



# LANDIS+GYR GRIDEDGE PROTECT

## INTRUSION DETECTION AND PREVENTION FOR MANUFACTURERS AND OPERATORS OF CRITICAL DISTRIBUTED IIOT ASSETS



### REDUCE THE RISK OF IIOT CYBER INCIDENTS

through endpoint monitoring and intrusion detection



### ENABLE FAST IIOT ATTACK MITIGATION

through anomaly detection and security automation



### BRIDGE THE IIOT SECURITY SKILLS GAP

with services tailored to your needs

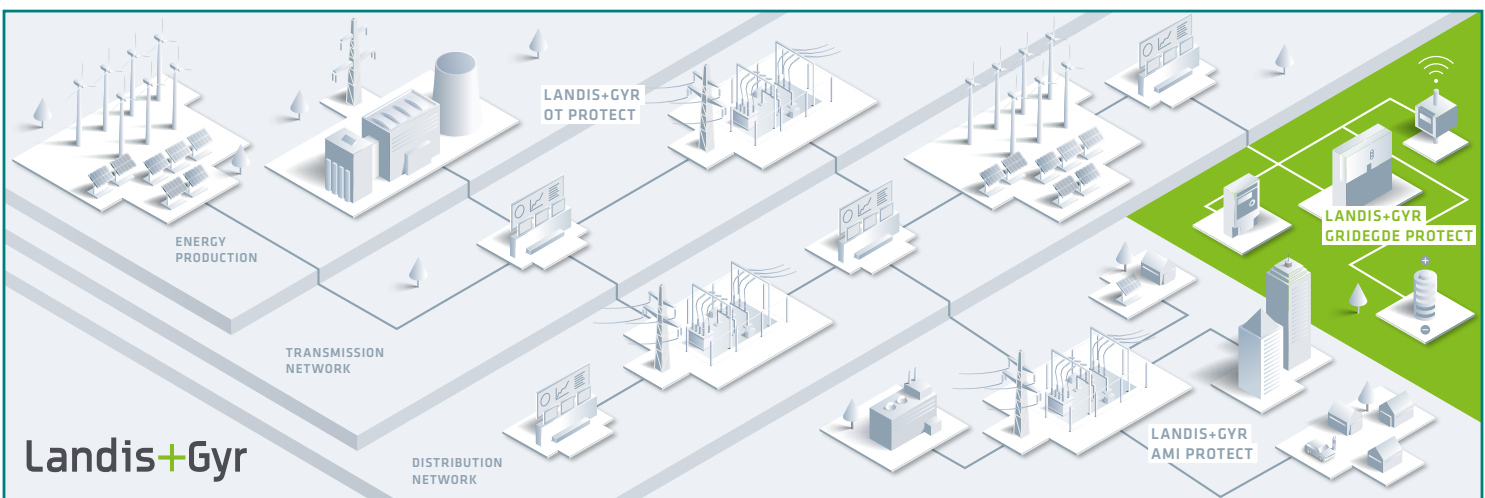
»When selecting an IDS for our distributed energy storage systems, it was particularly important to us that monitoring and security automation are specifically tailored to our devices and can be expanded at any time. Because both our technology and the threat landscape are constantly evolving.«

Daniel Ackermann | Director Software Development | Sonnen

Landis+Gyr GridEdge Protect enables manufacturers and operators to secure their critical IIoT assets and networks, ensure security compliance and save downtime money. The solution by Landis+Gyr security portfolio Rhebo is designed to establish effective industrial cybersecurity on energy storage systems, electrical charging stations and other high-value distributed IIoT assets without overburdening

the processing capacity of the devices. It provides all functionalities to stop attacks right at the edge and to detect threats before operational failure occurs. Landis+Gyr also supports vendors with operating the edge intrusion detection system as managed services to bridge the prevailing skills gap and staff shortages.

## LANDIS+GYR GRIDEDGE PROTECT: DEDICATED & LIGHTWEIGHT



# DISTRIBUTED IIOT DEVICES ARE SMART BUT VULNERABLE TO THREATS

The number of smart devices is growing in industrial networks. This is not limited to operational technology (OT) environments which can be easily secured with Landis+Gyr OT Protect. More and more highly distributed infrastructures such as energy storage systems, electric charging stations and intelligent demand site response systems are leveraging smart capabilities. They often communicate with the central operating platform via the public internet and cloud services. In addition, the assets are accessible to physical intervention and involve a variety of users, including local maintenance contractors and residential customers. As a result, IIoT assets are particularly exposed. A single compromised device can also infect the

entire fleet in the absence of security mechanisms. This is even more likely with novel attack patterns, advanced persistent threats or zero-day vulnerabilities. This complex risk surface makes distributed critical IIoT assets vulnerable to large scale threats like ransomware, DDoS attacks, botnets or orchestrated disruption. A successful attack will have widespread negative impact on operations and customer retention worldwide. Hence, manufacturers and operators of distributed critical IIoT devices need an intelligent, automated intrusion and threat detection and prevention system that identifies even novel attack patterns and minimizes fleet risk through intelligent and local security automation.

