

Double Duplexer for UMTS Cositing

Two Duplexers in a Single 1U Tray



Features:

- Unduplexes fully duplexed cabinets for RXAIT
- Ideal for adding additional cabinets of the same type
- Combines Tx and Rx BTS outputs onto a common feeder
- Two Duplexers in one housing
- Integrated bandpass

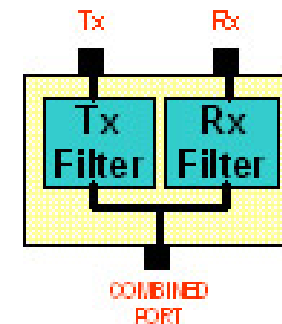
Overview

CCI's Double Duplexer combines Tx and Rx paths onto a common feeder. The Tx filter provides a low insertion loss, high power handling path, with high rejection of the receive band. The Rx filter passes the full receive band and provides significant rejection to a broad spectrum, with a minimum of 90 dB in the Tx Passband. The Tx filter is a high Q design optimized for low insertion loss with high power handling. The duplexer is designed to be expandable. A second unit can be installed adjacent to the first unit, saving rack space for a total of four (4) duplexers in a 1U high space. Above photo shows optional second unit installed.

Specifications

Common Specifications	
Impedance	50 Ohms
DC Pass Current	3 Amps
Group Delay	100 nSec Max / 3.84 MHz Band
Amplitude Ripple	+/- 0.5 dB Max / 3.84 MHz Band
Phase Ripple	+/- 3 Deg Max / 3.84 MHz band
Temperature Range	0 to 55 deg C.
Weight	15 Pounds Maximum
Environmental Protection	Indoor
MTBF	500,000 Hours
Dimensions	1U high x 19" (up to 2 double duplexers, 4 total)
Tx Path	
Passband	1930-1900 MHz
Insertion Loss	0.25 Typical
Return Loss	20 dB Typical
Power Handling	500 W Average
Rx Band Rejection	60 dBc Minimum
IMD within Rx Band	-160 dBc min (2 x 20 Watt tones)
Rx Path	
Passband	1850-1910 MHz
Insertion Loss	0.6 dB Typical
Power Handling	1 Watt Maximum
Return Loss	20 dB min.
In Band Rejection	90 dB (1930-1990 MHz)
Group Delay Ripple	+/- 100 nSec

Block Diagram



PRODUCTS MANUFACTURED BY: Communication Components Inc., www.cciproducts.com