

**Innovation in Every Wave**

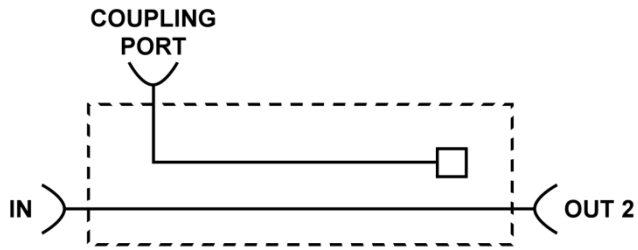
**4XX-600-6000 Series** of Wideband Directional Couplers are Low-PIM devices that operate from 600MHz – 6000MHz. It covers all cellular bands, including CBRS, C-Band and LTE-LAA. It has excellent directivity and coupling flatness across the entire band. It also exhibits a very low insertion loss along 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 Compliant
- 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:**

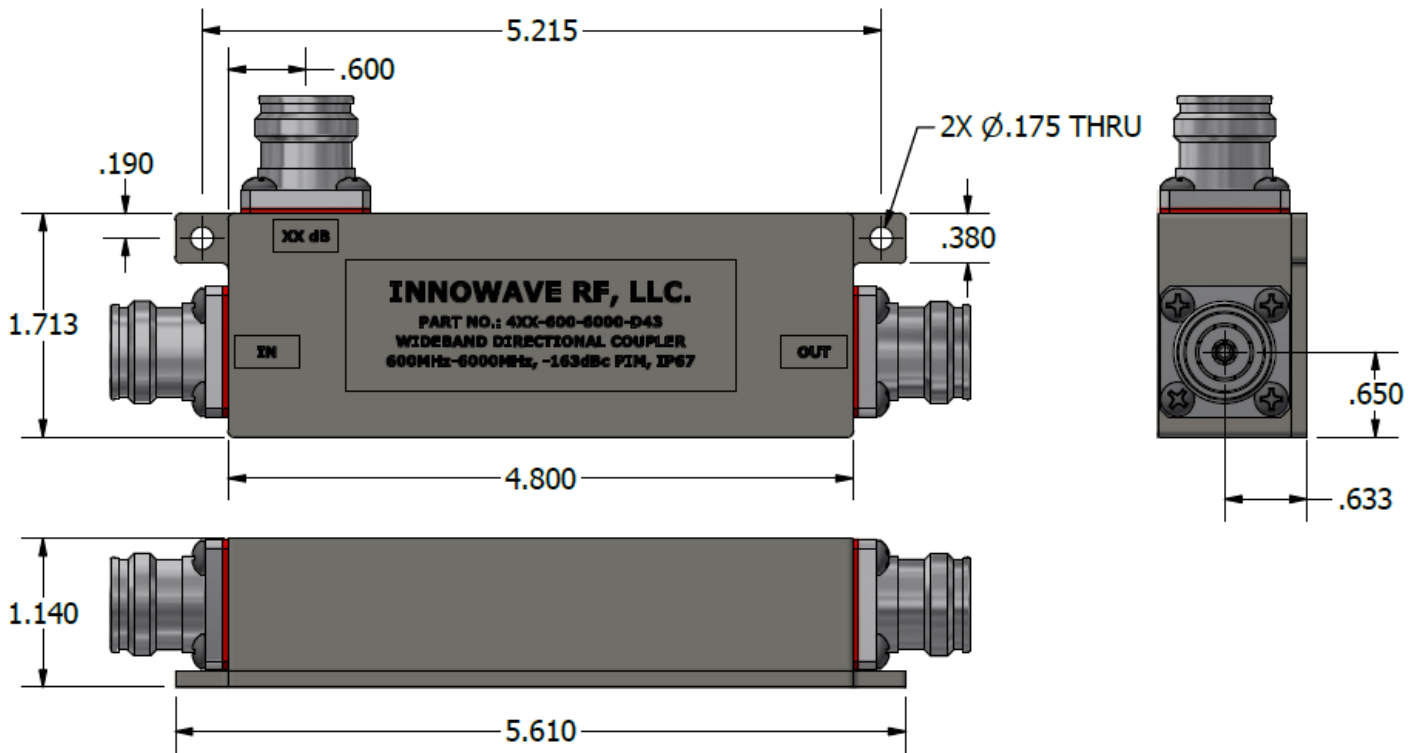
Coupling Value	3dB	5dB	6dB	7dB	8dB	10dB	12dB	13dB	15dB	20dB	25dB	30dB
Frequency Bands	600 MHz – 6000 MHz											
Insertion Loss (dB)	≤2.45	≤2.20	≤1.50	≤1.20	≤1.00	≤0.75	≤0.50	≤0.50	≤0.50	≤0.30	≤0.25	≤0.25
Frequency Sensitivity (dB)												
600 – 698 MHz	±1.30	±1.40	±1.40	±1.60	±1.60	±1.60	±1.65	±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**

**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**



Please contact our sales department at 737-200-7090 or [sales@InnowaveRF.com](mailto:sales@InnowaveRF.com) for any custom requirements.

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