

30 dB WR-430 Waveguide Loop Coupler, CPR430F Flange, N Female Coupled Port, 1.72 GHz to 2.61 GHz in Aluminum



**FMWCP1106N-30**

**Features**

- Three Port Broadwall Waveguide Coupler
- 30±0.7 dB Nominal Coupling Level
- Integrated N Female Connector coupled port
- 1.72 GHz to 2.61 GHz Frequency Range
- Main Line VSWR < 1.1:1
- Max Power 4kW (CW)

**Applications**

- Test Benches
- Radar
- Satellite
- Microwave Radio
- Attenuation Measurements
- Power Measurements
- Source Leveling

**Description**

The FMWCP1106N-30 is a WR-430 Directional Loop waveguide coupler with N female coupled port that operates in the frequency range of 1.72 to 2.61 GHz. This Waveguide component has a maximum VSWR of 1.4:1. These designs are made of painted aluminum and incorporate a Loop configuration that result in a mid-band nominal coupling value of 10, 20, 30, 40 or 50 dB. Common applications for this component would be where power measurements are required within a system for measuring/sampling power or frequency monitoring with minimal signal loss to the main transmission line. Fairview Microwave offers a complete family of waveguide Crossguide, Loop and Broadwall couplers that are in-stock and ship same day.

**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	1.72		2.61	GHz
<b>Coupler</b>				
Nominal Coupling Level		30		dB
Coupling Accuracy		±0.7		dB
Directivity	15			dB
Insertion Loss			0.2	dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.4:1	
Input Power (CW)			4	kWatts
Input Power, Peak			2,000	kWatts

**Mechanical Specifications**

**Size**

- Length 7.87 in [199.9 mm]
- Width 6.34 in [161.04 mm]
- Height 4.19 in [106.43 mm]
- Weight 3 lbs [1.36 kg]

**Interface**

- Waveguide Size WR-430
- Flange Type CPR-430F
- Flange Material and Plating Aluminum, Chromate Conversion
- RF Connector Type N Female

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## FMWCP1106N-30

Coupler Body Material and Plating

Aluminum, Chromate Conversion

### Environmental Specifications

#### Temperature

Operating Range

-40 to +70 deg C

Storage Range

-55 to +85 deg C

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

30 dB WR-430 Waveguide Loop Coupler, CPR430F Flange, N Female Coupled Port, 1.72 GHz to 2.61 GHz in Aluminum from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

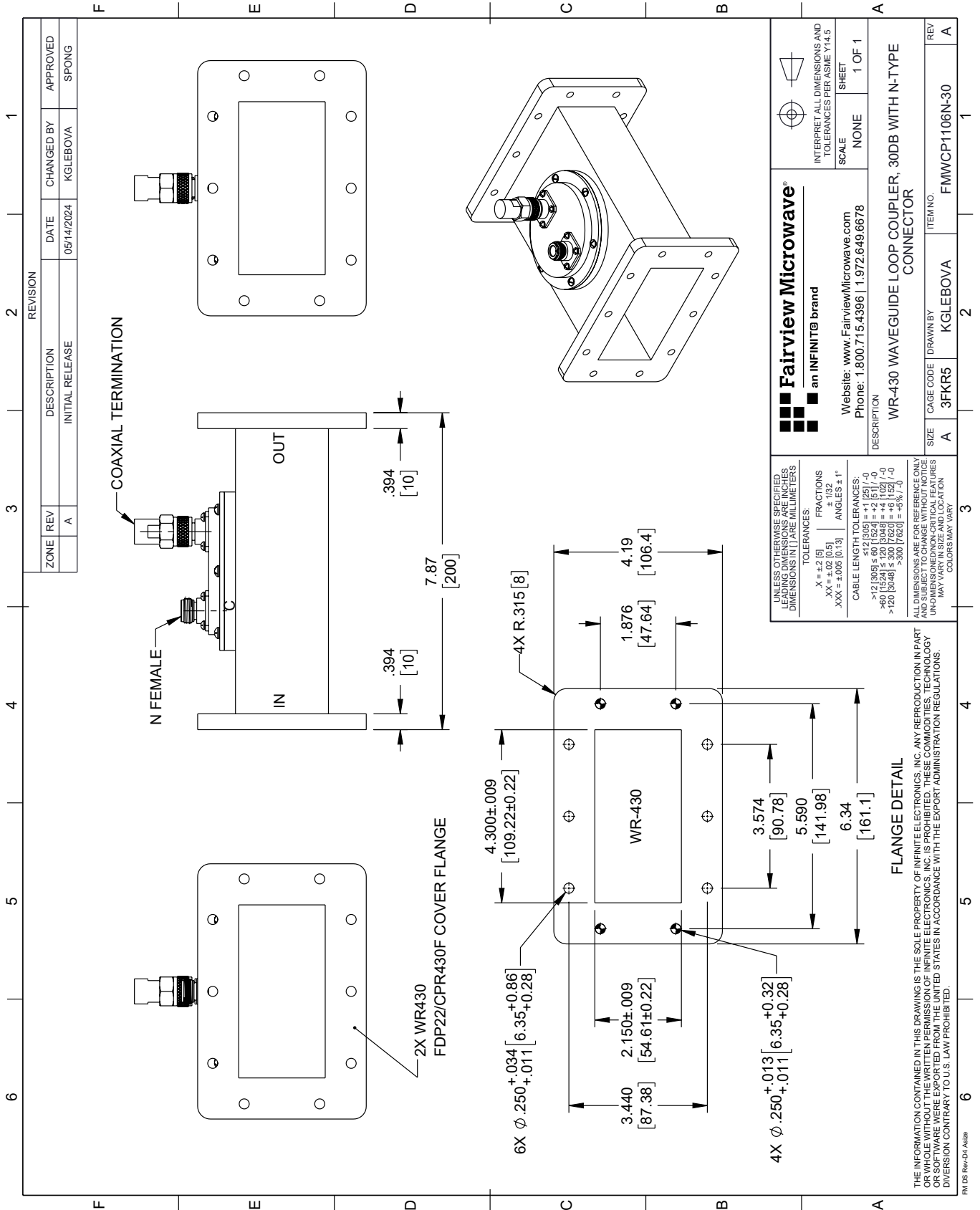
For additional information on this product, please click the following link: [30 dB WR-430 Waveguide Loop Coupler, CPR430F Flange, N Female Coupled Port, 1.72 GHz to 2.61 GHz in Aluminum FMWCP1106N-30](#)

URL: <https://www.fairviewmicrowave.com/30db-wr430-waveguide-coupler-cpr-430f-2.61ghz-fmwcp1106n-30-p.aspx>

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# FMWCP1106N-30 CAD Drawing

30 dB WR-430 Waveguide Loop Coupler, CPR430F Flange, N Female Coupled Port, 1.72 GHz to 2.61 GHz in Aluminum



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	INITIAL RELEASE	
	A			SPONG

 an INFINIT® brand		Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION: WR-430 WAVEGUIDE LOOP COUPLER, 30DB WITH N-TYPE CONNECTOR			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	KGLEBOVA	FMWCP1106N-30

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, UNLESS INDICATED OTHERWISE. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]  
 FRACTIONS ± 1/32  
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
 >12 [305] ≤ 60 [1524] = ±.1 [25] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0  
 >300 [7620] = ±.8 [203] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES, UNLESS INDICATED OTHERWISE. DIMENSIONS IN [ ] ARE MILLIMETERS. COLORS MAY VARY.

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FM DS Rev-D4 Alt26