

Accelerate grid digitalisation and serve your customers 24/7

We offer best value and innovative IoT solutions to monitor your MV/LV grid and localise faults efficiently.

Our solution →

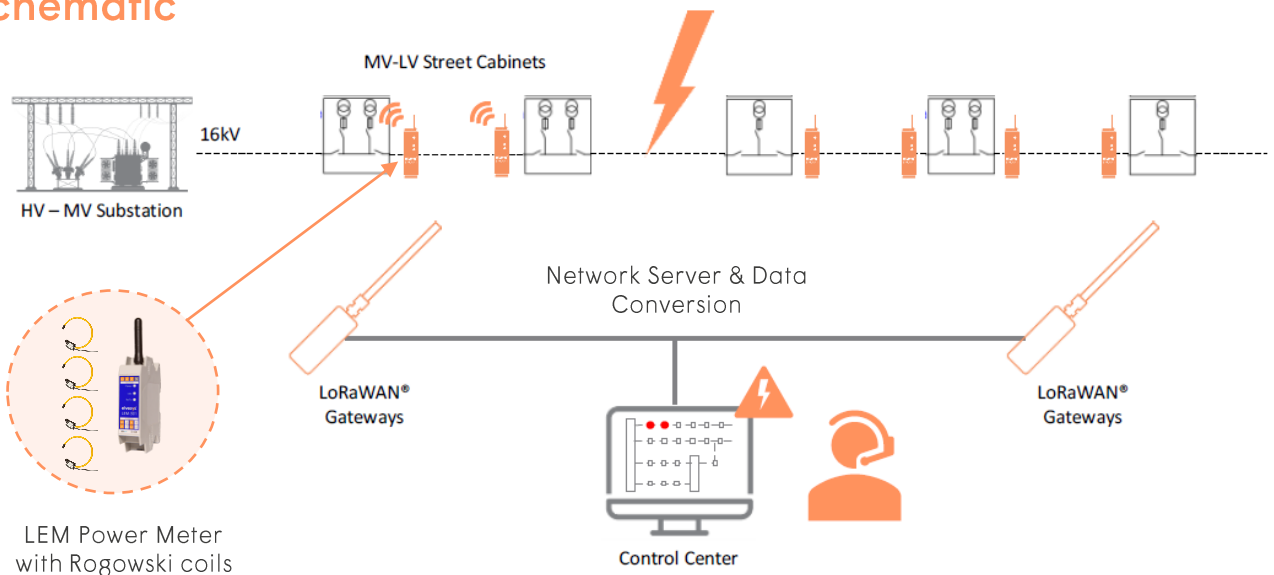
Smart, wireless LoRaWAN[®] power meters deployed at MV/LV stations, communicating through a private or public LoRaWAN[®] network with your SCADA system.

It's simple and effective.

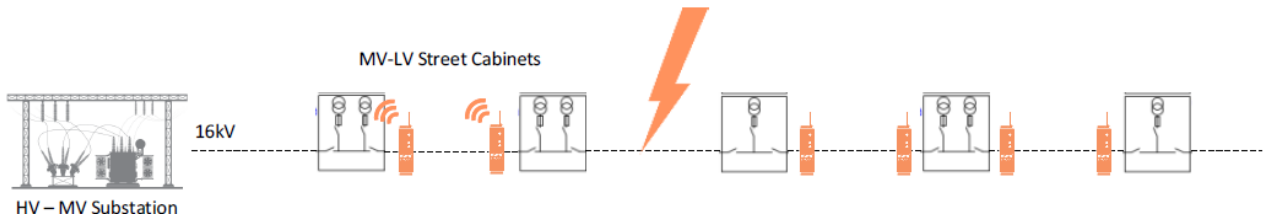


- ✓ **Monitor your grid cost effectively 24/7**
Get an overview of feeder and equipment loading
- ✓ **Increase primary equipment lifetime**
Reduce re-switching by localising faults
- ✓ **Reduce interruption time by up to 98%**
Localise faults in seconds instead of hours, fully remotely
- ✓ **Have your own LoRaWAN[®] network**
Offer services, read water, gas meters and other sensors

Schematic



How it works

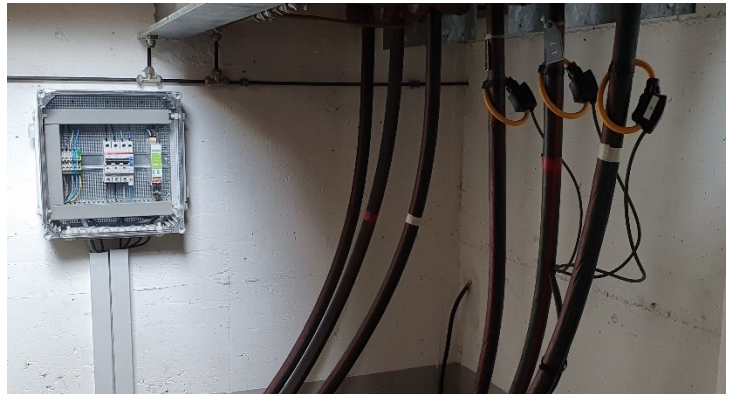


Normal Operation

- Measurements | Each 15 min
 - Average RMS current per phase
 - Max RMS current (40 ms) per phase
 - Average RMS voltage (LV) per phase

Fault event

- 1 Fault ⚡
- 2 Current peak measured
- 3 Feeder shut down
- 4 Transmission to SCADA
 - Phase exceeded the threshold
 - RMS current (40 ms) per phase



Reference Case



Switzerland, Wallis Canton, Multi Utility DSO

Challenges →

Monitor cost effectively the electricity loads and reduce interruption time by localising faults in the MV network

Semi Urban & Rural Network with long MV feeders supplying electricity in the valleys.



