

Optic Isolator Kit

Protection for the Data Stream from a GPS Antenna/Receiver

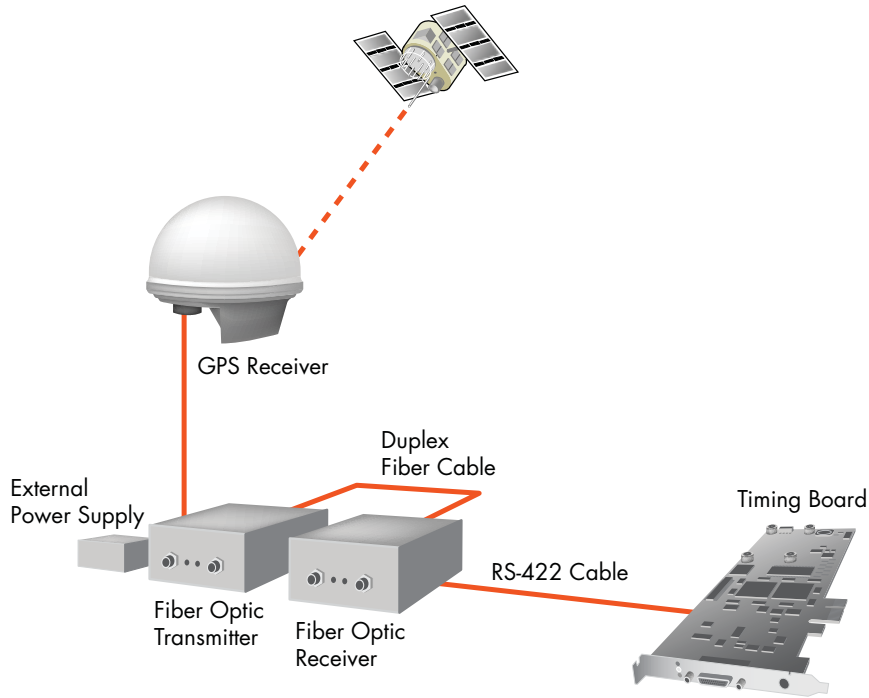


- **Complete fiber optic GPS cabling for systems using a GPS antenna/receiver**
- **Supports long distances between antenna and equipment**
- **Isolates equipment from lightning damage**
- **Suited for highly secure environments**

The GPS Optic Isolator is an off-the-shelf solution that offers GPS data transmission in a voltage-secure environment. It comes with two signal converters and the necessary cables to connect the GPS antenna/receiver to a Spectracom TSAT timing board or any timing board that supports an external GPS antenna/receiver.

The GPS Optic Isolator's fiber optic technology makes it possible to transmit GPS timing information safely and securely over longer distances than are typically achieved with copper wiring. This fiber optic transmission is also the most reliable method of isolating the equipment involved, eliminating the risk of damage caused by lightning.

Satellite information is received through the GPS antenna/receiver and then passed to a fiber optic transmitter by way of a data cable. The fiber optic transmitter converts the signal and then feeds it to a fiber optic receiver, which then converts the data back and sends it to a GPS timing board. A 100 meter plenum-grade duplex fiber optic cable is also supplied.



Specifications

Size (Receiver & Transmitter)

4.5" deep, 1.25" high, 3.5" wide

Transmitter Unit

External Power Supply

Input: 90 V to 264 V AC, 50 Hz to 60 Hz

Output: 12 V DC 600 mA or better

Input Through DB15 Connector

RS-422 GPS Data

RS-422 1PPS

30 meter cable supplied

Receiver Unit

Power Requirements

Unit receives its power from the Timing Board

DB15 output connector

Output Through DB15 Connector

RS-422 GPS Data

RS-422 1PPS

3 meter cable supplied

Propagation Delay

80 ns plus 6 ns per meter of fiber optic cable

Multimode Cable

Attenuation

< 3.85 dB/km, at 860 nm

Bandwidth

> 170 MHz km, at 860 nm

Insertion Loss

< 13.5 dB, at 860 nm

Propagation Delay

< 6 microseconds

Type

Duplex with ST connectors

100 meter cable supplied

Ordering Information

GPS Optic Isolator Kit

Model P0972VZ