



ALM-1 Line Monitor



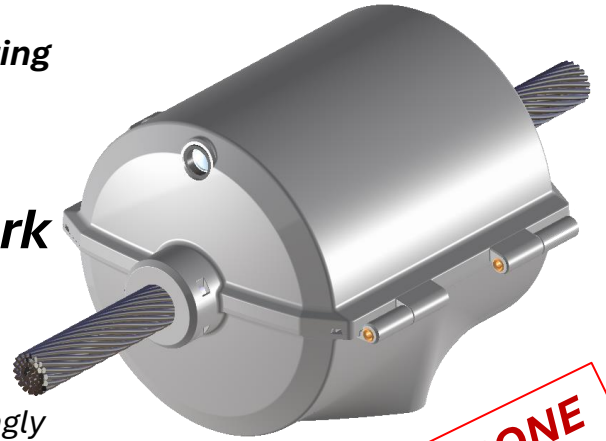
ALM-1

Is a patented device developed by Algortec for monitoring, surveying, managing and communicating in real time all physical, environmental and mechanical parameters of power lines

For future challenges of the network

Climate change requires a necessary transition towards higher energy efficiency and an ever-increasing use of renewable sources, preferably electrical

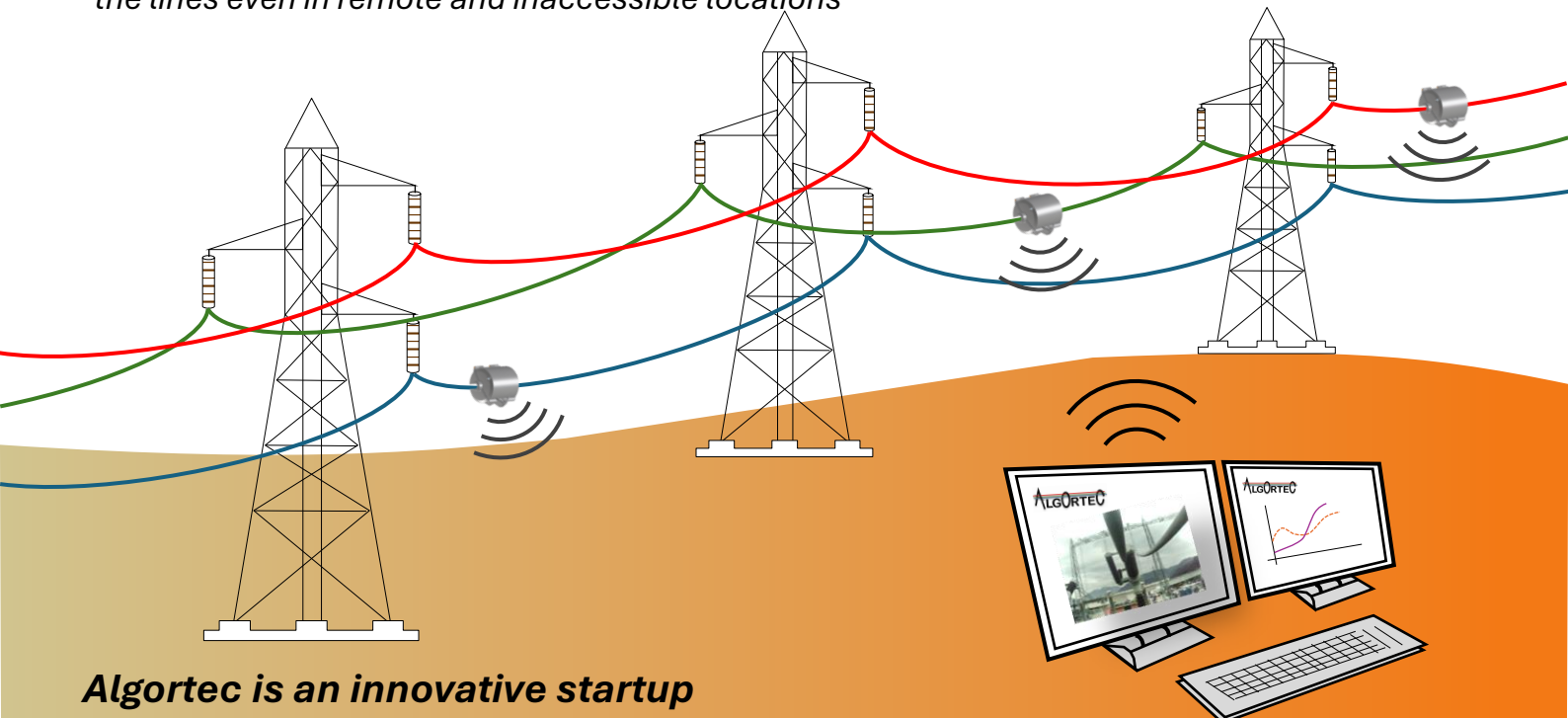
In the future, the electricity grid will therefore be increasingly used and strategic for the transport of energy produced by renewable sources and for this specific reason its management must be as efficient and effective as possible