»The cybersecurity of our energy storage systems provides safety for our customers worldwide.«

Daniel Ackermann | Director Software Development | Sonnen

## ENDPOINT DETECTION & RESPONSE FOR GLOBAL IIOT SECURITY

Landis+Gyr GridEdge Protect enables manufacturers and operators of critical IIoT assets to ensure the availability, integrity and security of their distributed high-value infrastructure. Landis+Gyr GridEdge Protect utilizes the tried-and-tested OT Protect intrusion and anomaly detection system for industrial environments and tailors the solution to the specific needs of IIoT devices:

- minimum use of CPU;
- minimum use of bandwidth;
- local security automation (e.g., blocklisting);
- simple global distribution via containerized agents;
- remote maintenance.

Landis+Gyr GridEdge Protect is integrated directly on the IIoT device as an endpoint detection and response solution. This deployment architecture enables local detection and mitigation of attacks, thus preventing lateral movement, spill-over and progressive threat propagation.

The integrated anomaly detection learns the authorized communication of all devices within a few hours.

During operation, all communication is monitored both on and between the IIoT devices and the cloud-based IIoT management platform. Detection of specific security-related incidents on an IIoT device (optionally) triggers the local security automation thus blocking the malicious communication directly on the affected device. Additionally, any security incident, e.g., due to configuration or novel communication changes or technical error states, is reported as an anomaly. This enables fleet operations to localize risks to availability and decide on effective mitigation measures fast and focused. Landis+Gyr GridEdge Protect is available as customer-operated as well as managed services. That way, manufacturers and operators of distributed IIoT assets can rest assured while focusing on their core business.

# SIMPLE AND EFFECTIVE 3 STEPS TO GLOBAL IIOT SECURITY

1



The first easy step to IIoT security:  
**Rhebo Industrial Security Assessment**

## Cybersecurity starts with visibility.

The Rhebo Industrial Security Assessment creates a profound understanding of your IIoT assets, communication structure and risk exposure. Depending on your requirements the step includes a risk exposure assessment of the IIoT assets and the control platform via communication monitoring as well as a pentest of selected IIoT devices.

## You profit from

- the analysis of all communications between the devices and control platform including protocols, connections and communication behavior;
- the assessment of existing CVE-documented vulnerabilities;
- the identification of risks and security gaps;
- a detailed report and workshop with recommendations.

2



The seamless transition to comprehensive IIoT security:  
**Rhebo Industrial Protector**

## Tailored cybersecurity that works locally to protect globally.

The Landis+Gyr GridEdge Protect solution Rhebo Industrial Protector is an industrial security monitoring system with integrated intrusion and anomaly detection. Running agent-based on your IIoT assets it detects all anomalies and reports them in real-time to the control center. Optionally, security policies can be defined for automatic local mitigation measures.

## You profit from

- an IIoT security solution tailored to your security automation needs;
- real-time visibility of communication behavior of all IIoT assets (protocols, connections, frequencies);
- real-time reporting of security events and technical error states;
- attack mitigation on device-level to prevent threat propagation into the network;
- high scalability through containerized agents.

3



The recipe to peace of mind.  
We monitor  
so you don't have to:  
**Landis+Gyr Managed Protection**

