# LT-DC-330/2700-10

# Directional Coupler | 330-2700 MHz | 10 dBi

The Lamatel LT-DC-330/2700-6 Directional Coupler is designed for efficient signal sampling and distribution across a wide frequency range of 330–2700 MHz. With a coupling factor of 10 dB, this device ensures accurate signal splitting while maintaining minimal insertion loss. Ideal for signal monitoring, power measurement, and distributed antenna systems (DAS), its robust and compact design supports stable performance in a variety of RF communication setups, including indoor and outdoor environments.

#### **Key Features**

Wide Frequency Range: 330–2700 MHz
Coupling Value: 10 dB for accurate signal sampling

• Low Insertion Loss ensures minimal signal degradation

High Isolation between input and output ports

 Compact and Lightweight Design for easy system integration

Durable Construction for reliable indoor and outdoor use

 Suitable for Distributed Antenna Systems (DAS), power monitoring, and signal testing applications

## Key Highlights

• Excellent VSWR Performance for maximum system efficiency

• Bi-directional Design allows flexible installation options

• High Power Handling Capability for demanding RF environments

• Stable Performance Across Wide Temperature Ranges

Corrosion-Resistant Finish ensures long-term reliability

• Easy Integration into existing RF communication and test setups

#### **Applications**

• Distributed Antenna Systems (DAS) for buildings, tunnels, and stadiums

Signal Monitoring and Testing in RF

communication systems

Power Measurement in transmission lines

### **Specifications**

| -                     |              | _                        |                      |
|-----------------------|--------------|--------------------------|----------------------|
|                       | Electrical S | peci                     | fications            |
| Frequency             |              | 1                        | 330-2700 MHz         |
| Configuration         |              |                          | 10 dBi               |
| Coupling              | 340-380 MHz  |                          | 10 ±1.9 dBi          |
|                       | 380-2700 MHz |                          | 10 ±1.2 dBi          |
| Distribution Loss     |              | 20.8 dB                  |                      |
| Insertion Loss        |              | 0.8 dB                   |                      |
| Frequency Isolation   |              | 30 dB                    |                      |
| VSWR                  |              | ≤1.28 @ 340-380 MHz      |                      |
|                       |              | ≤1.25 @ 380-2700 MHz     |                      |
| Power Capacity        |              | Avg. 300 W, Peak 1.5 kW  |                      |
| Impedance             |              |                          | 50 Ω                 |
| Intermodulation       |              | $\leq$ -                 | 161 dBc @ 2 x 43 dBm |
|                       | Environmenta | l Spe                    | ecifications         |
| Environment           |              | ETS 300 019              |                      |
| Operating Temperature |              | 25 °C to +85 °C          |                      |
| Relative Humidity     |              |                          | 0 ~ 100%             |
| Application           |              |                          | IP65                 |
|                       | Mechanical   | Spec                     | cifications          |
| Dimensions (mm)       |              | 177 x 47 x 27            |                      |
|                       |              | (excluding connectors)   |                      |
| Weight (Kg)           |              | 0.66 (4.3-10) / 0.64 (N) |                      |
| RF Connector          |              | N Female                 |                      |

