

LT-DPXL-450-500-5/6

UHF 50W 6-CAVITIES DUPLEXERS

The LT-DPXL-450-500-5/6 is a 6-cavity UHF duplexer covering the 450–500 MHz band with 5 MHz channel spacing. It provides high selectivity, strong isolation, and minimal insertion loss, ensuring efficient and reliable RF performance in UHF communication systems.

Key Features

- Frequency range: 450–500 MHz
- 5 MHz TX/RX channel spacing
- 6 resonant cavities for high selectivity
- High isolation ≥ 75 dB
- Low insertion loss ≤ 1.5 dB
- Maximum input power: 50 W
- Rugged metal housing with N-Female or BNC-Female connectors

Electrical Specifications	
Frequency Range	450 – 500 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.

