The intelligent answer to voltage fluctuation

Introducing Minera SGrid, the regulated transformer for smart-grid challenges

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Maintain voltage stability while integrating more distributed generation

Even as new sources of distributed generation are integrated into your network, it's possible to maintain voltage stability — and it's simpler than you think.

Minera SGrid from Schneider Electric takes the proven benefits of regulated distribution transformers a step further. It's the compact, reliable smart-grid transformer that fits your network and your customers' needs.

So if you've ever wondered if all this is possible, the answer is yes. You can maintain voltage stability while integrating more distributed generation — easily and cost-effectively.

Learn more about Minera SGrid

An innovative application of proven technology

Minera SGrid solves the modern problem of voltage fluctuation using field-proven components:

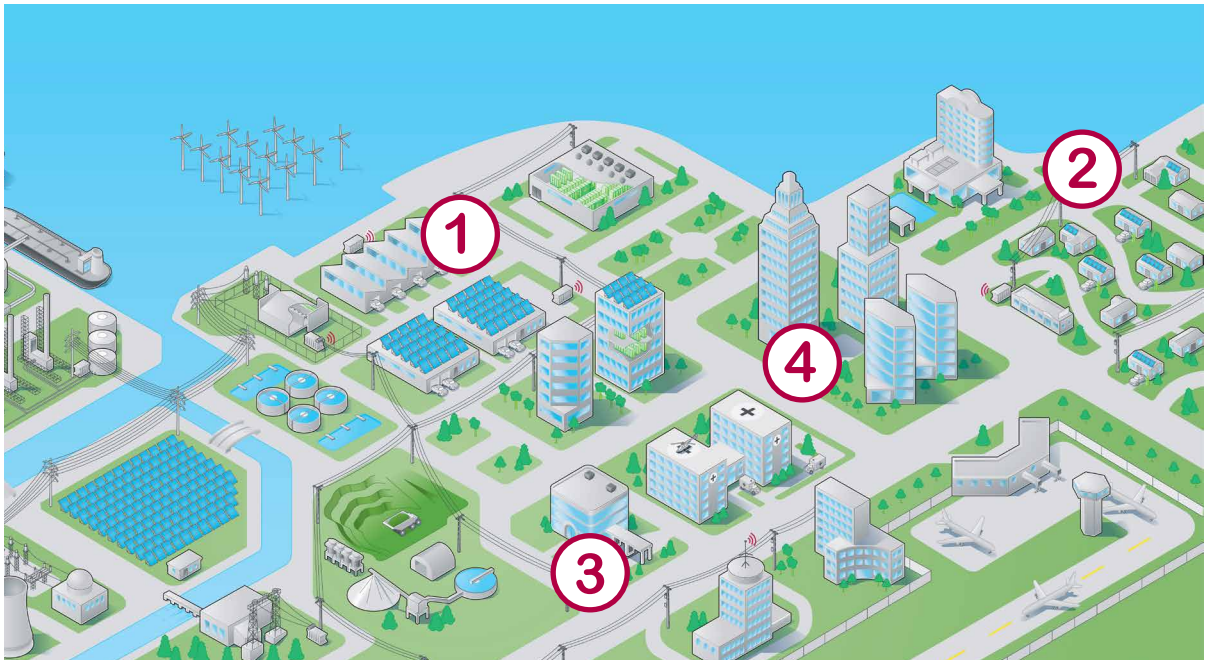
- A serial transformer working together with the conventional active part
- A set of low-current LV contactors
- A PLC to control operations

So how does it work? The serial transformer keeps voltage output within a specified range by using the contactors to manage the step process. Most importantly, the components are arranged in a design that greatly simplifies maintenance and makes it easy to adjust regulation as needed — offering peace of mind to network operators and reliability for users.

Discover Minera SGrid benefits

Minera SGrid automatically regulates voltage throughout your network

Click the numbers to learn more:



Minera SGrid provides stability for both utilities and private networks

Minera SGrid technical specs

Watch the video

Choose the regulation strategy that best fits your network

- **Basic regulation:**
  You define a set voltage point. Regulation occurs to keep the transformer output value at the set point.
- **Line drop compensation:**
  You have two alternatives: regulation based on line characteristics or regulation depending on transformer power output.
- **Remote point regulation:**
  You choose to regulate output voltage based on measurements taken at different points of the network to ensure all points remain within a defined voltage band.