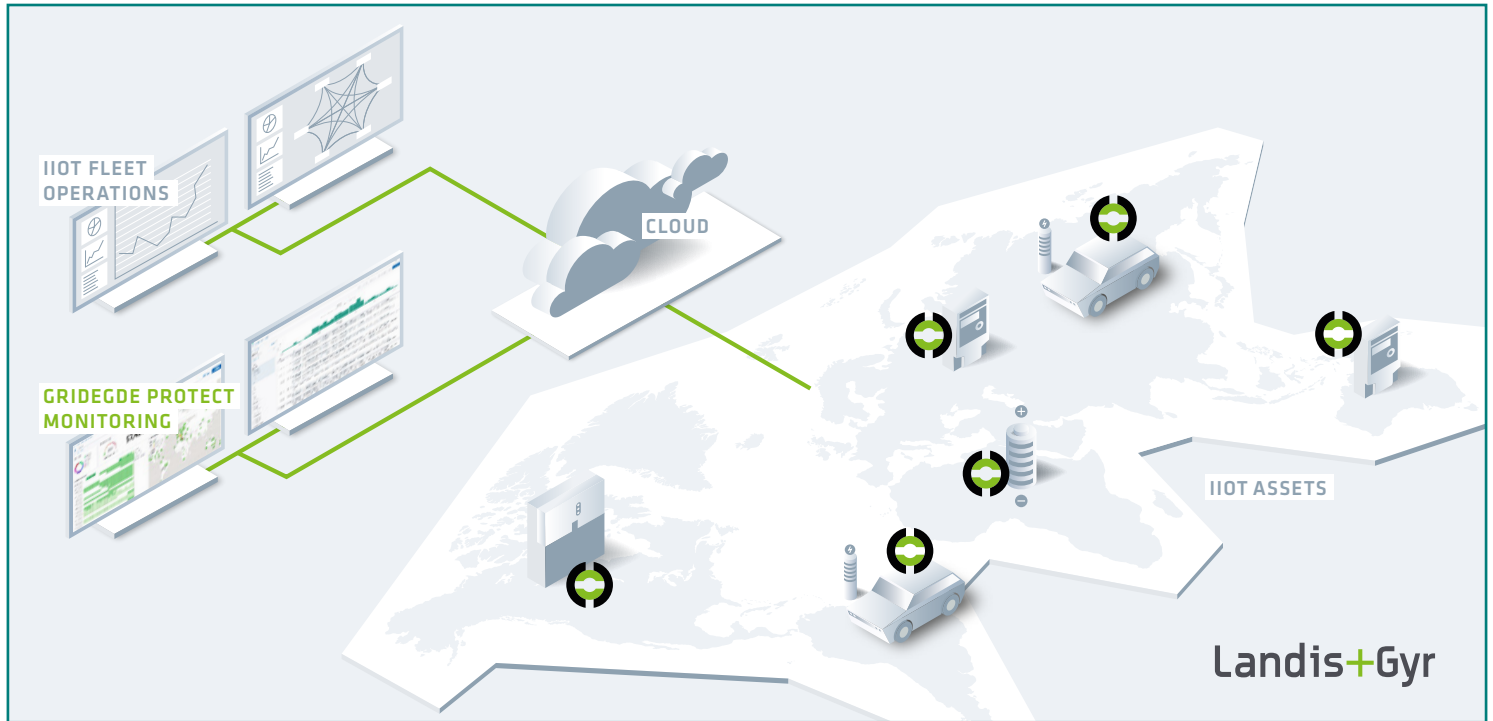
## Cybersecurity needs resources and know-how.

With Landis+Gyr Managed Protection, we also support you in operating the IIoT security monitoring, in particular in evaluating and responding to incidents, as well as continuously reviewing and improving mitigation mechanisms.

## You profit from

- expert support for the operation of the IIoT security monitoring system;
- fast forensic analyses and assessment of IIoT anomalies;
- fast actionability in case of incidents;
- regular IIoT cyber risk and vulnerability analyses and pentests for continuous improvement.

# LIGHTWEIGHT AT THE EDGE CENTRALIZED SECURITY MONITORING FOR GLOBAL IIOT FLEETS



## LEAN IIOT PLATFORM SECURITY TAILORED TO YOUR ASSETS

Landis+Gyr GridEdge Protect functions as a fully integrated, individually tailored IIoT security solution. It utilizes the tried-and-tested industrial monitoring and anomaly detection system Rhebo Industrial Protector and adds II-

oT-specific functions like active mitigation, intrusion prevention and software containerization. The solution is implemented on device-level via software packages that can be deployed and managed remotely and fully automated.

### WHAT?

- real-time detection and prevention of cyber attacks and critical cyber incidents on device-level;
- real-time notification of the operation center about any communication anomaly;
- full visibility from IIoT network to device in terms of risk, vulnerabilities and technical error states;
- optional managed services by Rhebo experts.

### HOW?

- local monitoring of entire communication on the IIoT devices;
- continuous analysis of each device's behavior and its local interfaces such as web interfaces and system protocols;
- deep packet inspection down to value level;
- security automation tailored to customer's security policies.

### WHY?

- comprehensive cybersecurity against online attacks and local tampering;
- no asset performance impairment due to design tailored to CPU & memory constraints of IIoT devices;
- high scalability through remote and automated deployment and maintenance;
- comprehensive Rhebo support from design to operation.

\* for complete list of supported protocols, see Rhebo Industrial Protector spec sheet

# IloT SECURITY MADE SIMPLE



## SECURITY AGAINST PREVAILING VULNERABILITIES

through recurrent IloT cyber risk analysis and maturity assessments.



## SCALABLE SECURITY

through centralized monitoring for 10,000 to 100,000+ edge devices.



