

FO-converter (Fiber Optic Converter)



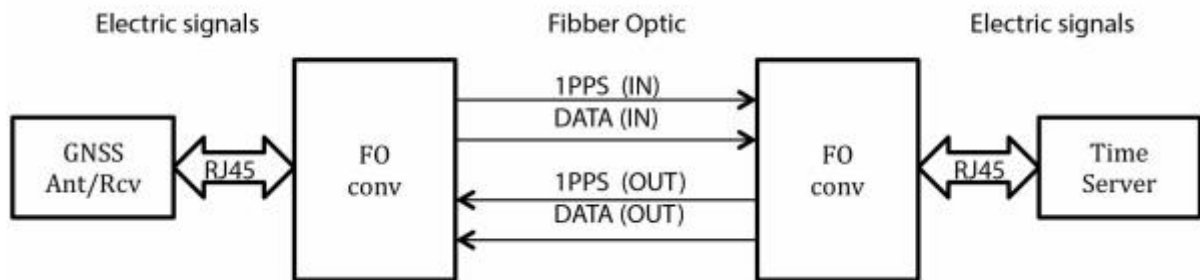
Electric signal side



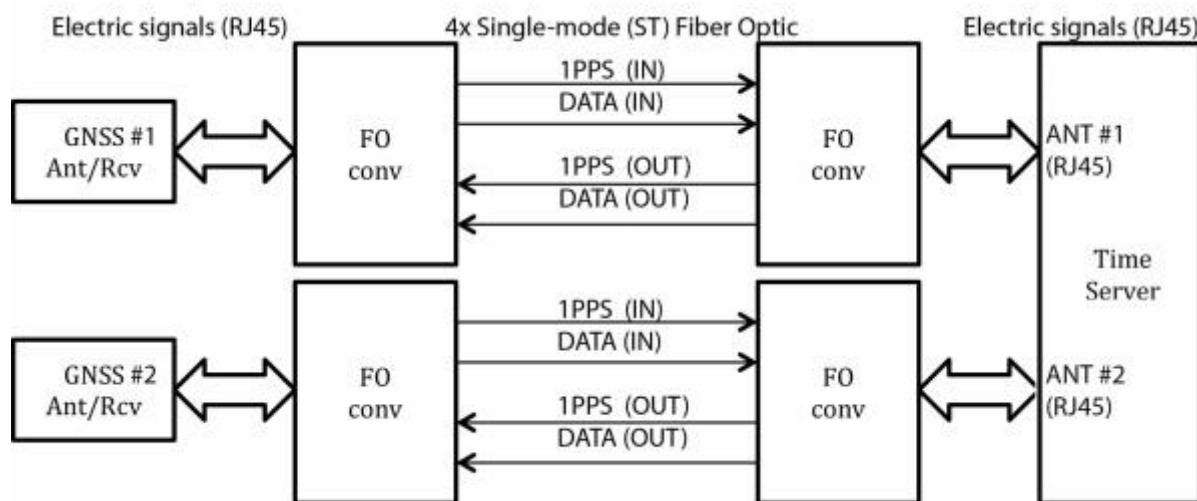
Fiber Optic side

The FO converter can be used to connect a GNSS MultiSAT receiver to NTS3000/4000/5000 Timeserver. The max. connection distance is 1.5 km (1 mile). Single antenna (A/B) requires 2 converters connected on each side of:

- GNSS Multi-SAT Receiver/Antenna (via RJ45)
- NTS-3000/4000/500 Time Server (via RJ45)

