



OPGWatch®

Enhance grid reliability using
Distributed Fiber Optic Sensing

ABOUT PRYSMIAN

Prysmian is a global cabling solutions provider leading the energy transition and digital transformation.

With 150 years of experience, Prysmian has been established as a leader in the energy transition and digital transformation. Founded in 1879, Prysmian has grown into a global leader in the production of electrical and fiber-optic cables. Since 1983, our Excellence Center in Barcelona, Spain, has been producing Optical Ground Wire (OPGW), contributing to our extensive expertise in fiber-optic technology. The acquisition of Omnisens S.A. in 2021 has further strengthened Prysmian's capabilities in long-distance fiber optic sensing solutions, enhancing our ability to meet the evolving needs of the industry.

MONITORING SYSTEM

OPGWatch® detects events in real time across the overhead lines using only one fiber from installed OPGW cable. This system allows managing these critical infrastructures increasing **efficiency, reliability** and **safety**.

No extra sensors on the line

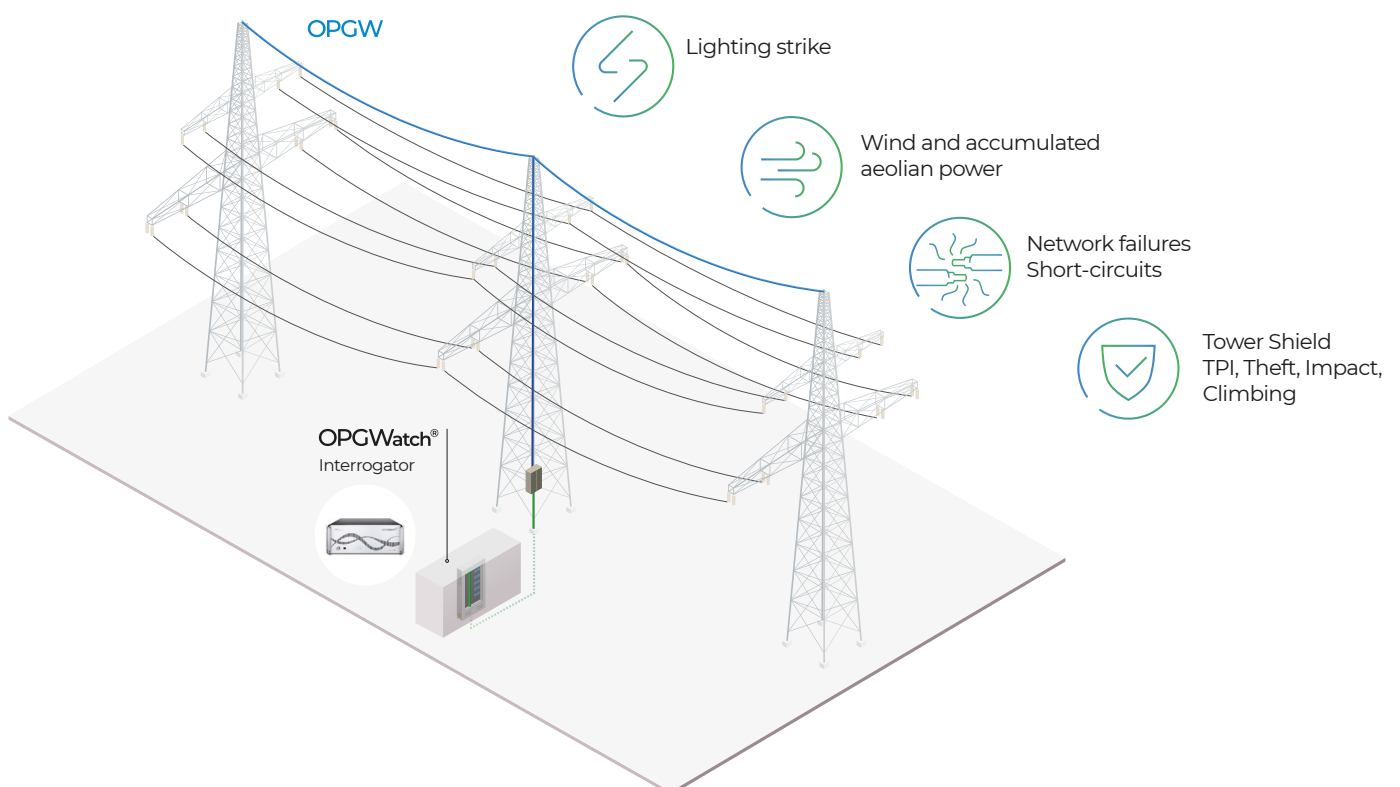
OPGWatch® accurately collects data along the entire length of the fiber, functioning as a continuous sensor and eliminating the need for additional devices installed on the line.

Does not require line shutdown

OPGWatch® interrogator is placed in a substation and does not need to have extra hardware installed on the line, so it can be installed on live lines.

Uses one of the existing fibers

The system only requires one dedicated fiber per installed OPGW and accurately analyzes data and classifies events triggering alarms.



KEY USE CASES

The system monitors, among other events:



Tower Shield

Improve security by knowing the location in real time of vandalism incidents or other safety hazards such as theft, intrusion, impact, climbing.



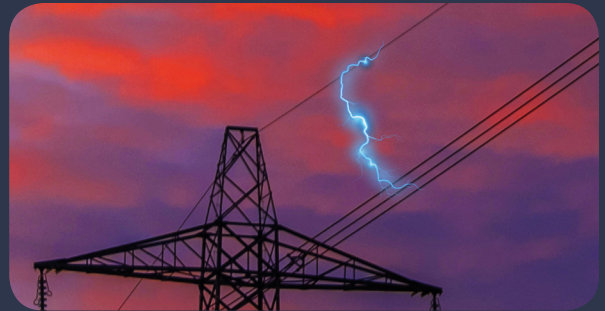
Wind and Accumulated Aeolian Power

Identify critical spans exposed to winds and weather events along the line. Unlike punctual sensors, which are limited to monitoring specific fixed locations, OPGWatch® provides continuous, real-time data across the entire monitoring range.



Lightning

Reduce OPEX by eliminating supervision activities after a storm. Prevent network interruptions due to undetected damages on cables.



Short circuit

Reduce interruption time and cost by knowing in real time the exact location of the event.

DETECTING EVENTS FOR A RELIABLE SERVICE



Highly
scalable



Simple and
fast
installation



Predictive and
preventive
maintenance



ROI increase
& cost of
ownership
reduction

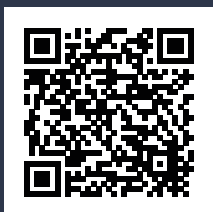


Existing
fiber
infrastructure



OPGWatch®

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