



## GPS Optic Isolator Kit

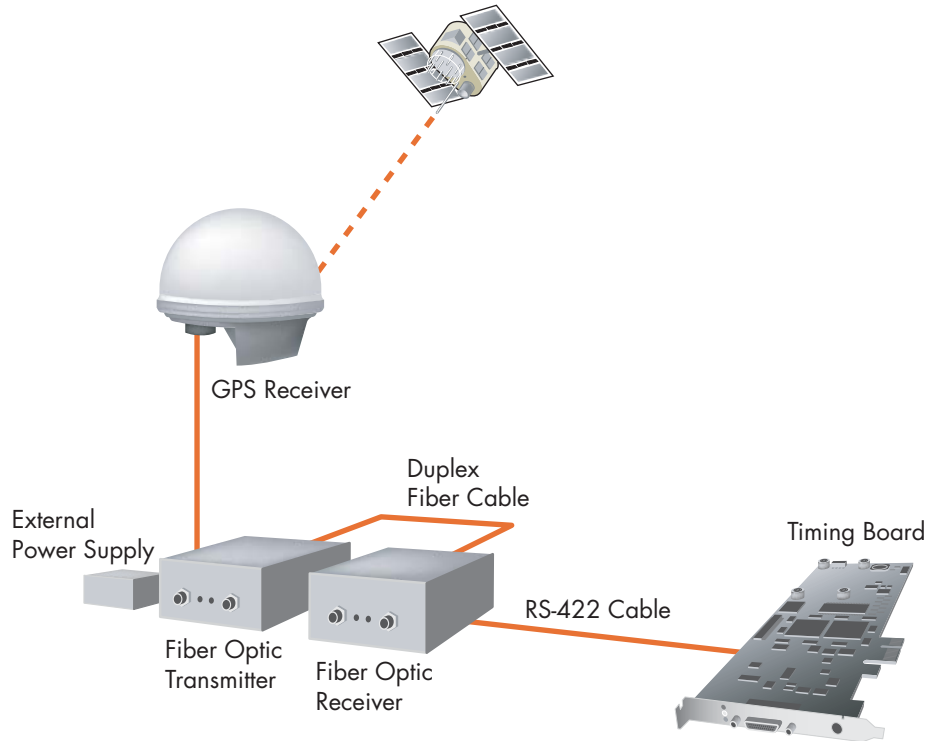


- Complete fiber optic GPS cabling system
- Supports long distances between antenna and equipment
- Isolates equipment from lightning damage
- Suited for highly secure environments

The GPS Optic Isolator is an off-the-shelf solution that offers long-run GPS signal 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 30 meter extension 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  
2 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**