

LT-DPXL-400-450-5/6

UHF 50W 6-CAVITIES DUPLEXERS

The LT-DPXL-400-450-5/6 is a 6-cavity UHF duplexer designed for the 400–450 MHz band with 5 MHz channel spacing. Offering robust performance with high isolation and low insertion loss, it is suited for repeaters, trunked networks, and professional UHF RF applications.

Key Features

- Frequency range: 400–450 MHz
- 5 MHz TX/RX channel spacing
- 6 resonant cavities for enhanced selectivity
- Isolation ≥ 75 dB
- Insertion loss ≤ 1.5 dB
- 50 W maximum input power
- Compact, rugged design with N-F or BNC-F connectors

Electrical Specifications	
Frequency Range	400 – 450 MHz
Channel Spacing	5 MHz
Number of Cavities	6
Impedance	50 Ω
VSWR	≤ 1.35
Insertion Loss	≤ 1.5 dB (typical ≤ 1.2 dB)
Isolation	≥ 75 dB
Max Input Power	50 W
Mechanical Specifications	
Connectors	N-F / BNC-F
Dimensions	228 × 190 × 40 mm
Weight	1.6 kg
Environmental Specifications	
Operating Temperature	–20 °C ~ +50 °C



Applications

Base stations and repeater systems
Public safety and emergency communications networks
Professional two-way radio infrastructure
Transportation and utility communication systems
RF systems requiring reliable transmit/receive isolation

Ordering Information

The duplexer series is available in the following models:

LT-DPXL-136-150-5/6 : VHF Duplexer, 136–150 MHz, 5 MHz spacing, 6 cavities, 50 W

LT-DPXL-150-180-5/6 : VHF Duplexer, 150–180 MHz, 5 MHz spacing, 6 cavities, 50 W

LT-DPXL-400-450-5/6 : UHF Duplexer, 400–450 MHz, 5 MHz spacing, 6 cavities, 50 W

LT-DPXL-450-500-5/6 : UHF Duplexer, 450–500 MHz, 5 MHz spacing, 6 cavities, 50 W

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.

