



# Amplifiers

DATA SHEET

1900 Receiver Air Interface Tray

RMC-1819-2-8



- 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.



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## SPECIFICATIONS

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#### Electrical Specification

|                                     |  |
|-------------------------------------|--|
| <b>Operating Band</b>               | 1850 - 1910 MHz                                  |
| <b>Net Receive Gain (No bypass)</b> | 10 dB  |
| <b>Net Receive Gain (Bypass)</b>    | -11 dB   |
| <b>Receive Gain Flatness</b>        | ± 1 dB, ± 0.2 dB within any 3.84 MHz segment     |
| <b>Input Third Order Intercept</b>  | +13 dBm Min                                      |
| <b>Noise Figure</b>                 | 2.5 dB typical                                   |
| <b>Phase Linearity</b>              | ≤ 2° from linear phase over any 3.84 MHz segment |
| <b>IM3</b>                          | 150 dBc min, 2x20 W carriers                     |
| <b>DC Power Requirement</b>         | 24 - 48 VDC (2A @ 27 VDC)                        |
| <b>Alarm Connection</b>             | Dry contact each amplifier                       |

#### Environmental Specification

|                              |  |
|------------------------------|--|
| <b>Operating Temperature</b> | 0° C to +55° C                               |
| <b>Lightning Protection</b>  | Surge > 20KA, 20 KA Mult, Res Pulse < 250 uJ |

#### Mechanical Specification

|   |  |
|---|--|
| <b>Input/Output Connections</b>             |  |
| <b>Receive Output Ports</b>                 | 16 x QMA female (8 per channel)                                    |
| <b>Receive Input Ports</b>                  | 2 x N female (1 per channel)                                       |
| <b>Test Ports</b>                           | 2 x QMA female (coupled @ -20 dB) (1 per channel)                  |
| <b>DC Power Input</b>                       | 1 x Amp SL-156 (2 pin male - 0.156 in. pitch)                      |
| <b>DC Bias Input</b>                        | 2 x Molex Micro-Fit (2 pin male - 0.118 in. pitch) (1 per channel) |
| <b>Dimensions (body only)(HxWxD)</b>        | 1U or 1.75 x 19.0 x 8.093 in. (44.45 x 482.6 x 205.56 mm)          |
| <b>Dimensions (incl. connectors)(HxWxD)</b> | 1U or 1.75 x 19.0 x 9.50 in. (44.45 x 482.6 x 241.3 mm)            |
| <b>Weight</b>                               | 7.15 lbs (3.24 Kg)   |

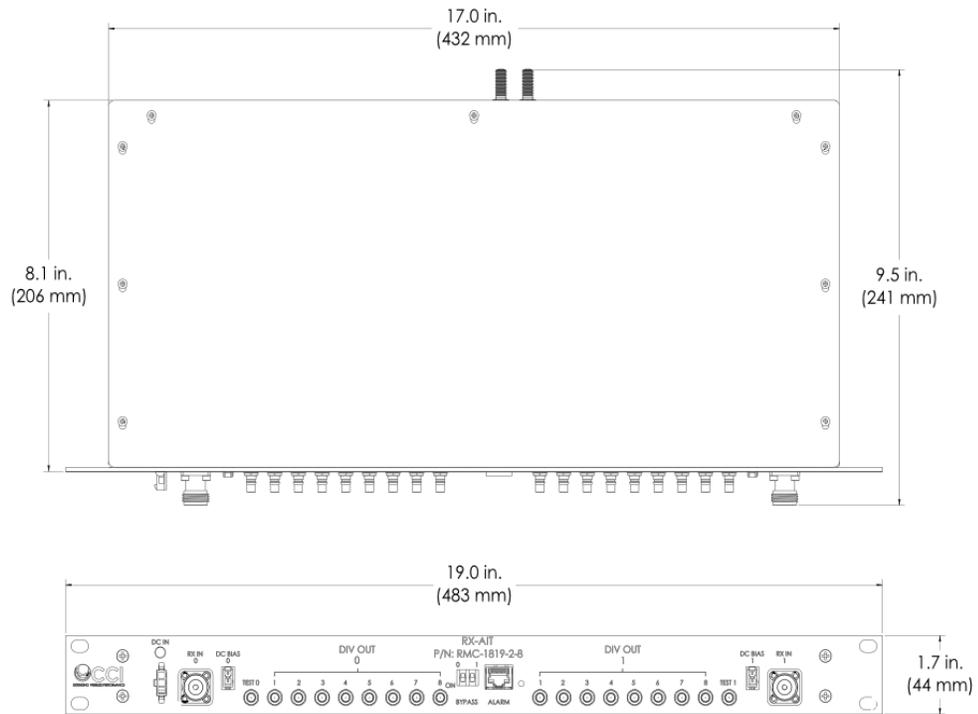


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RMC-1819-2-8 Outline Drawing



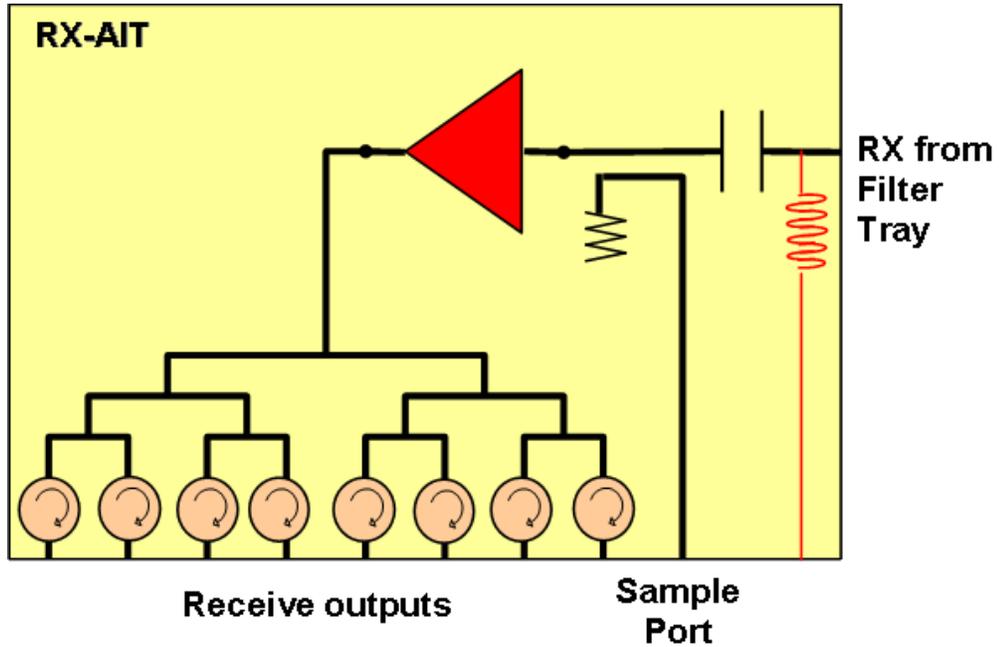
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Block Diagram



RMC-1819-2-8 Block Diagram



# Amplifiers

ORDERING

1900 Receiver Air Interface Tray

RMC-1819-2-8

Parts & Accessories

RMC-1819-2-8 8 port, 2 channel Multicoupler



# Amplifiers

STANDARDS &  
CERTIFICATIONS

1900 Receiver Air Interface Tray

RMC-1819-2-8

Certifications

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