

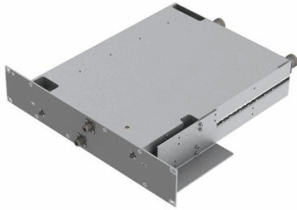


Filters & Combiners

DATA SHEET

850 Dual Duplexer

DDP-850-HP-1



- Two 850 Dual Duplexers in a 2U Tray
- Combines Tx and Rx BTS outputs onto a common feeder
- Two Dual Duplexers in one housing
- DC inputs for passing bias
- Integrated Bandpass

Overview

CCI's Dual Duplexer combines Tx and Rx paths onto a common feeder. Provides Duplexing of UMTS and GSM onto a single feeder without the loss normally associated with passive combiners. Separate isolated receive paths permit connection of multiple components, such as CCI's RX-AIT (Multicoupler). The Tx filter is a high Q design optimized for low insertion loss with high power handling. The Rx1 filter provides significant rejection in the Tx band, while maintaining low loss. The Rx2 filter provides moderate rejection in the Tx band.



Filters & Combiners

SPECIFICATIONS

850 Dual Duplexer

DDP-850-HP-1

Electrical

RF Parameters	Ports	Frequency(MHz)	Specification	
Return Loss	ANT	824 - 849	20 dB min.	
		869 - 894	20 dB min.	
	BTS	824 - 849	20 dB min.	
		869 - 894	20 dB min.	
		RX IN	824 - 849	20 dB min.
		RX OUT	824 - 849	20 dB min.
Insertion Loss	ANT to BTS	869 - 894	0.25 dB typ.	
	BTS to RX IN	824 - 849	0.5 dB typ.	
	ANT to RX OUT	824 - 849	0.6 dB typ.	
Rejection	ANT to BTS	824 - 849	70 dB min.	
		869 - 894	65 dB min.	
	BTS to RX IN	851 - 869	40 dB min.	
		869 - 894	91 dB min.	

General Characteristics	
Impedance	50 ohms
Group Delay	100 nS max. / 3.84 MHz band
Amplitude Ripple	± 0.05 dB max. / 3.84 MHz band
Phase Ripple	± 3 deg. max. / 3.84 MHz band
Continuous Average Power	500 W max. (BTS and ANT ports)
	1 W max. (RX IN and RX OUT ports)
Peak Envelope Power	2 kW max. (all ports)
Intermodulation Performance	<-117 dBm (-160 dBc) typical (2 x +43 dBm tones)
DC Pass Current	3A

Environmental

Operating Temperature	0° C to +55° C
Enclosure	Indoor
MTBF	>500,000 hours

Mechanical

Connectors	4 x 7-16 DIN female [BTS 0, BTS 1, ANT 0, ANT 1] (rear), 2 x SMA DIN female [RX IN 0, RX IN 1] (front), 2 x N female [RX OUT 0, RX OUT 1] (front), 2 x JST 2-Pin Plug [DC 0, DC 1] (front)
Dimensions (body only)(HxWxD)	2U or 3.5 x 12.95 x 17.11 in. (88.9 x 329 x 434.5 mm)
Dimensions (incl. connectors and front panel)(HxWxD)	2U or 3.5 x 19.00 x 18.78 in. (88.9 x 482.6 x 477.03 mm)
Weight with brackets	30 lbs max. (13.61 kg)

