

Silent. Secure. Optical - Without the Wires

Introducing the M-Core (Megabits-core)

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

Engineered for mission-critical performance, the M-Core offer 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, GPScompromised, 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.



M100-, M-, and K-cores

Voice, Data	M-Core	Voice, Data	M-Core
Operating Range	>2000 m	Power Consumption	7.5 W
Speed	1-20 Mbps	Weight	563 g
Frequency	NIR/Vis/SWIR	Dimensions	3.6"x 3.4"x 2.1"
Data Interface	Ethernet	Operating Temp.	-20° to 50° C

Communication Links





Person to Person







Building to Building







Drone to Ground







Ship to Ship







Camera to Computer



Back panel with Ethernet, Audio and Control



Integrated back panel interface



