

# LightSpeed™ R4

## Auto-Connection Free-Space Optical Communications

### Introducing the Auto-Connection FSO system

**Compact, high-speed Free-Space Optical (FSO)**  
**Transceiver gimbals designed for challenging non-RF environments.**

Engineered for mission-critical performance, LightSpeed™ R4 offers covert, wireless, high-bandwidth optical communication at distances exceeding 3km. Designed for seamless integration into defense platforms, these gimbal enable secure, self-erecting, interference-free links – without reliance on congested or compromised RF spectrum.

- **3km+ Tactical LOS Non-RF Comms:** 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.

Whether deployed in field operations, perimeter surveillance, building smart infrastructure, or next-gen communications platforms, the LightSpeed™ R4 Transceiver Gimbal enable secure low-power data connections in congested environments; empowering defense systems with next-gen, fiber-class connections minus the wire, minus the risk.



### Specifications

Communication	Voice, Data
Operating Range	3 km+
Data Speed	1-20 Mbps
Frequency	Vis/NIR/SWIR or custom
Data Interface	Ethernet RJ-45
Power Consumption	12 W
Power Supply	Up to 2 batteries with hot swap; 2590/U battery for 24+ hours of operation or 2557/U for 10+ hours of operation
Weight	10 lbs
Size	5.8 x 5.8 x 11.5 in
Operating Temperature	-20 to +50 C



Interface and Controls



Mast configuration on Vehicle