## RESOURCE SECURITY

through centralized, automated remote deployment and maintenance.



## (II)OT SECURITY MADE SIMPLE

through IloT-focused analysis and intelligent event visualization as well as automated blocking of known attack vectors.



## SECURITY AGAINST KNOWN AND NOVEL CYBERATTACKS

through IloT Intrusion Detection and Prevention System combining monitoring, asset discovery, threat detection and security automation.



## END-2-END SECURITY

through anomaly detection to prevent threat propagation across OT, IloT and Advanced Metering Infrastructure.



## SECURITY AGAINST UNPREDICTABLE TCO

through simple license schemes and easy, low-footprint installations.



## SECURING ACTIONABILITY

through Rhebo expert support for risk analysis, operations and forensic analysis.



## SYSTEM SECURITY

through flexible and cost-efficient integration and maintenance of Rhebo IloT Security through containerized software.



## SECURING COMPLIANCE

through monitoring and IDS solution based on national and international security laws and standards.



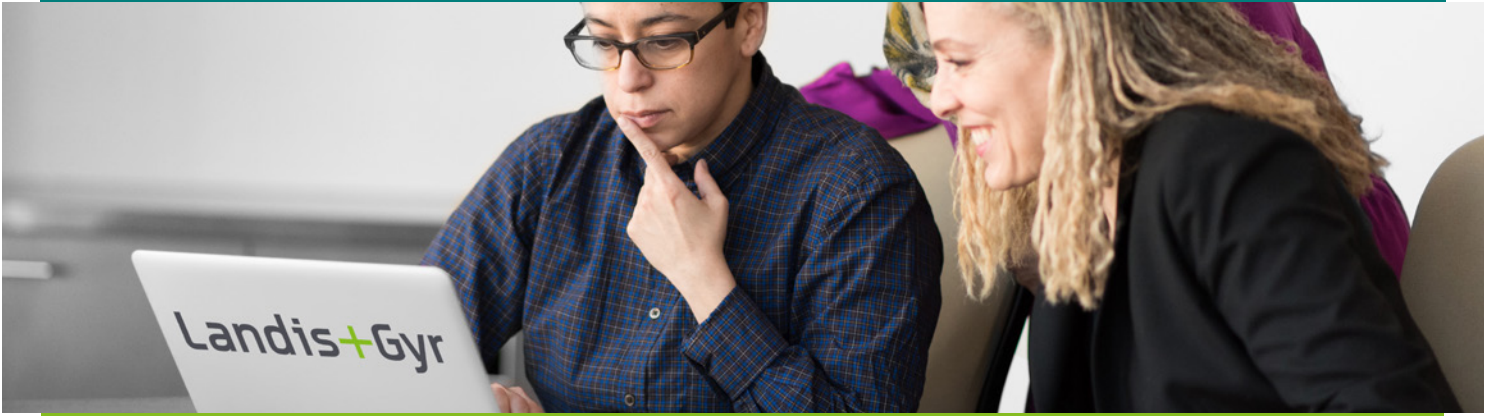
## SECURITY OF TRUST MADE IN GERMANY

compliant with European Cyber Security Organisation (ECSO) and GDPR.

»As a dedicated industrial cybersecurity provider, Landis+Gyr's security portfolio Rhebo has been enabling end-to-end network security in critical and industrial infrastructure for more than ten years. GridEdge Protect provides powerful yet lightweight intrusion detection and prevention where networks are the most vulnerable: at the edge.«

Zeek Muratovic | Director Security Solutions | Landis+Gyr





## MAKE YOUR GRIDEDGE ASSETS BULLET-PROOF. BOOK A DEMO

EXPLORE THE LANDIS+GYR SECURITY SOLUTIONS

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### ABOUT LANDIS+GYR

Landis+Gyr is the leading global provider of integrated energy management solutions for the utility sector. Offering one of the broadest portfolios, we deliver innovative and flexible solutions to help utilities solve their complex challenges in smart metering, grid edge intelligence and smart infrastructure. With sales of USD 1.8 billion, Landis+Gyr employs approximately 5,600 people in over 30 countries across five continents, with the sole mission of helping the world manage energy better.

[www.landisgyr.com](http://www.landisgyr.com)

### ABOUT RHEBO

Rhebo provides simple and effective cybersecurity solutions for Operational Technology and distributed industrial assets for the energy sector, critical infrastructure and manufacturing. The company supports customers with OT security from the initial risk analysis to managed OT monitoring with intrusion & anomaly detection. As a trustworthy cybersecurity provider, Rhebo is ISO 27001 certified. Since 2021, Rhebo is part of the Landis+Gyr AG.

[www.rhebo.com](http://www.rhebo.com)