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For more information about Minera SGrid, visit us online today!
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Appendix

Make voltage fluctuation a thing of the past

Improve network stability with a plug-and-play smart-grid transformer

Minera SGrid is:

Plug-and-play ready, for optimized investment costs

- Simple installation
- Suitable for existing distribution substations
- Designed for autonomous operation
- Compliant with existing standards and new regulations
- DMS-ready product
- Global support with your local Schneider Electric™ field services team

Highly customizable

- Voltage range and step number tailorable for more precise regulation
- Special requests: any MV voltage up to 36 kV, oil, low losses
- Remote supervision capability

Proven technology, designed for compliance

A smart choice for new substations and existing locations

Minera SGrid is a regulated distribution transformer created to help distribution network owners eliminate the risk of voltage fluctuation. It's an innovative answer to voltage regulation, helping you significantly improve network quality.

Minera SGrid brings:

Improved network quality

- Automatically stabilizes the output voltage
- Very wide regulation range thanks to innovative technology
- Increased production of decentralized energy without risk of voltage band violations

Enhanced reliability and ultra-low maintenance

- No moving mechanical parts inside transformer tank
- Robust design with proven industrial components
- No power electronics

Minera SGrid at a glance

Rated power (kVA)	160	250	400	630	800	1000
Technology	Hermetically sealed transformer					
Cooling type	ONAN					
Max ambient temperature	40 °C					
Altitude	1000 m					
Nominal frequency	50 Hz					
High voltage	Selectable – up to 36 kV insulation voltage					
De-energized tappings	5 positions +/-5% Other configuration on request					
Secondary voltage at no load	Selectable – 1.1 kV insulation voltage					
On load tappings	5 positions +/-5% (9 positions +/-10%) configuration on request: symmetrical/asymmetrical – step value					
Vector group	Dyn5 – Dyn11 (other coupling on request)					
No-load losses	A0 as per latest regulation (other losses configuration available on request)					
Load losses at 75 °C	Bk as per latest regulation (other losses configuration available on request)					
Impedance voltage	4 – 6%					
MV/LV winding material	Al/Al or Cu/Cu on request					

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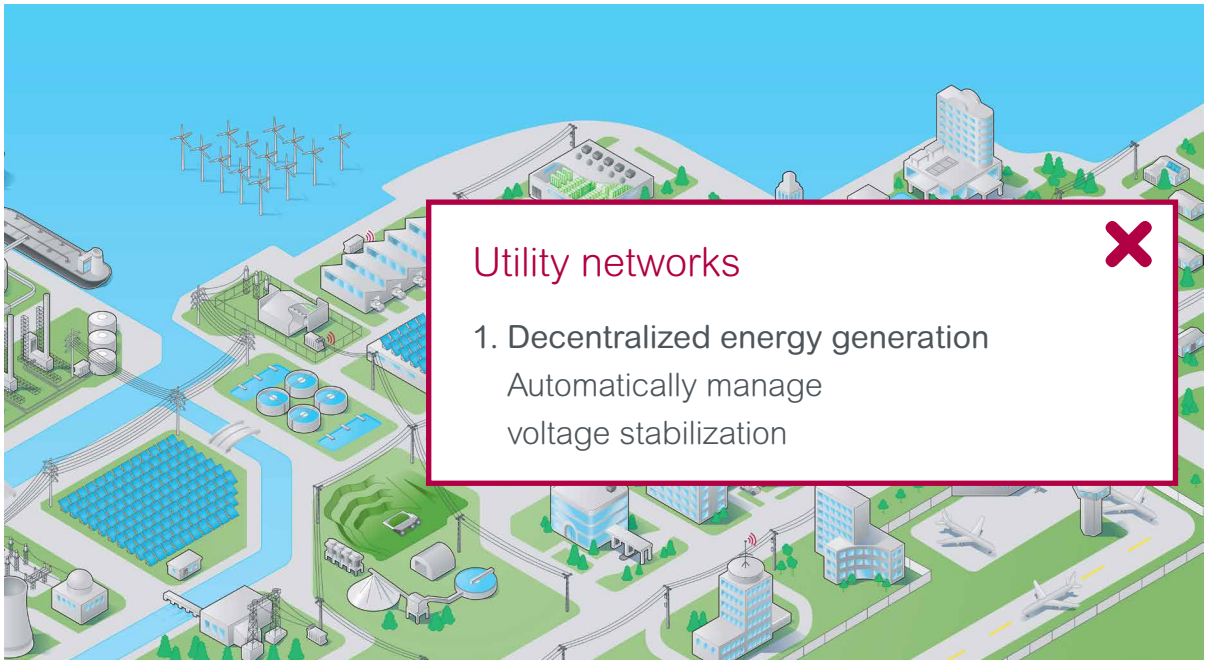

