

Lamatel Duplexer Series

STANDARD, WIDEBAND, AND HIGH PERFORMANCE

Lamatel offers a complete portfolio of duplexers designed to meet the needs of professional communication systems across VHF and UHF bands. Available in compact 6-cavity, wideband 8-cavity, and high-performance 8-cavity designs, these duplexers ensure reliable transmit/receive separation, high isolation, and stable operation under demanding conditions.

Specification	LT-DPXL Series	LT-DPXH Series	LT-DPXHH Series
Models	LT-DPXL-136-150-5/6 LT-DPXL-150-180-5/6 LT-DPXL-400-450-5/6 LT-DPXL-450-500-5/6	LT-DPXH-134-174-5/8 LT-DPXH-300-400-5/8 LT-DPXH-400-520-5/8	LT-DPXHH-150-172-5/8 LT-DPXHH-300-360-5/8 LT-DPXHH-400-450-5/8
Frequency Bands	VHF (136–180 MHz) UHF (400–500 MHz)	VHF (134–174 MHz) UHF (300–520 MHz)	VHF (150–172 MHz) UHF (300–450 MHz)
Number of Cavities	6	8	8 (High Selectivity)
Power Rating	50 W	100 W	100 W
Channel Spacing	5 MHz	5 MHz	5 MHz (≥3 MHz*)
Insertion Loss	≤1.5 dB	≤1.5 dB	≤1.2–1.3 dB
Isolation	≥75 dB	≥75 dB	≥80 dB
Key Applications	Standard 6-cavity compact duplexers, suitable for general-purpose repeaters & base stations	Wideband 8-cavity duplexers, supporting higher power and broader frequency coverage	High Performance 8-cavity duplexers, for critical systems needing tighter rejection & selectivity

Applications

Base Stations and Repeaters

Ensure reliable separation of transmit and receive channels, enabling stable and interference-free communication in fixed-site infrastructure.

Public Safety and Emergency Networks

Provide dependable RF performance for mission-critical operations, where high isolation and selectivity are essential to maintain secure communications.

Utilities and Transportation Networks

Support operational radio systems used in power distribution, railways, airports, and ports, ensuring consistent connectivity across large service areas.

Professional Two-Way Radio Systems

Deliver robust duplexing performance for commercial, industrial, and enterprise radio networks that require uninterrupted voice and data.

Mission-Critical RF Deployments

High-performance duplexers (DPXHH series) support tight frequency spacing with superior rejection, making them ideal for environments with congested spectrum or high interference risk.

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.

