

Overview

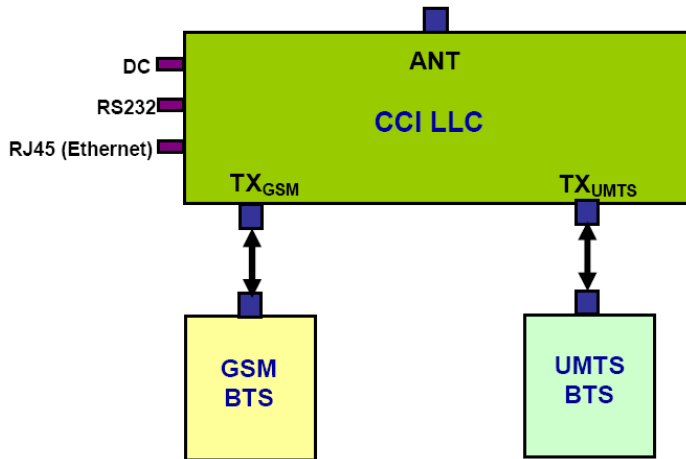


CCI's Remote Tunable Narrow Guard Band Filter-Combiner (LLC) combines UMTS and GSM onto a single feeder without the insertion loss normally associated with passive combiners. This new model

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 3U assembly and can be used with CCI DACs for further feeder line reduction.

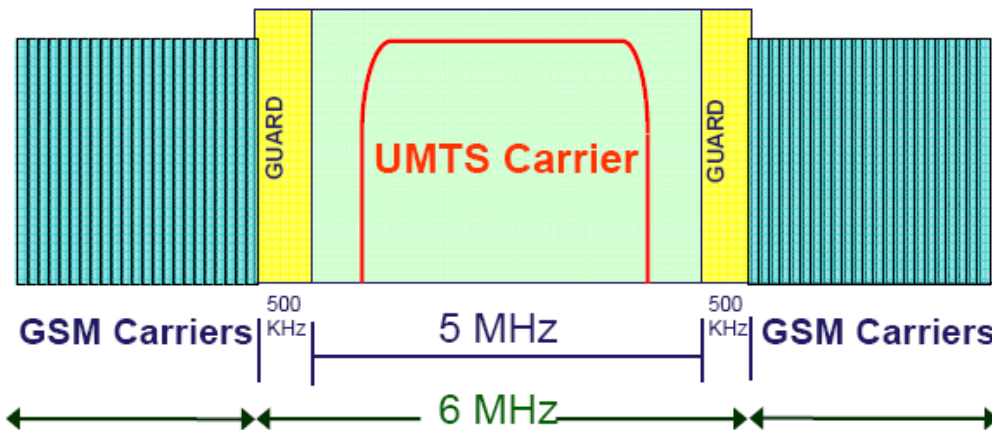
Block Diagram



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
- Remote TCP/IP Control or RS232

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

Tunable Low Loss Combiner for UMTS Cositing

Electrical Specifications	
Tx Tuning Range	Any 4 MHz segment in 1930-1990
Insertion loss	0.6 dB typ
UMTS port Isolation	35 dB min, 40 dB typ
GSM port Isolation	25 dB min, 30 dB typ
Return Loss	18 dB Minimum
Guard Band	500 KHz each side of the UMTS carrier
Power Handling	250 Watts Average, 2KW peak
IM3	150 dBc min., 2 x 20 W carriers
Group Delay variation	50 nSec Typical
Mechanical Specifications	
Size	19" Rack Mount, 3U Height
Weight	25 Pounds
Temperature Range	0 to 55 Deg. C
DC Power Requirement	+24VDC (only required when tuning)
Data Connection	Ethernet (RJ45) and RS232
Lightning Protection	Surge > 30KA, 20 KA Mult, Res. Pulse < 250 uJ
Input/Output Connections	7/16 DIN Female

...closing the gap