



# Filters & Combiners

DATA SHEET

## Wideband Hybrid Combiner

HYO-75-2xx



- Wideband Hybrid Combiner covering 698 - 3800 MHz
- Near lossless combining
- High in-band isolation
- Outdoor capable unit
- Very low PIM
- High power Handling 300W per port and 3KW peak
- RoHS compliant

### Overview

CCI's Wideband 2-Way Hybrid Combiner with Coupler provides a solution where combining two RF inputs into one or two common outputs is required. The unit is housed in a weatherproof outdoor enclosure for outdoor basestation or tower mount applications.

#### Technical Description:

CCI's Outdoor Wideband 2-Way Hybrid Combiner covers the full 698 - 3800 MHz spectrum. The unit is housed in an IP67 moisture proof enclosure, with IP67 moisture proof connectors suited for long-life. The combiner can be wall or pole mounted.



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## SPECIFICATIONS

### Wideband Hybrid Combiner

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#### Electrical

RF Parameters	Ports	Frequency(MHz)	Specification
Insertion Loss	Coupling loss	698 - 3800	3.0 dB
	Input* to Output*	698 - 3800	0.6 dB
Isolation	Input* to Input*	698 - 3800	25 dB min.
Return Loss	All Ports	698 - 3800	18 dB minimum, 20 dB typical

\*Input Refers to Ports 1-2 and Output Refers to Ports 3-4

General Characteristics	
Impedance	50 ohms
Continuous Average Power	300 W maximum (per port)
Peak Envelope Power	3 kW maximum
Intermodulation Performance	<-160 dBc (-117 dBm)

#### Environmental

Operating Temperature	-40 °C to +70 °C
Ingress Protection	IP67
Relative Humidity	0 - 95%

#### Mechanical

Parameters	HYO-75-2F1	HYO-75-2F2	HYO-75-2F3
Connectors	4 x 7-16	4 x 4.3-10	4 x N-type
Housing Dimensions	184 x 42 x 44 mm	184 x 42 x 44 mm	184 x 42 x 44 mm
Overall Dimensions	184 x 79 x 44 mm	184 x 79 x 44 mm	184 x 79 x 44 mm
Weight	0.32 Kg (1.21 lbs)	0.5 Kg (1.10 lbs)	0.4 Kg (0.88lbs)
Mounting		Pole/Wall mounting bracket	

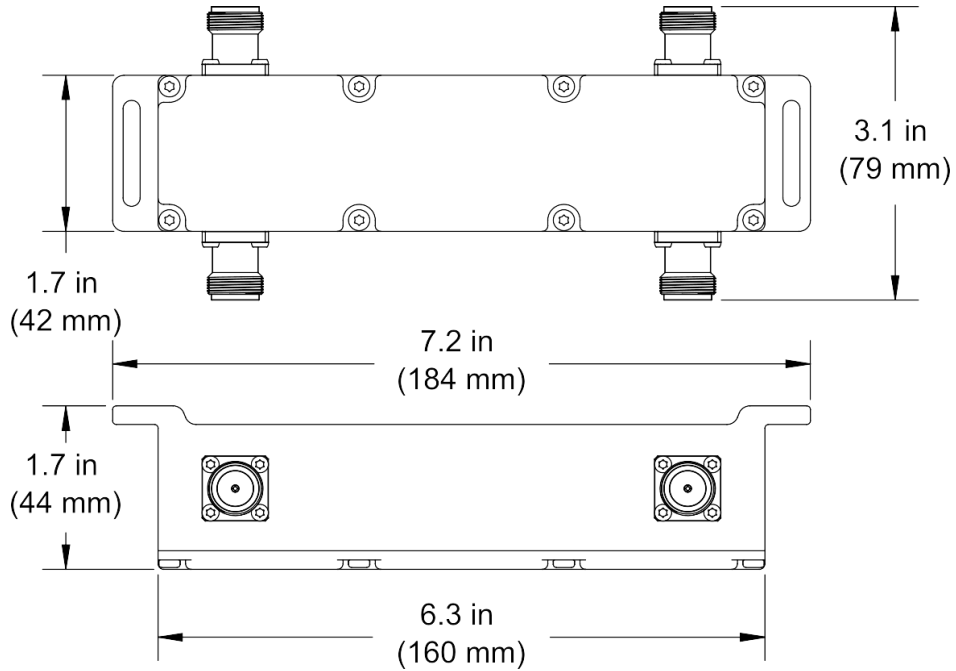


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SPECIFICATIONS

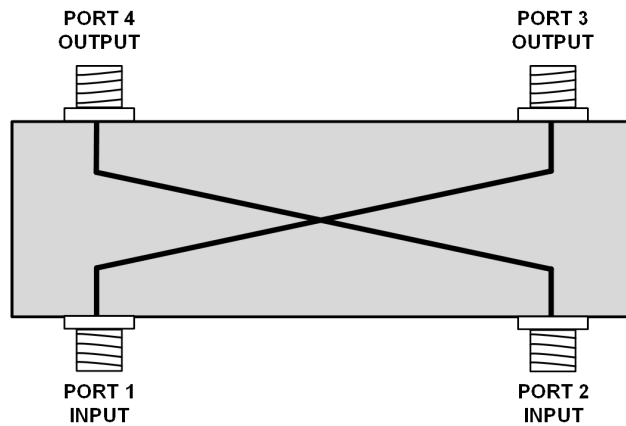
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2-Way Hybrid Combiner Outline Drawing with N-type Connectors

Block Diagram



2 x 2 Hybrid Combiner with Coupler Block Diagram



# Filters & Combiners

## STANDARDS & CERTIFICATIONS

### Wideband Hybrid Combiner

HYO-75-2xx

#### Parts & Accessories

- HYO-75-2F1** Outdoor Wideband 2-Way Hybrid Combiner with 7-16 DIN Connectors
- HYO-75-2F2** Outdoor Wideband 2-Way Hybrid Combiner with 4.3-10 Connectors
- HYO-75-2F3** Outdoor Wideband 2-Way Hybrid Combiner with N-type Connectors

#### Standards & Compliance

- Safety** EN 60950-1, UL 60950-1
- Emission** EN 55022
- Immunity** EN 55024
- Environmental** IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-5, IEC 60068-2-6, IEC-60068-2-11, IEC 60068-2-14, IEC 60068-2-18, IEC 60068-2-27, IEC 60068-2-29, IEC 60068-02-30, IEC 60068-2-52, IEC 60068-2-64, GR-63-CORE 4.3.1, EN 60529 IP65 & IP67

#### Certifications

Antenna Interface Standards Group (AISG), Federal Communication Commission (FCC) Part 15 Class B, CE, CSA US, ISO 9001

