Receive Multicoupler with Low Noise Amplifier

Block Diagrams

AC-input or DC -input
Power Supply for LNA not shown



Typical 800 MHz Band Performance With TX-RX Offset 45 MHz (Minimum Guardband 27 MHz)

