



Rhebo IIoT Security
Intrusion detection and prevention for manufactures and operators of critical distributed IIoT assets



REDUCE THE RISK OF IIOT CYBER INCIDENTS

through communication monitoring and vulnerability detection



ENABLE FAST IIOT ATTACK MITIGATION

through anomaly detection and security automation



BRIDGE THE IIOT SECURITY SKILLS GAP

with services tailored to your needs



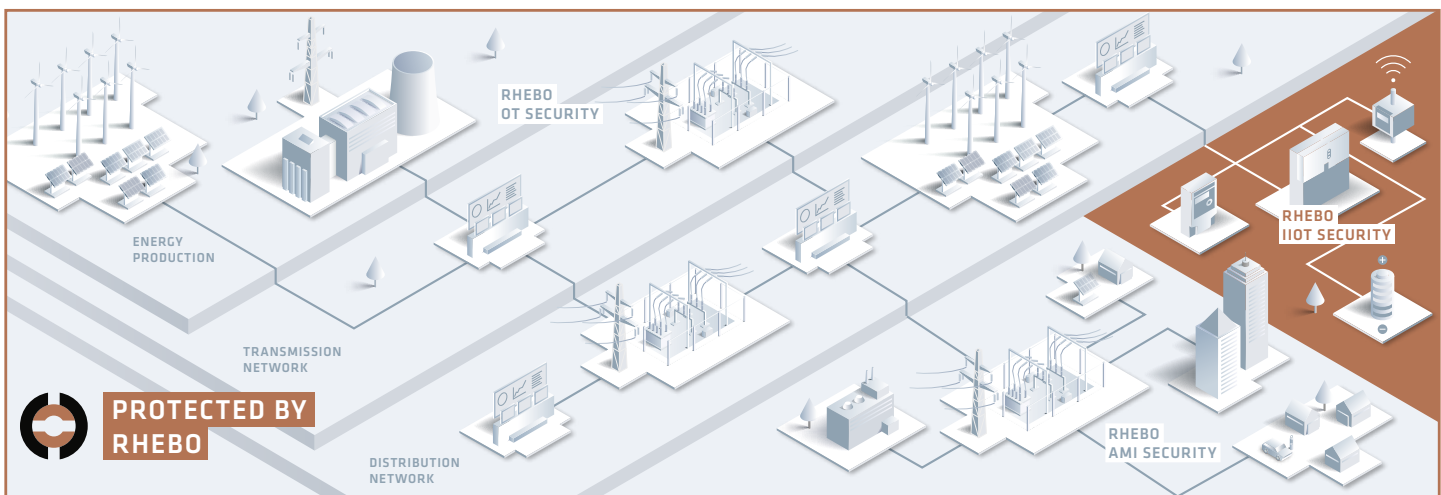
»When selecting Rhebo, it was particularly important to us that monitoring and security automation are specifically tailored to our devices and can be expanded at any time. Because both our technology and the threat landscape are constantly evolving.«

Daniel Ackermann | Director Software Development | Sonnen

Rhebo IIoT Security enables manufacturers and operators to secure their critical IIoT assets and networks, ensure security compliance and save downtime money. The solution is designed to establish effective industrial cybersecurity on energy storage systems, electrical charging stations and other high-value distributed IIoT assets. It provides

all functionalities to stop attacks right at the start and to detect threats before operational failure occurs. Rhebo provides simple and effective industrial cybersecurity solutions »Made in Germany« for Operational Technology (OT), distributed industrial assets in industrial IoT (IIoT) networks and the Advanced Metering Infrastructure.

Rhebo IIoT Security Dedicated & Simple



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 Rhebo OT Security. 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

Rhebo IIoT Security enables manufacturers and operators of critical IIoT assets to ensure the availability, integrity and security of their distributed high-value infrastructure. Rhebo IIoT Security utilizes the established dedicated industrial monitoring system with anomaly detection by Rhebo 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;
- remote maintenance.

Rhebo IIoT Security 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 triggers the local security automation thus blocking the malicious communication directly on the affected device. Additionally, any deviation from the authorized communication, 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. Rhebo IIoT Security is available as customer-operated as well as managed services by Rhebo. That way, manufacturers and operators of distributed IIoT assets can rest assured while focusing on their core business.

