

Product Preview

APPLICATIONS

- Building-to-building connectivity
- University campus links
- Security surveillance links
- Emergency connectivity
- Cellular infrastructure
- RF bypass in congested areas
- Unmanned Air Vehicles (UAVs)
- Small satellites
- Ground stations
- Defense

FEATURES

- Eye-safe operation at 1550 nm wavelength
- Long range
- Full duplex transmission
- Small size and weight transmitter/receiver

OVERVIEW

The Freedom Photonics FP8100 Free Space Optical (FSO) Transmitter / Receiver is extremely compact, yet rugged, to be easily deployed outdoors under varying weather conditions as well as indoors operating through a window. The Transmitter / Receiver small size and weight make it ideal for situations that require rapid deployment. It can also provide connectivity for moving vehicles such as Unmanned Air Vehicles (UAVs), aircraft, ships and satellites.

Operating at the eye-safe wavelength of 1550 nm, the FSO link offers an extended reach, up to 4000 meters, depending on weather conditions. This high performance in a compact enclosure enables new applications to benefit from FSO communications.

SPECIFICATIONS

Parameter	
Bit Rate Options	10 and 125 Mbps
Link Range	Up to 4000 meters (in clear weather)
Free Space Wavelength	1550 nm (eye-safe)
Transmitter/Receiver	One transmitter and one receiver (Two active simultaneous beams for full duplex communications)
Dimensions	12 x 10 x 5 cm
Weight	< 400 grams
Operating Temperature	-40 °C to 60 °C
RF & EMI Immunity	Yes
Environmental seal	Yes

