

CCI UMTS Cositing Series

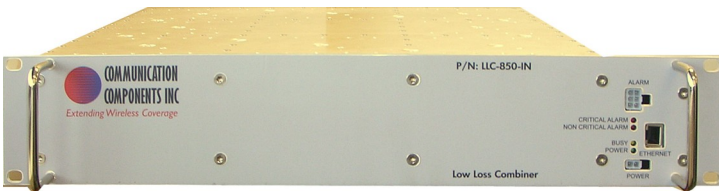
Tel: 201-342-3338
Fax: 201-342-3339
Email: sales@cciproducts.com

▶ CCI Model: LLC-900-IN

900MHz Band Narrow Guard Band Tunable Low Loss Combiner (LLC)

Combines UMTS and GSM onto a Single Feeder

Overview



CCI's Remote Tunable Narrow Guard Band Filter-Combiner (LLC) combines UMTS and GSM onto a single feeder without

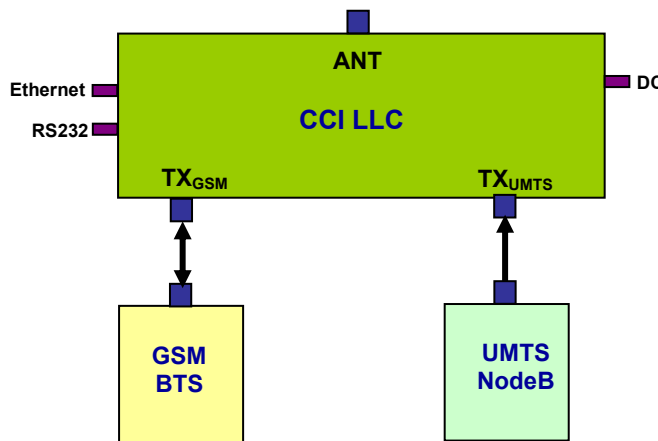
the insertion loss normally associated with passive combiners. This new model reduces the guard band requirement to only 500KHz, restoring lost spectrum associated with previous units. A precisely matched UMTS filter allows the UMTS carrier to be positioned anywhere in the band and provides high rejection of unwanted spurious emissions and noise. Transmit paths are fully isolated to prevent intermodulation products. Multiple units can be cascaded for deployment of additional UMTS channels. When not tuning, no power is required, effectively becoming a pure passive low-loss filter combiner. Control is via TCP/IP or Ethernet requiring only a web browser. All software is resident internally, no extra software or controller is required.

The unit is housed in a single rack-mounted 19" by 2U assembly and can be used with CCI DACs for further feeder line reduction.

Features:

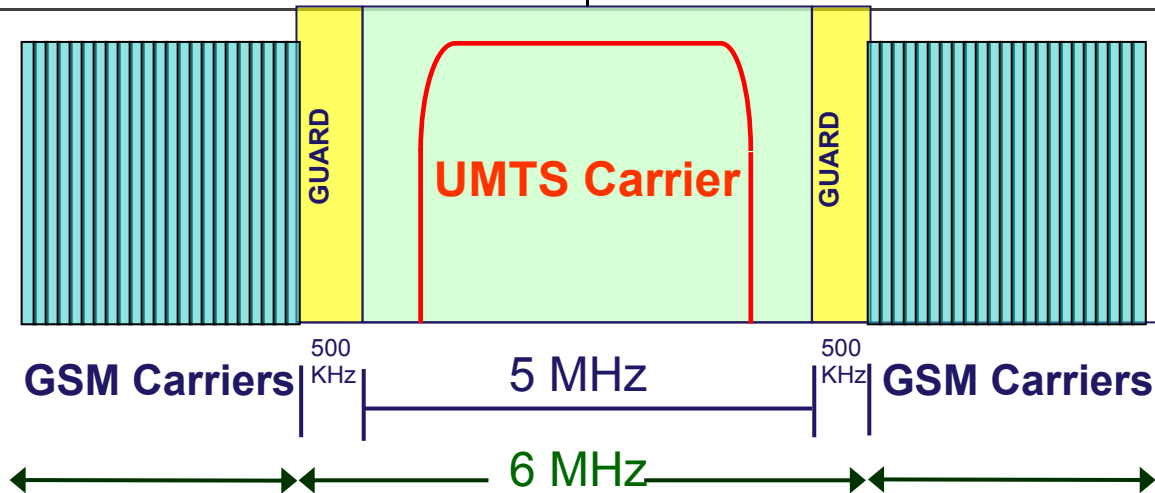
- Low Loss Combining
- Narrow Guard Band
- High Reliability Design
- High Power Handling
- Cascadable for higher levels of combining
- Excellent Filter Response
- Built-In Software
- Control via Ethernet
- DC Block

Block Diagram



Tunable Low Loss Combiner for UMTS Cositing

Electrical Specifications	
Tx Tuning Range	Any 3.84 MHz segment in 935—960 MHz in 100kHz steps
Insertion loss	0.2 dB typical, 1dB Max
Isolation 2G port to 3G port in 3G band	27.5 dB min
Isolation 3G port to 2G port in 2G band	30dB min
EVM measured in 3.84MHz bandwidth	3.5% max
Intermodulation	Better than 117dBm
Return Loss	18 dB Minimum
Guard Band	500 KHz each side of the UMTS carrier
Power Handling	400 Watts Average per port, 2KW peak per port
Mechanical Specifications	
Size	19" Rack Mount, 2U Height
Weight	13 kg
Temperature Range	0 to 55 Deg. C
DC Voltage / Power Requirement	+18 to +76V DC; 2A @ +24VDC (only required when tuning)
Data Connection	RJ45 Ethernet
Lightning Protection	Surge > 30KA, 20 KA Mult, Res. Pulse < 250 uJ
Input/Output Connections	7/16 DIN Female



CCI Confidential

Communication Components, Inc.

Tel: 201-342-3338

Fax: 201-342-3339