

directly from the transmission line

# gridpulse® WEATHER

The reliable source for weather data directly from your line – makes highly accurate grid load predictions and Dynamic Line Rating possible



reports from installed sensors continuously empower system operators to make better and accurate decisions



# **INTERESTED?** LET'S TALK.

CONTACT ONE OF OUR EXPERTS



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Transmission lines are the lifelines of our modern world. They require maintenance and we believe that the people and organizations operating those lines deserve the best information available to be able to provide the best possible service in terms of reliability and performance -that's where Gridpulse comes in.



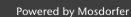


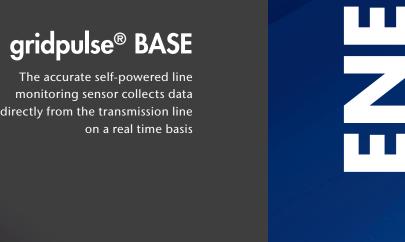












DISCOVER GRIDPULSE The Transmission Line Monitoring System developed by and for industry experts

**EMPOWERING GRIDS** 

AND THE PEOPLE

WHO RUN THEM



Reduce carbon footprint utilizing existing OHLs



Increase safety of grid operation



Make fact-based decisions



Safely increase hidden capacity



Identify critical areas before problems occur



Gain insights from multiple locations

# **WE GENERATE DATA AND TURN IT INTO KNOWLEDGE**

Line Temperature

Icing Detection

**Weather Prediction** Camera

**Ampacity Prediction** 

OnBoard High Resolution

**Line Conditions** 

Voltage Measurement

Sag & Clearance

Motion Detection

Integrated GRIDPULSE system collects precise measurements of the line with a gridpulse® BASE sensor installed.

Based on the gathered data, critical events such as icing can be anticipated early and operators can take real time corrective actions to avoid critical situations before they occur.

The best-in-class **gridpulse**® **CONNECT** software processes all gathered data turning it into reliable and accurate basis for intelligent decisions.

Intelligent software is able to predict ampacity affording operators the ability to efficiently operate electricity flows on the grid.

In combination with gridpulse® WEATHER, weather conditions can be precisely predicted for monitored locations of your lines providing necessary data for Dynamic Line Rating.

# THE PROCESS THAT **EMPOWERS REAL TIME ACCURATE DECISIONS**



















### Analysis

Together with system operators our experts assess the individual needs of the grid driving the most suitable monitoring solution. Mosdorfer has a proven track record over many years of Transmission Line Grids and system operations.

system should not create problems itself.

## Offering

Based on technical needs a tailored offer is created for specific situations with regard to sizing, investment and desired features.

### Installation

It's not just about mounting the sensor our service team is ready when you are to deliver a plug & play experience.

### Online

Once online, operators are empowered by actionable insights on the grid.



Our aim is to make our solutions easy to use – from first contact and analysis of your individual challenges to configuration, installation and operation of your defined We believe that in order to solve problems a good

With the experiences we have from many installations worldwide and our overall expertise in the field of transmission line components provided by Mosdorfer, customers benefit from our combined knowledge and experience from the start so operators can focus on the things that are more critical to their daily activities.

#### Technical data

Outside dimension (w x h x l)	315 x 298 x 315 mm
Weight	< 9 kg
Diameter conductor range	from 15 to 45 mm

Frequency	50 Hz (60 Hz)
Operating Temperature of gridpulse® BASE	from -40 to +85°C
Conductor temperature	from -40 to +200°

Tested in accordance to all relevant standards.

Harvesting of energy from conductor



#### Features and capabilities of gridpulse® BASE:

- autonomous power harvesting from phase conductor
- fire resistant composite housing
- connectivity to the **gridpulse**® **CONNECT** software via GSM, WiFi, LoRa, LoRaWAN, or satellite
- GPS localization
- high resolution camera

#### Measurement of:

- conductor temperature
- conductor inclination
- current, voltage
- ambient temperature
- ambient humidity
- vibration
- global radiation\*
- wind direction and speed\*

#### Calculation of:

- sag/clearance
- conductor creep
- icing/de-icing
- ampacity (with prediction)/dynamic line rating\*
- \* with/without **gridpulse® weather**, meteorological weather data and **gridpulse® connect** modules

