



Innovation in Every Wave

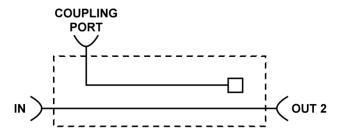
4XX-600-6000 Series of Wideband Directional Couplers are Low-PIM devices that operate from 600MHz – 6000MHz. It covers all cellular bands, including CBRS, C-Band and LTE-LAA. It has excellent directivity and coupling flatness across the entire band. It also exhibits a very low insertion loss along with 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 rd) | -163 dBc (2 Tones +43 dBm) | | | | | | | | | | | | |
| Input Power | | 300 Watts (Avg); 500 Watts (Peak) | | | | | | | | | | | |
| Other Coupling Values are available on Request | | | | | | | | | | | | | |



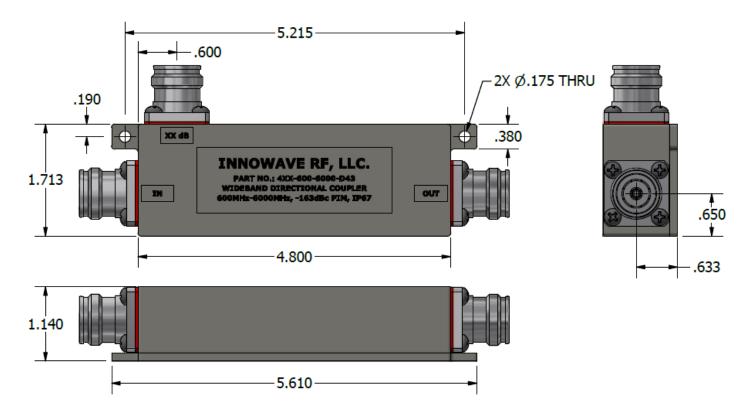
MECHANICAL SPECIFICATIONS:

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



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