INSTALLED WITH DRONE

For a more sophisticated DLR

ALM-1 measures, collects and transmits in real time to the control system of the network operators all the information and static and dynamic variables of the network itself and/or the surrounding environment, which have a direct impact on the performance of the power lines
In DLR (Dynamic Line Rating) activities, **ALM-1** allows the maximization of the transported load according to the environmental conditions, ensuring its safety, as well as the remote management of the line for predictive maintenance and the identification of the conditions of the lines even in remote and inaccessible locations

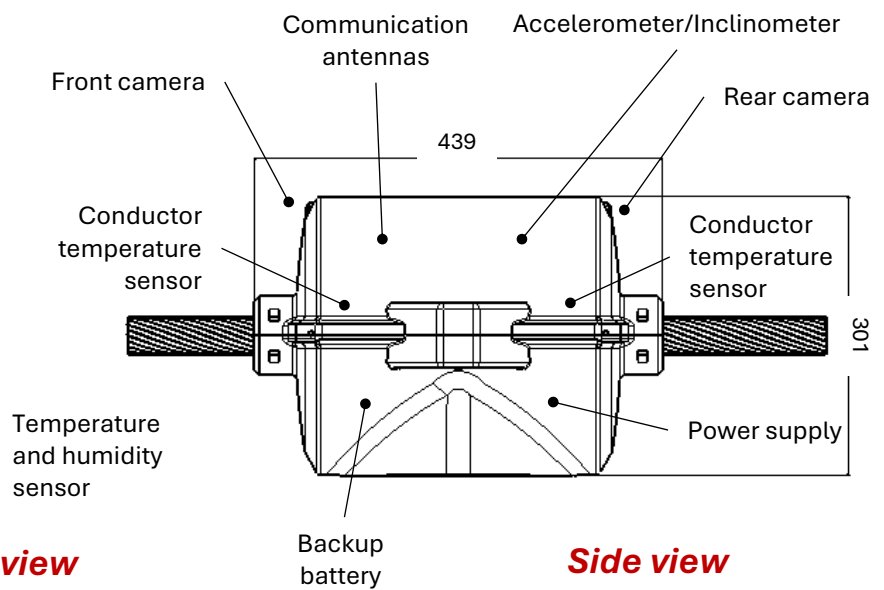
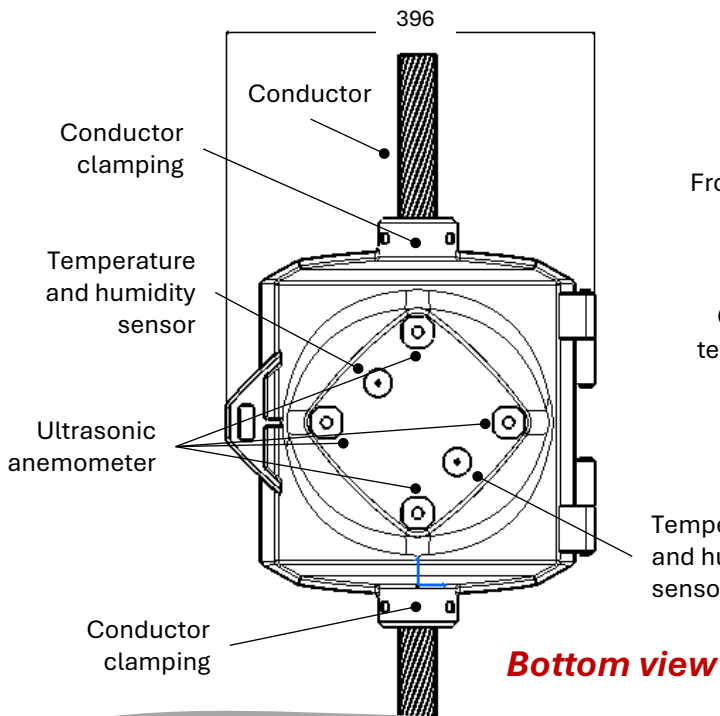


Algortec is an innovative startup accredited by the University of Trento

<https://www.unitn.it/ricerca/95377/start-up-a-unitrento>

Main technical features

- Self-powered with double magnetic core
- «Linux based» control board
- Double conductor temperature sensor
- Double humidity and ambient temperature sensor
- Current sensor (20 ÷ 1.000) A
- Accelerometer / Inclinator
- Atmospheric discharge sensor
- Ultrasonic anemometer
- Front and rear camera
- Signal LED
- Backup batteries for 48 hours



Minimun current	20 A
Maximun current	1.000 A
Line diameter	(26÷42) mm
Operating temperature	(-30 ÷ +50) °C
Max line temperature	105°
Wind sensor speed range	(0 ÷ 50) m/s
Wind sensor speed resolution	0,1 m/s

Communication systems	2/3/4 G – LoRaWAN – Wireless Mesh - Satellite
Weight	14 kg
Optical camera	2 x 5 Mpixel
Battery autonomy	2 days
3-axis accelerometer	+/- 16g
GNSS positioning, constellations	GPS, BeiDou, GLONASS, Galileo

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