

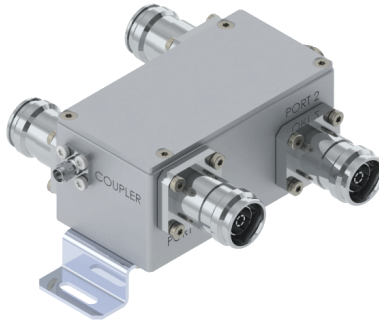


# Filters & Combiners

DATA SHEET

## Wideband Hybrid Combiner

HYO-68-2xx



- Wideband Hybrid Combiner covering 2700-5925 MHz
- Coupled output port
- Near lossless combining
- High in-band isolation
- Outdoor capable unit
- High power Handling 500W per port and 3KW peak
- RoHS compliant

### Overview

CCI's Wideband 2-Way Hybrid Combiner 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 2700- 5925 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.



# Filters & Combiners

## SPECIFICATIONS

### Wideband Hybrid Combiner

HYO-68-2xx

#### Electrical

RF Parameters	Ports	Frequency(MHz)	Specification
Insertion Loss	Input <sup>1</sup> to Output <sup>2</sup>	2700 - 5925	3.05 dB ± 0.1 dB
Coupled Output	Input <sup>1</sup> to Coupled Port <sup>3</sup>	2700 - 5925	34 dB ± 10 dB
Isolation	Input Port 1 to Input Port 2	2700 - 5925	30 dB min. , 32 dB typ.
Return Loss	All Ports	2700 - 5925	25 dB min.

<sup>1</sup>Ports 1 & 2; <sup>2</sup>Ports 3 & 4; <sup>3</sup>Test Port

#### General Characteristics

Impedance	50 ohms
Continuous Average Power	500 W maximum (per port)
Peak Envelope Power	3 kW maximum
DC Pass Current/AISG Pass	DC paths: Port 1 to Port 3; Port 2 to Port 4; (max 6.5 A per AISG 2.0)

#### Environmental

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

#### Mechanical

Parameters	HYO-68-2F2
Input/Output Connectors	4.3-10 female x 4
Coupled Port	SMA female x 1
Dimensions (body only)(HxWxD)	1.77 x 3.50x 1.69 in. (45.0 x 89.0 x 43.0 mm)
Dimensions (incl. brackets)(HxWxD)	1.77 x 5.12 x 2.28 in. (45.0 x 130.0 x 58.0 mm)
Weight with brackets	1.5 lbs (0.69 Kg)
Mounting	Pole/Wall mounting bracket

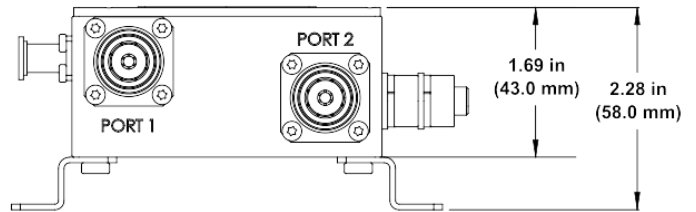
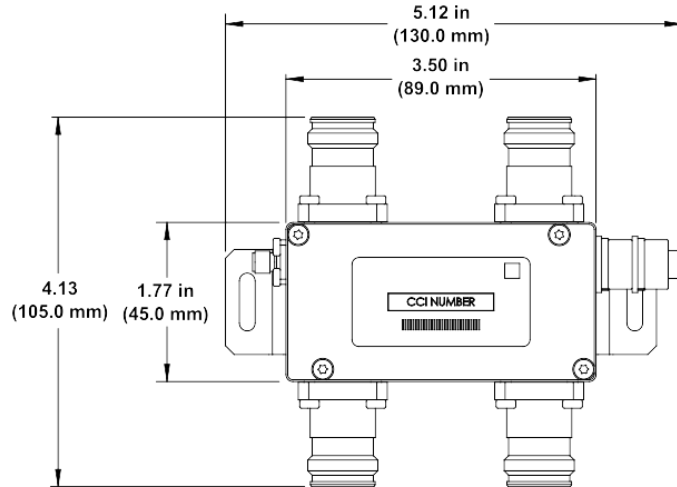


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SPECIFICATIONS

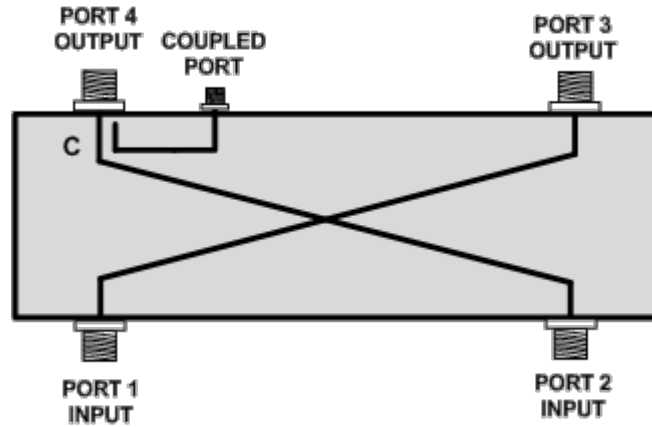
Wideband Hybrid Combiner

HYO-68-2xx



2-Way Hybrid Combiner Outline Drawing with 4.3-10 Connectors

Block Diagram



2 x 2 Hybrid Combiner with Coupled Output Port Block Diagram



# Filters & Combiners

## STANDARDS & CERTIFICATIONS

### Wideband Hybrid Combiner

HYO-68-2xx

#### Parts & Accessories

**HYO-77-2F2** Outdoor Wideband 2-Way Hybrid Combiner with output coupler and 4.3-10 Connectors

#### Standards & Compliance

<b>Safety</b>	EN 60950-1, UL 60950-1
<b>Emission</b>	EN 55022
<b>Immunity</b>	EN 55024
<b>Environmental</b>	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

