

CCI UMTS Cositing Series

Model RMC-850-2-8 (CEQ 27175)
8 port, 2 channel Multicoupler

RX-AIT: 850 Receiver Multicoupler for Cositing UMTS with GSM

Overview



Provides a common receive distribution point for multiple basestations

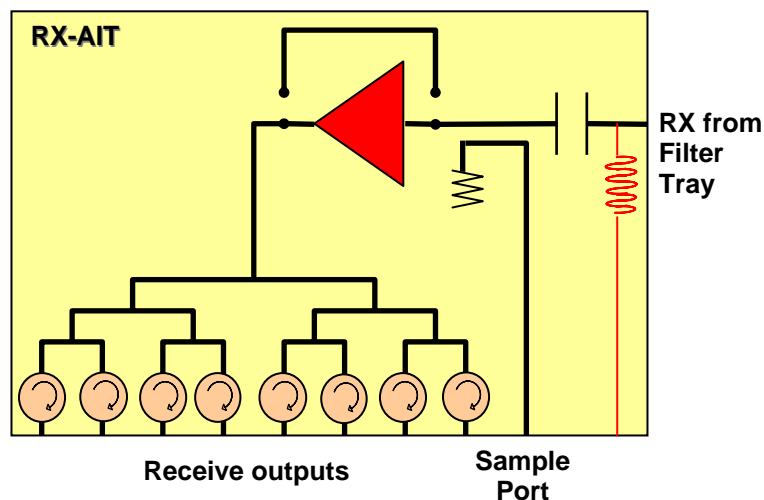
CCI's Receiver Air Interface Tray (RX-AIT) provides a convenient multi-port connection for multiple basestations. The RX-AIT provides two receive paths, each amplified and fully isolated, with eight outputs plus a test port. Each amplifier is fully alarmed with separate (isolated) power supplies. The unit is directly powered by the BTS, and is contained in a single 1U tray. Integrated bias-T's provide a pathway for TMA power, The RX-AIT also eliminates TMA and receive path dependency when operating with multiple technologies such as GSM and UMTS. High linearity LNAs maintains fidelity of UMTS and GSM/EDGE signals. The unit is housed in a single rack 19" mounted assembly designed to perfectly integrate with other elements of CCI's UMTS Cositing series.

Features:

- 8 ports, 2 channel
- Integrated test ports
- Integrated Bias-Ts
- Eliminates single cabinet dependency
- AC coupled RF Ports
- QMA receive connectors provide the fastest and most positive connection
- Single 1U Tray

CCI Confidential—Specifications Subject to Change

Block Diagram



Rx-AIT for UMTS Cositing

Electrical Specifications	
Operating Band	Full Cellular Band (824-849 MHz)
Net Receive Gain	20 dB +/- 1dB
Receive Gain Flatness	+/- 1dB, +/- 0.2 dB within any 3.84 MHz segment
Input Third Order Intercept	+12 dBm minimum
Noise Figure	1.5 dB typical
Phase Linearity	$\leq 2^\circ$ from linear phase over any 3.84 MHz segment
Splitter Output Isolation	30 dB minimum
IM3	150 dBc min., 2 X 20 W carriers
Temperature Range	-30° to +130° F
DC Power Requirement	24-48VDC (2A @ 27 VDC)
Alarm Connection	Dry contact each amplifier
Lightening Protection	Surge > 30KA, 20 KA Mult, Res. Pulse < 250 uJ
Mechanical Specifications	
Input/Output Connections:	
- Receive Output Ports	QMA—Female
- Receive Input Ports	N-Female
- Test Ports	QMA—Female (coupled @ -20 dB)
- DC Input	Molex Mini-Fit