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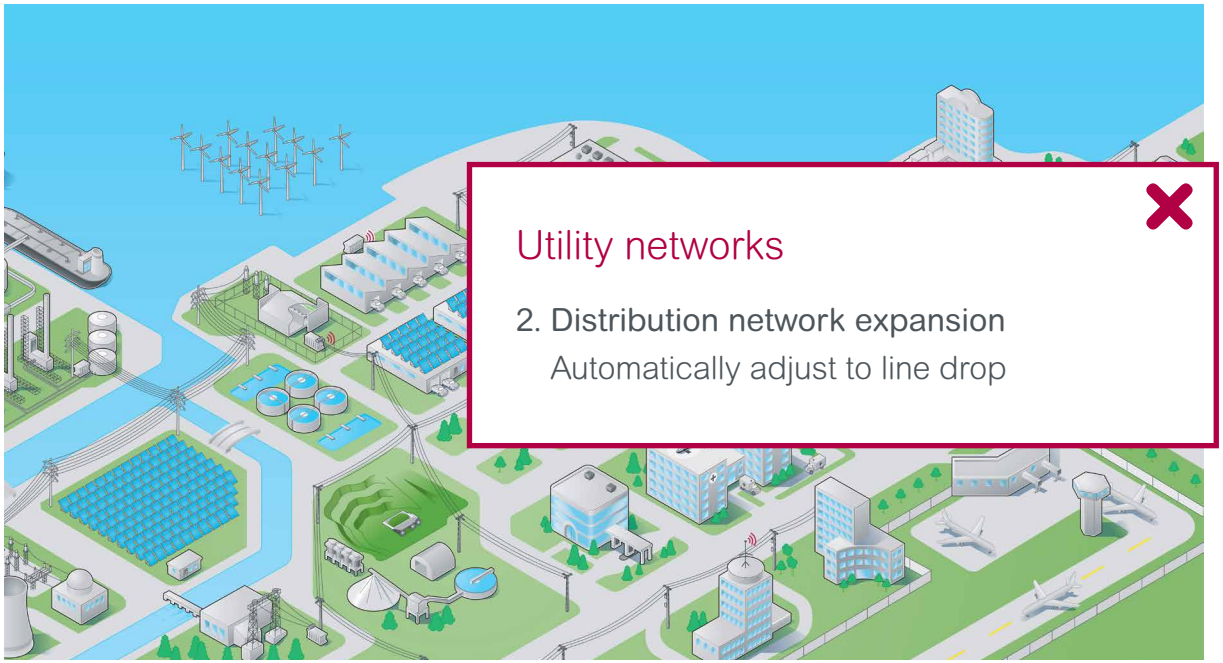

