

LT-DPX 4' 6 Cavities Series

VHF UHF 700/800/900 MHZ 350W DUPLEXERS

The Lamatel LT-DPX Series is a family of high-power 4-inch cavity duplexers designed for base station applications requiring close frequency separation and superior isolation. With a robust 6-cavity design, continuous power handling up to 350 W, and isolation performance up to 100 dB, these duplexers deliver reliable transmit/receive separation in mission-critical communication systems.

Each unit is precision-engineered with temperature-compensated cavities, silver-plated loops, and tuning rods to ensure stable performance across a wide temperature range. Available in rack-mount or wall-mount configurations, the LT-DPX series is ideal for demanding environments where high selectivity and long-term durability are essential.

Key Features

- High-power handling: up to 350 W continuous
- Available for VHF, UHF, and 700/800/900 MHz bands
- 6-cavity, 4-inch resonators for excellent selectivity
- Very close channel spacing capability (as low as 0.5 MHz)
- High isolation performance: up to 100 dB
- Low insertion loss: as low as 1.2 dB

Applications

UHF base station and repeater systems
Public safety and emergency communications
Trunked radio and utility networks
RF systems requiring enhanced rejection



	LT-DPX-138-174-0.5/6	LT-DPX-406-512-0.5/6	LT-DPX-746-960-3.6/6
Mechanical Specifications			
Frequency Range	138 – 174 MHz	406 – 512 MHz	746 – 960 MHz
Minimum Spacing	0.5 MHz	0.5 MHz	3.6 MHz
Cavities	6 (4-inch)	6 (4-inch)	6 (4-inch)
Continuous Power	350 W	350 W	350 W
Connectors	N-Female	N-Female	N-Female
Insertion Loss	≤2.1 dB	≤1.2 dB	≤1.2 dB
Isolation (@ min sep)	≥85 dB	≥100 dB	≥85 dB
VSWR	≤1.22:1	≤1.22:1	≤1.22:1
Mechanical Specifications			
Dimensions	78.7 × 48.3 × 20.3 cm	20.3 × 48.3 × 38.1 cm	20.3 × 48.3 × 30.5 cm
Mounting	19-inch rack or wall-mount	19-inch rack or wall-mount	19-inch rack or wall-mount
Weight	20.25 kg	12.15 kg	10.8 kg
Environmental Specifications			
Operating Temperature	–40 °C ~ +60 °C	–40 °C ~ +60 °C	–40 °C ~ +60 °C

Notice

Lamatel duplexers can be factory-tuned to the customer's specified operating frequencies prior to shipment. If the required frequencies are not provided at the time of order, the duplexer will be delivered in its standard untuned state. In such cases, the responsibility for tuning the duplexer to the desired frequencies rests with the customer.

