



**THE SOFO COMPENSATOR ALLOWS TO READ
SOFO LONG GAUGE DEFORMATION SENSORS
OF ACTIVE LENGTH > 5 METER**

Description

The SOFO 8/12 channels compensator allows to use the full SOFO Reading Unit measurement range.

It is packaged in a 19 inches 1U rack with connections in the front face.

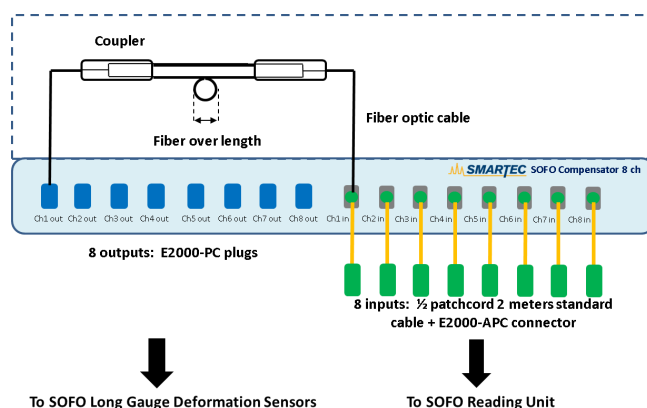
On the front face each of the 8/12 inputs and 8/12 outputs is interfaced between the SOFO Reading Unit and a SOFO sensor.

The main components are 2 optical couplers for each channel and fiber optic cable to guide the signal generated by the SOFO Reading Unit and reflected back by the SOFO sensors. The optical couplers split the signal in two paths and/or recombine the two signal paths into one path. Each couple of optical couplers are connected with fiber optic cable to allow the signal travelling from one coupler to the other. One fiber optic cable path has an over length in respect to the other one. This has the aim to partially compensate the signal path unbalance coming from the SOFO sensor and enable the SOFO Reading Unit to correctly process it. The compensator is used when SOFO Long Gauge Deformation Sensors of active length > 5 meter are deployed. SOFO Long Gauge Deformation Sensors of active length > 5 meter can return a path unbalance that is wider to the one that SOFO Reading Unit is able to process. For the SOFO Reading Unit being able to properly measure large deformations on long sensors, it is necessary to compensate such return signal by using a compensator.

The compensator is completely passive, all fiber optic layout without electric components and no power supply.

Key Features

- Packaged in 19" 1U rack module with connections in the front face
- Available with 8 or 12 channels
- All fiber optic layout
- Completely passive
- No electric components
- No need of power supply
- Compatible with SOFO Light and SOFO VII



Compensator functioning and architecture