



# Narrow Band High Isolation 3dB Low PIM Hybrid 4-Port Coupler

**AMA-1248-3HYB-716-HIO** (1725-1850 MHz) **AMA-1249-3HYB-716-HIO** (890-960 MHz)



### **Description**

AMA-1248 and AMA-1249 series 3dB Hybrid couplers are designed for low PIM, high isolation, high performance mobile phone network applications. A typical 38-40dB isolation can be achieved for each coupler when terminated by Rojone's cable load (AMA-5257 series) and perfectly matched with the network.

AMA-1248 is for 1725-1850MHz band applications, while AMA-1249 is for 890-960MHz band applications. They are designed for low intermodulation operation, and are RoHS compliant.

Custom frequency bands are available on request. Please contact sales@rojone.com.au with your specifications.

## **Specifications**

#### **General Specifications**

| Frequency Range | 1725-1850 MHz (AMA-1248)<br>890-960 MHz (AMA-1249)       |
|-----------------|--|
| Coupler Type    | 4 Port Directional                                       |
| Power Handling  | 200W cw (@25°C), 500W peak                               |
| Coupling Value  | 3 dB   |
| Return Loss     | < -30 dB   |
| Isolation       | 38-40 dB (typical)*                                      |
| AMP Balance     | < 0.5 dB (< 0.3 dB typical)                              |
| PIM             | < -150 dBc @ 43 dBm x2<br>-155 dBc to -165 dBc (typical) |
| Through Loss    | 3.5 dB maximum (3.2 dB typical)                          |
| Op. Temperature | -40°C to +65°C   |
| RF Connector    | DIN 716 Female   |
| Humidity        | < 99%, no condensation                                   |
| Weight          | 820g   |

<sup>\*</sup> **Note:** Coupler is terminated with RF Load which has return loss <- 35dB to achieve isolation 38-40dB.





## **Test Results (Typical Isolation)**