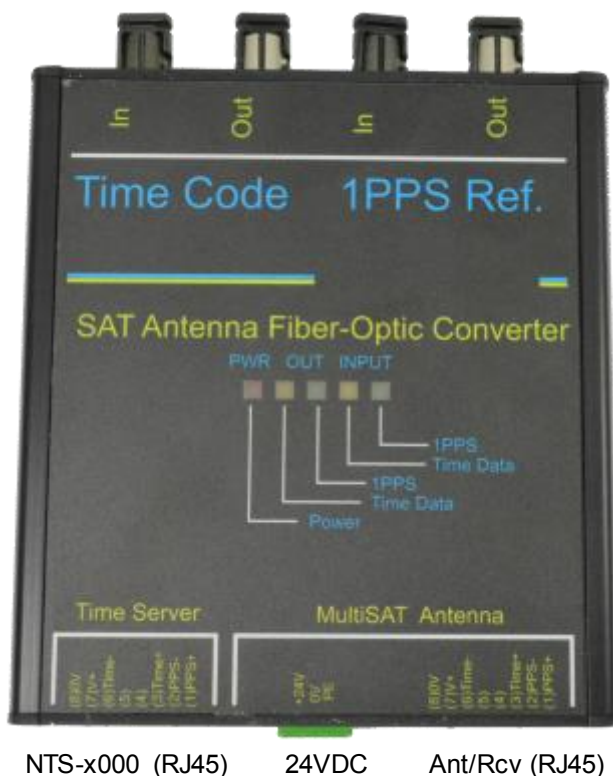


Connection scheme for single GNSS-Timeserver communication



Connection scheme for double redundant GNSS-Timeserver communication

ST single-mode fiber optic (conv2conv)

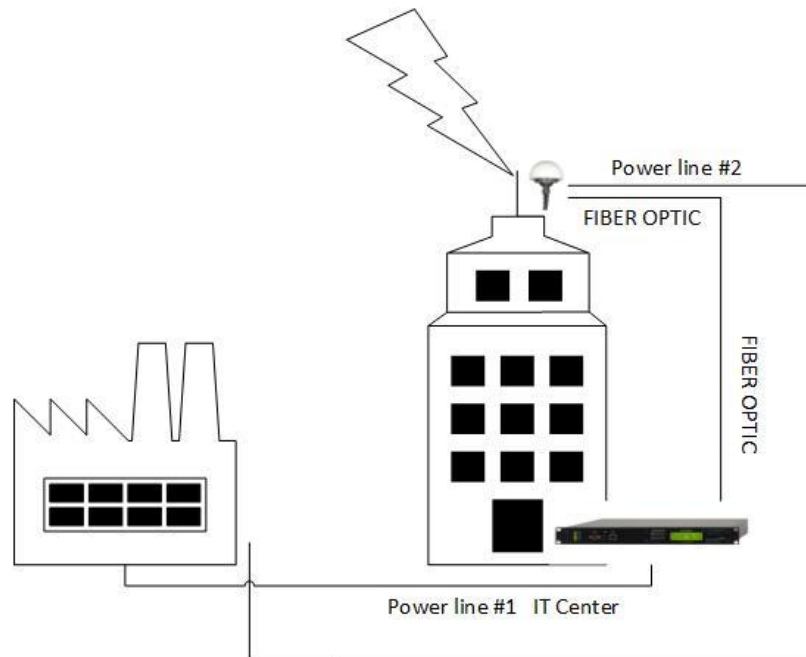


Quick installation:

1. Prepare 2pcs of FO-conv for each MultiSAT antenna/receiver. For Dual antenna system (A/B) use 4pcs of FO-conv (2pcs/antenna).
2. Connect FO-conv using single-mode (ST ended) fiber optic wire (top side of picture)
3. Connect FO-conv #1 to NTSx000 unit using UTP cat 5. Plug the cable into RJ45 connector of FO-conv labelled "Time Server". Another side of cable plug into NTS-x000 ANT#1 (or ANT#2).
4. Connect FO-conv #2 to GNSS Ant/Rcv using STP cat 5. Plug the cable into RJ45 connector of FO-conv labelled "MultiSAT Antenna". Another side of cable plug into NTS-x000 ANT#1 (or ANT#2).

Powering fiber optic converter (FO-conv)

FO-conv requires 24VDC. Unit #1 can be powered directly from NTS timeserver antenna connector (RJ45) located at back panel (label ANT1 or ANT2). Unit #2 is connected to GNSS MultiSAT Ant/Rcv and it is requiring external power supply.



GNSS receiver connected to electric circuit #2 does not interfere IT electric circuit #1 when surge

It is strongly recommended to use separated from main IT hardware 110/230V AC electric circuit. Since fiber optic is not caring electricity, using separate 110/230V AC powering (or solar panels) for GNSS MultiSAT Ant/Rcv makes solution 100% resistance for surge and overvoltage.