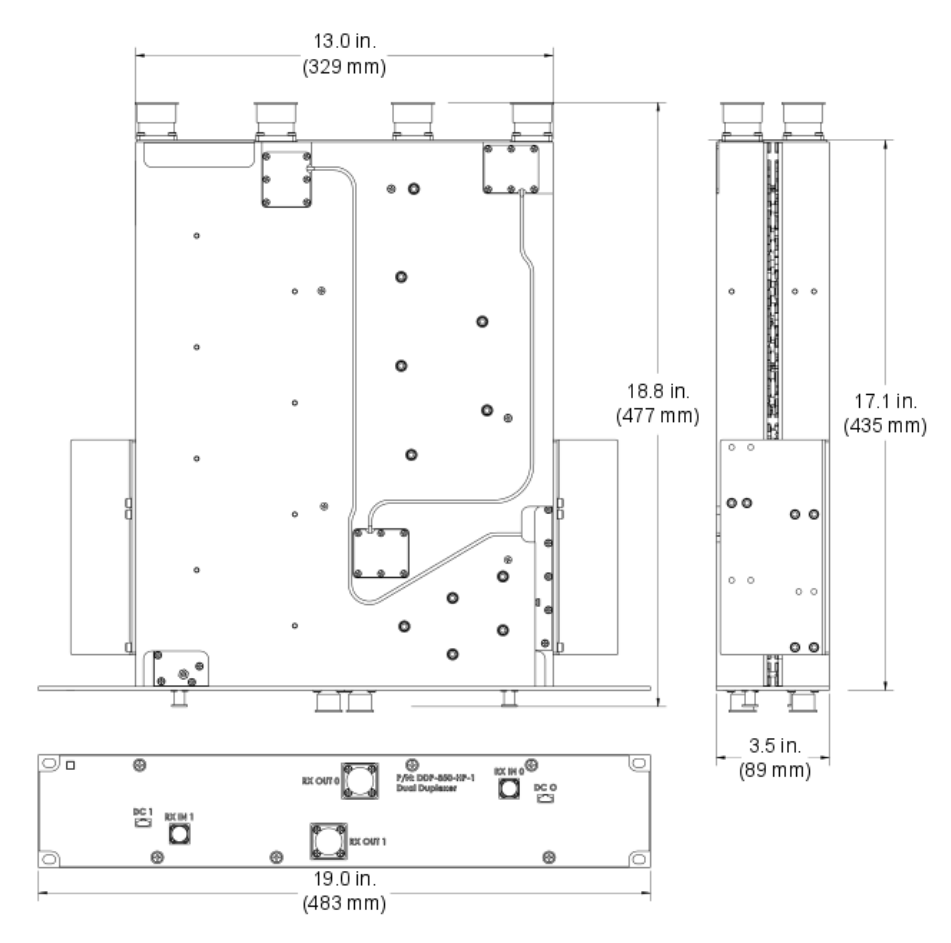


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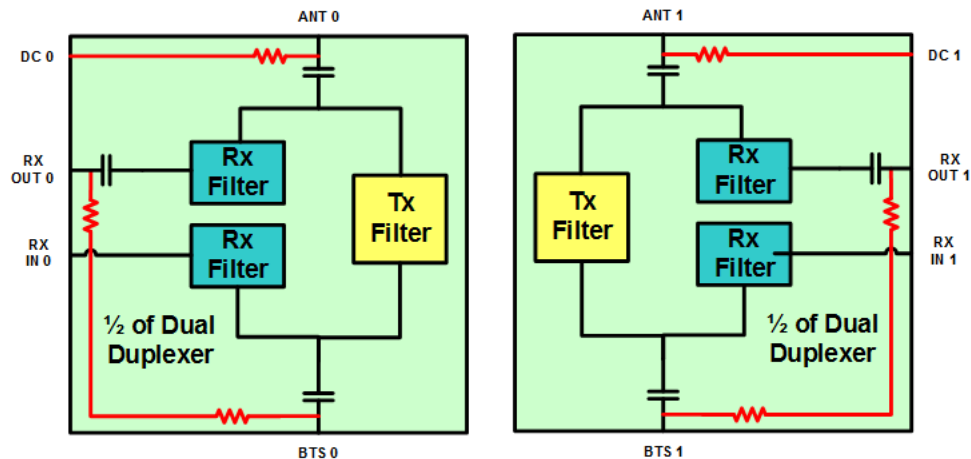
850 Dual Duplexer

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Dual Duplexer Outline Drawing

Block Diagram



Dual Duplexer Block Diagram



Filters & Combiners

ORDERING

850 Dual Duplexer

DDP-850-HP-1

Parts & Accessories

DDP-850-HP-1 850 MHz Dual Duplexer



Filters & Combiners

STANDARDS &
CERTIFICATIONS

850 Dual Duplexer

DDP-850-HP-1

Certifications

Federal Communication Commission (FCC) Part 15 Class B, CE, CSA US