

**DATA SHEET** 

### Wideband Hybrid Combiner

HLO-77-2-xx



- Wideband Hybrid Combiner with Integrated Load covering 698 2700 MHz
- Compact twin unit with excellent return loss
- High in-band isolation of 30 dB
- Outdoor capable unit rated at IP67
- Very low PIM
- High power Handling 150W per combiner and 3KW peak
- RoHS and AISG 2.0 compliant

#### Overview

CCI's Wideband 2-Way Hybrid Combiner with Integrated Load provides a solution where combining two RF inputs into one output 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 with Integrated Load 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.



### **SPECIFICATIONS**

### Wideband Hybrid Combiner

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### Electrical

RF Parameters	Ports	Frequency(MHz)	Specification
Total Insertion Loss	Port 1/Port 2 to COM	698 - 2700	3.5 dB ± 0.4 dB
Isolation	Port 1 to Port 2	698 - 2700	30 dB typical
Return Loss	All Ports	698 - 2700	20 dB min.

General Characteristics	
Impedance	50 ohms
Continuous Average Power	150 W maximum
Peak Envelope Power	3 kW maximimum
Intermodulation Performance	<-155 dBc (-112 dBm) minimum

DC Pass Current/AISG Pass DC path: Port 2 to COM (max 2.5 A per AISG 2.0)

### Environmental

Operating Temperature -40 °C to +65 °C

Ingress Protection IP67

Relative Humidty 5 - 95%

Lightning Protection 8/20us, ±10KA max, 10 strikes per IEC61000-4-5

#### Mechanical

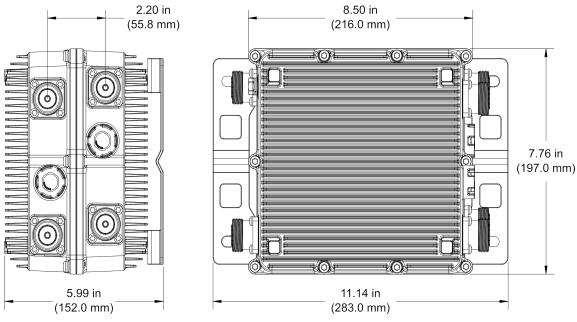
Parameters	HLO-77-2Tx (Twin)	
Input Connectors	7-16 or 4.3-10 female × 4	
Output Connectors	7-16 or 4.3-10 female × 2	
Dimensions (incl. brackets)(H×W×D)	$11.14 \times 7.76 \times 5.778$ in. (293.0 $\times$ 197.0 $\times$ 152.0 mm)	
Weight with brackets	19.8 lbs (9.0 Kg)	
Mounting	Pole/Wall mounting bracket	



**SPECIFICATIONS** 

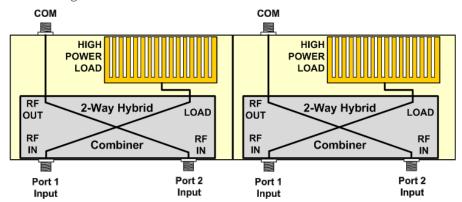
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2-Way Hybrid Combiner with Integrated Load Outline Drawing

### Block Diagram



2 Way Hybrid Twin Combiner with Integrated Load Block Diagram



## STANDARDS & CERTIFICATIONS

### Wideband Hybrid Combiner

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### Parts & Accessories

HLO-77-2-T1 Outdoor Wideband 2-Way Twin Hybrid Combiner with Integrated Load and DIN Connectors

HLO-77-2-T2 Outdoor Wideband 2-Way Hybrid Twin Combiner with Integrated Load and 4.3-10 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











