

DATA SHEET

850 Receiver Air Interface Tray

RMC-850-2-8



- Provides a common receive distribution point for multiple basestations
- 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

Overview

CCI's Receiver Air Interface Tray (RX-AIT) provides a convenient multiport 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 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.



SPECIFICATIONS

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Electrical Specification

Operating Band 824 - 849 MHz

Net Receive Gain 20 dB

Receive Gain Flatness ± 1 dB, ± 0.2 dB within any 3.84 MHz segment

Input Third Order Intercept +12 dBm Min

Noise Figure 1.5 dB typical

Phase Linearity ≤ 2° from linear phase over any 3.84 MHz segment

Splitter Output Isolation 30 dB minimum

IM3 150 dBc min, 2×20 W carriers

DC Power Requirement 24 - 48 VDC (2A @ 27 VDC)

Alarm Connection Dry contact each amplifier

Environmental Specification

Operating Temperature 0°C to +55°C

Lightning Protection Surge > 30KA, 20 KA Mult, Res Pulse < 250 uJ

Mechanical Specification

Input/Output Connections

Receive Output Ports 16 × QMA female (8 per channel)

Receive Input Ports 2 x N female (1 per channel)

Test Ports 2 × QMA female (coupled @ -20 dB) (1 per channel)

DC Power Input 1 × Molex Mini-Fit (2 pin male - 0.165 in. pitch)

Dimensions (body only)(H×W×D) $\underline{10}$ or $1.75 \times 19.0 \times 8.10$ in. $\underline{(44.45 \times 482.6 \times 205.74 \text{ mm})}$

Dimensions (incl. connectors)($H \times W \times D$) 1U or 1.75 \times 19.0 \times 9.50 in. (44.45 \times 482.6 \times 241.3 mm)

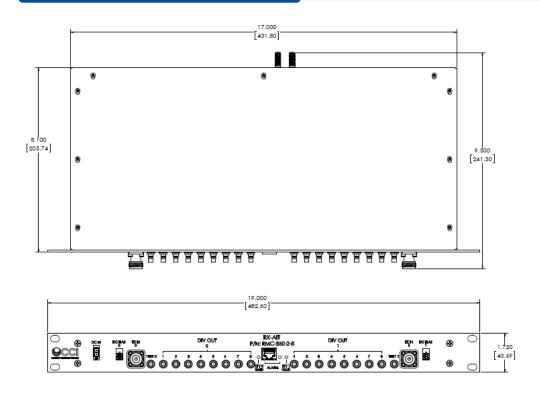
Weight 7.15 lbs (3.24 kg)



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RMC-850-2-8 Outline Drawing

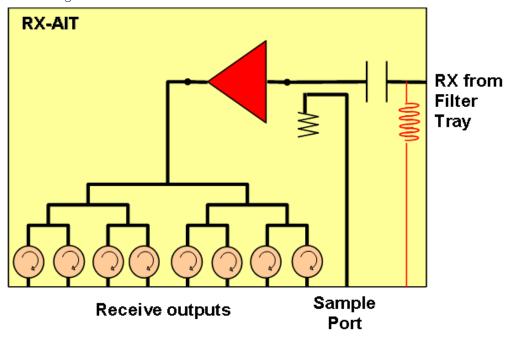


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Block Diagram



RMC-850-2-8 Block Diagram





ORDERING

850 Receiver Air Interface Tray

RMC-850-2-8

Parts & Accessories

RMC-850-2-8 8 port, 2 channel Multicoupler





STANDARDS & CERTIFICATIONS

850 Receiver Air Interface Tray

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Certifications

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