Rhebo OT Security Made Simple



Rhebo supports industrial companies in **saving millions** in security compliance fees and downtime money.



Rhebo enables **fast ramp-up** from 10,000 to 100,000 devices and more with a highly scalable IIoT security solution.



Rhebo ensures a **cost-efficient roll-out and update** deployment without the need of local engineering or maintenance teams.



SECURITY AGAINST PREVAILING VULNERABILITIES through recurrent IIoT cyber risk analysis and maturity assessments.



SECURITY AGAINST KNOWN AND NOVEL CYBERATTACKS through IIoT 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, IIoT and Advanced Metering Infrastructure.



»With Rhebo, we can centrally and reliably secure our energy supply as well as the municipal utilities and over 16,000 decentralized energy producers we serve. The newly gained transparency and continuous monitoring visibly increases our network quality«.

Dipl.-Ing Daniel Beyer | Head of System Engineering & Information Security Manager | Thüringer Energienetze GmbH & Co. KG



(II)OT SECURITY MADE SIMPLE through IIoT-focused analysis and intelligent event visualization as well as automated blocking of known attack vectors.



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 IIoT Security through containerized software.



SECURITY AGAINST UNPREDICTABLE TCO through simple license schemes and easy, low-footprint installations.



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.

Simple & Effective

3 Steps To Global IIoT Security

1



The first easy step to integrated 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 Rhebo IIoT Security solution **Rhebo Industrial Protector** is an industrial security monitoring system with integrated intrusion and threat detection and prevention. It runs directly on your IIoT assets and detects all communication anomalies. According to your individual security policies anomalies are either actively blocked on the affected device or reported to the control center for further assessment.

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:

Rhebo Managed Protection

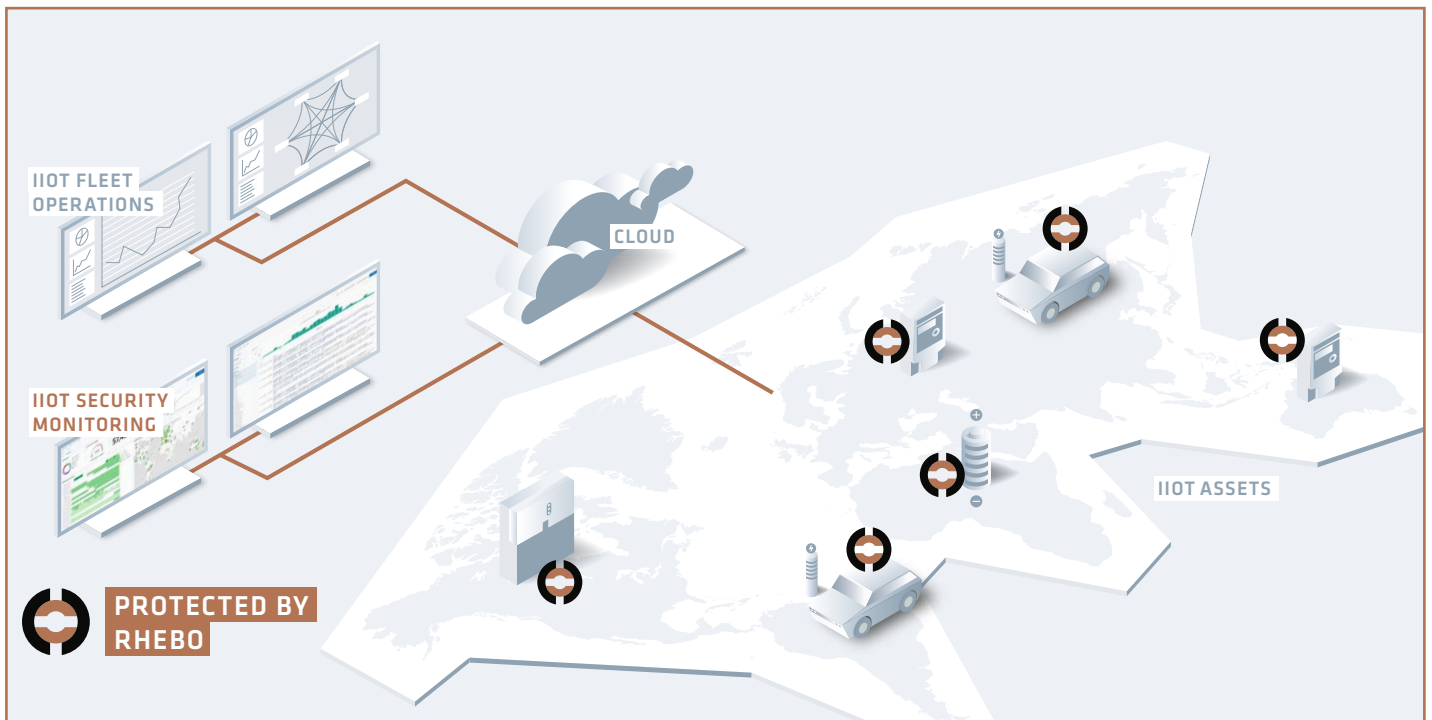
Cybersecurity needs resources and know-how.