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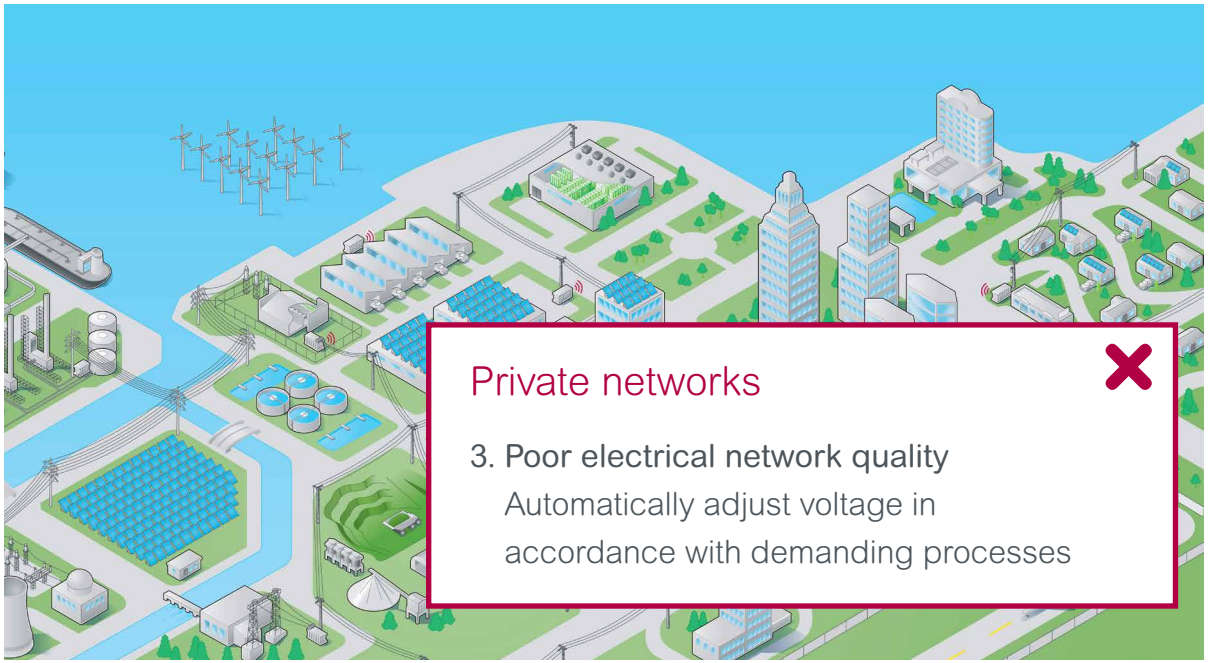

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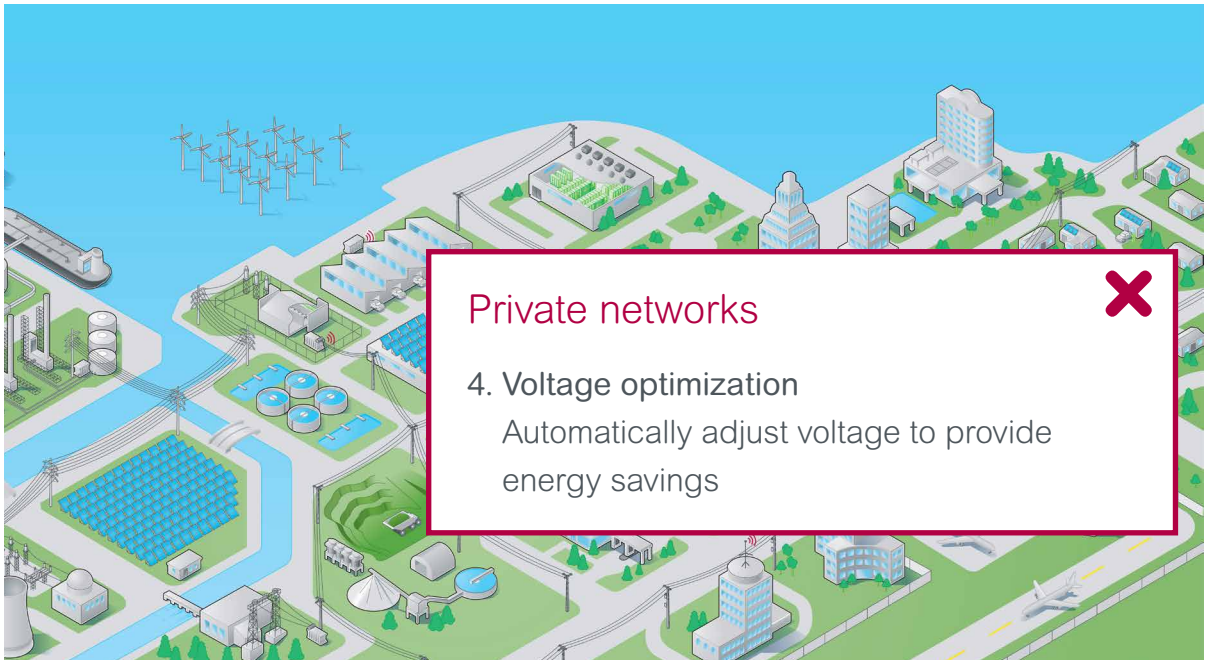

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