

# **408-600-6000** 8 dB Wideband Directional Couplers -163 dBc PIM, 600-6000 MHz, IP67

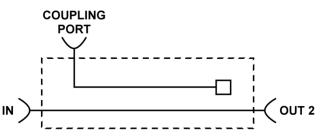
#### Innovation in Every Wave\_

**4XX-600-6000 Series** of Wideband Directional Couplers are Low-PIM devices that operate from 600MHz – 6000MHz. It covers all cellular bands, including CBRS, C-Band and LTE-LAA. It has excellent directivity and coupling flatness across the entire band. It also exhibits a very low insertion loss along with outstanding VSWR at all three ports. These units are weatherproof and suitable for extreme conditions. Available in different connector options. **Other Coupling Values are available on request.** 

#### **FEATURES:**

- Operates from 600 MHz to 6000 MHz
- Covers 600MHz (Band 71), CBRS, C-Band & LTE-LAA
- Low Insertion Loss and Low VSWR
- Excellent PIM rating, -163dBc
- RoHS Complaint
- Weatherproof / Outdoor unit
- In Stock to low lead time delivery
- Superior Construction and High Power Handling
- Available in 4.3-10 or Nex10 Connectors

## **Block Diagram for Directional Couplers**





#### **PART ORDERING INFO:**

4.3-10 Conn: 4XX-600-6000-D43

Nex10 Conn: 4XX-600-6000-X10

**XX** - Coupling Value (Ex: 6dB -- 406; 30dB -- 430)

## **ELECTRICAL SPECIFICATIONS:**

Coupling Value	3dB	5dB	6dB	7dB	8dB	10dB	12dB	13dB	15dB	20dB	25dB	30dB
Frequency Bands	600 MHz – 6000 MHz											
Insertion Loss (dB)	≤2.45	≤2.20	≤1.50	≤1.20	≤1.00	≤0.75	≤0.50	≤0.50	≤0.50	≤0.30	≤0.25	≤0.25
Frequency Sensitivity (dB)												
600 – 698 MHz	±1.30	±1.40	±1.40	±1.60	±1.60	±1.60	±1.65	±1.65	±1.70	±1.75	±1.80	±1.80
698 – 2700 MHz	±1.30	±1.40	±1.40	±1.60	±1.60	±1.60	±1.70	±1.70	±1.75	±1.75	±1.80	±1.80
2700 - 6000 MHz	±1.40	±1.50	±1.50	±1.75	±1.75	±1.75	±1.70	±1.70	±1.75	±1.80	±1.90	±1.90
Directivity (dB)												
600 – 698 MHz	≥ 24	≥ 25	≥ 25	≥ 28	≥ 28	≥ 29	≥ 32	≥ 32	≥ 34	≥ 37	≥ 47	≥ 47
698 – 2700 MHz	≥ 24	≥ 25	≥ 25	≥ 27	≥ 27	≥ 27	≥ 30	≥ 30	≥ 32	≥ 35	≥ 45	≥ 45
2700 - 6000 MHz	≥ 23	≥ 23	≥ 23	≥ 25	≥ 25	≥ 25	≥ 28	≥ 28	≥ 30	≥ 30	≥ 42	≥ 42
Return Loss	-19dB @ 600 – 4200 MHz / -17 dB @ 4200 – 6000 MHz											
Impedance	50 Ω											
Intermodulation (PIM-3 <sup>rd</sup> )	-163 dBc (2 Tones +43 dBm)											
Input Power		300 Watts (Avg); 500 Watts (Peak)										
Other Coupling Values are available on Request												

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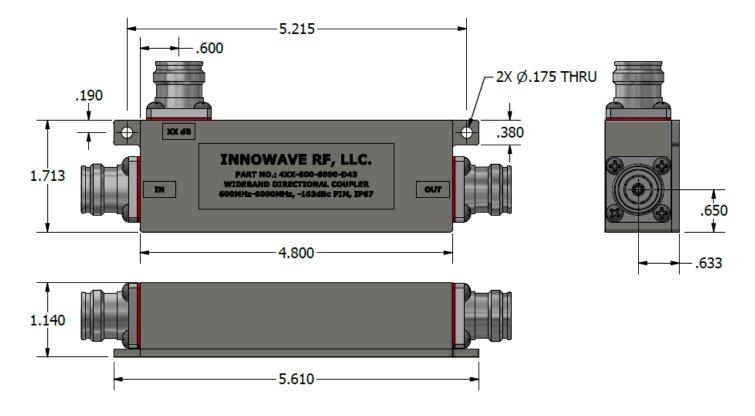


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### **MECHANICAL SPECIFICATIONS:**

Connectors:	4.3-10 (D43) / Nex10 (X10)				
Housing Finish:	Aluminum Body				
Mounting Method:	Mounting Panel				
Temperature Range:	-30°C to 75°C				
Weight:	0.75 lb				
Relative Humidity:	5% - 95%				
Environment:	IP67				

#### Dimensions for 4XX-600-6000-D43



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