With **Rhebo 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.

Sample Deployment of Rhebo IIoT Security In Your IIoT Infrastructure



Lean IIoT Platform Security Tailored To Your Assets

Rhebo IIoT Security 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 IIoT-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?

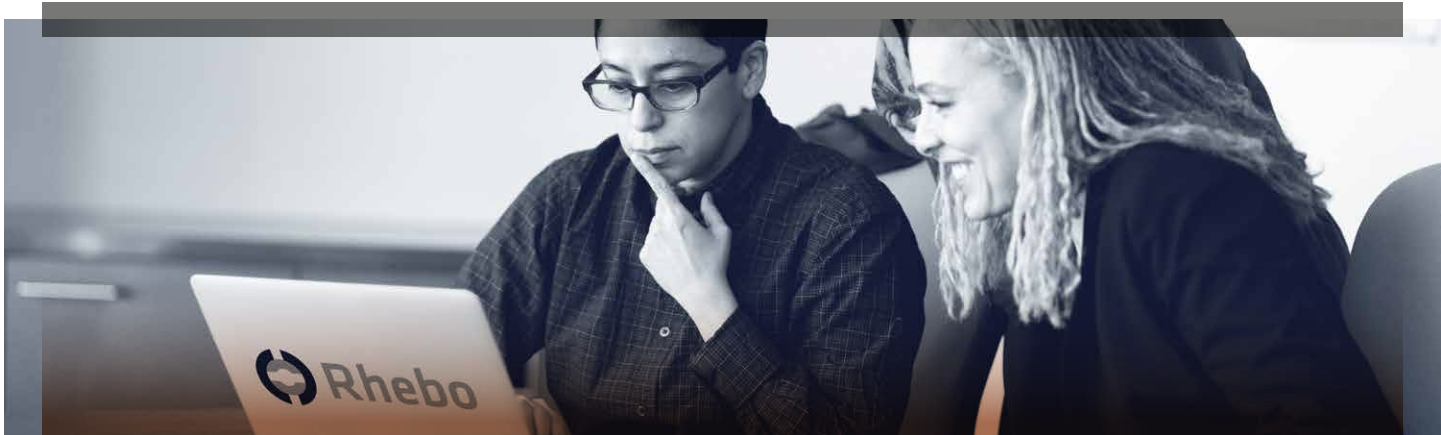
- real-time detection and prevention of cyber attacks and critical cyber incidents on device-level;
- real-time notification of the operation center about any communication anomaly;
- full visibility from IIoT network to device in terms of risk, vulnerabilities and technical error states;
- optional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



**Make your IIoT applications and assets bullet-proof.
Get in touch for a demo.**

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Don't take what we say for granted. Ask our customers!

➤ Learn how renowned Sonnen GmbH secure their globally distributed 60,000+ residential energy storage systems with Rhebo IIoT Security.

Secured by Rhebo



OT Security Made In Germany



Initiated by ECSO. Issued by eurobits e.V.

Rhebo OT Security Made Simple

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

management solutions for the energy industry with around 7,500 employees in over 30 countries worldwide. Rhebo is a partner of the Alliance for Cyber Security of the Federal Office for Information Security (BSI) as well as the Teletrust - IT Security Association Germany. The company was awarded the »Cybersecurity Made In Europe« label for its strict data protection and data security policies. www.rhebo.com