Oiken's private LoRaWAN[®] network deployed

Gradual extension of coverage over the territory

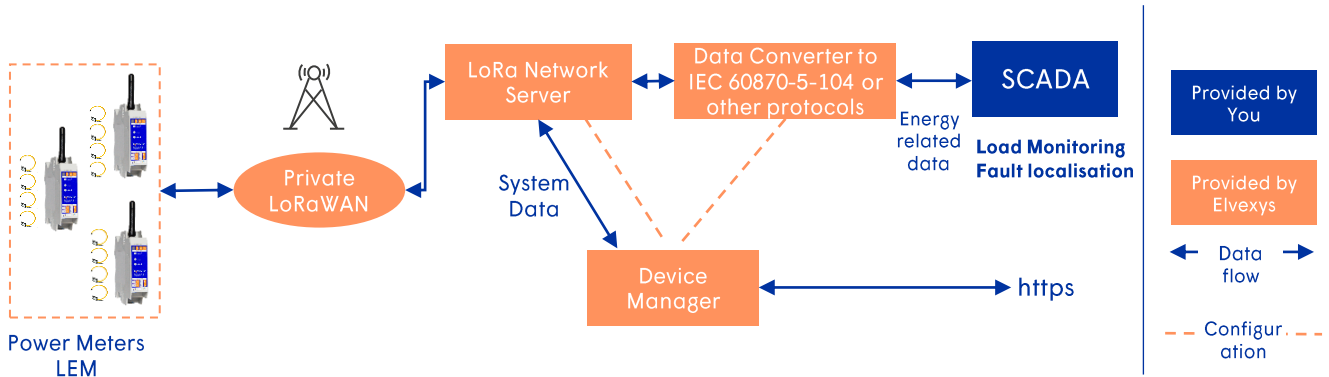
20 LEM-302 in operation

Deployment of 100 in progress

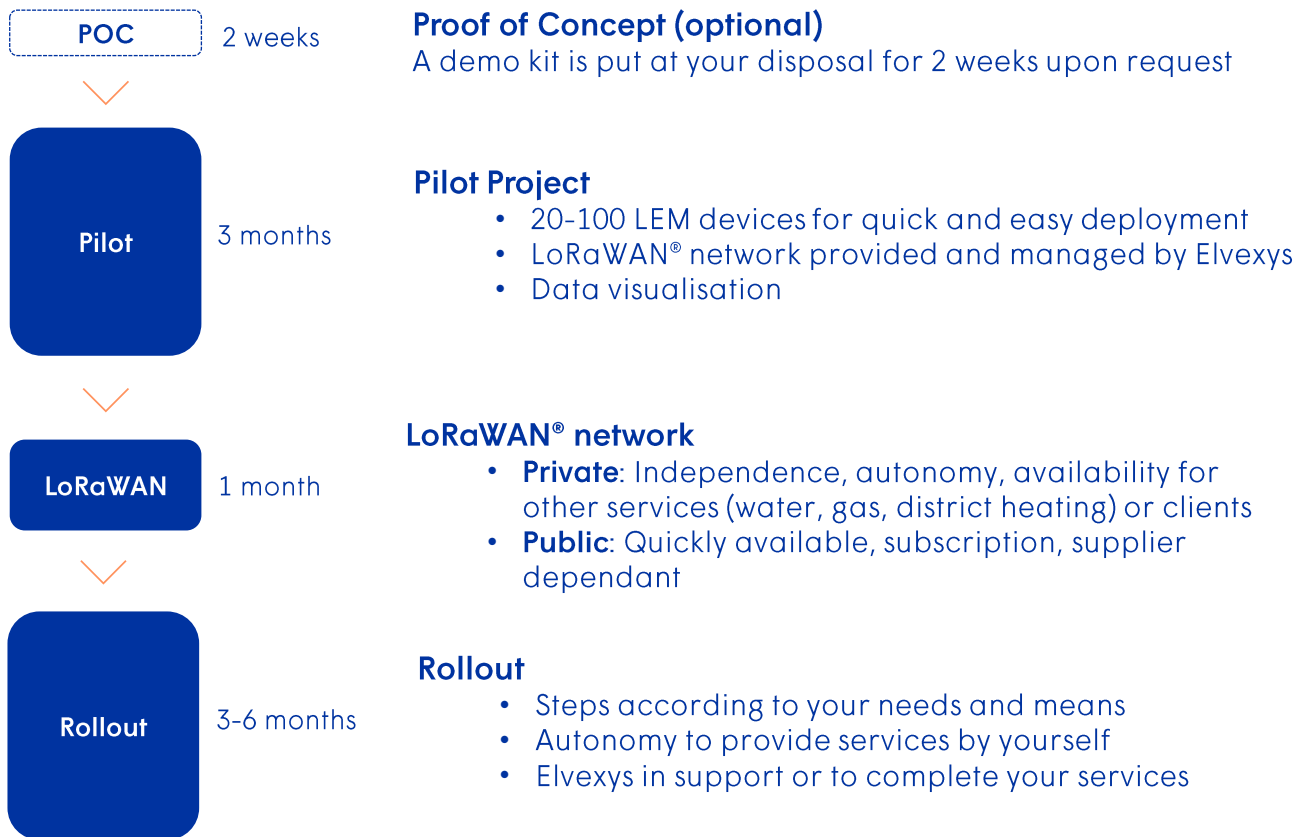
Data provided to the SCADAs

via IEC 60870-5-104

Integration into your environment



How to get there with us ?



Would you like to get more information ?

We would be happy to discuss your specific needs and evaluate together how you could benefit from Elvexys' best value, innovative IoT solutions.

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