

LightSpeed™ M100-Core

Free-Space Optical Transceiver



Silent. Secure. Optical - Without the Wires

Introducing the M100-Core (100 Megabits-core)

Compact, High- and Low-Speed Free-Space Optical (FSO) Transceivers designed for integration.

Engineered for mission-critical performance, the M100-Core offers **covert, wireless, high-bandwidth optical communications** at distances up to 2000 meters. Designed for seamless integration into defense platforms, these transceivers enable secure, interference-free links—without reliance on congested or compromised RF spectrums.

Key Features:

- 2000 m Tactical LOS Range:** Reliable performance in rural, industrial, or urban environments. Ideal for asset to FOB, base-to-vehicle, UAV, or deployed sensor backhauls.
- Operational Flexibility:** Works in RF-denied, GPS-compromised, and spectrum-contested environments.
- Hard-to-Intercept Optical Link:** Inherent LPI/LPD—No RF emissions, virtually immune to jamming.
- Integration-Ready:** Compact form factor, modular interface, and plug-and-play interface means they're up instantly.
- Low Power, High Performance:** Optimized for the absolute minimum power consumption possible; embedded and mobile platforms.

Voice, Data	M100-Core	Voice, Data	M100-Core
Operating Range	>2000 m	Power Consumption	30 W
Speed	up to 100 Mbps	Weight	1575 g
Frequency	NIR/Vis/SWIR	Dimensions	6.35 x 4.14 x 4.06 in
Data Interface	RS-232	Operating Temp.	-20° to 50° C

Communication Links



Person to Person



Building to Building



Drone to Ground



Ship to Ship



Camera to Computer



M100-, M-, and K-cores



Integrated back panel interface



DL1 - Optical Remote Control

