



REDUCE THE RISK OF OT CYBER INCIDENTS

through asset discovery, vulnerability detection and network monitoring



ENABLE FAST MITIGATION OF OT ATTACKS

through early warning of suspicious network activity



BRIDGE THE OT SECURITY SKILLS GAP

with services tailored to your needs



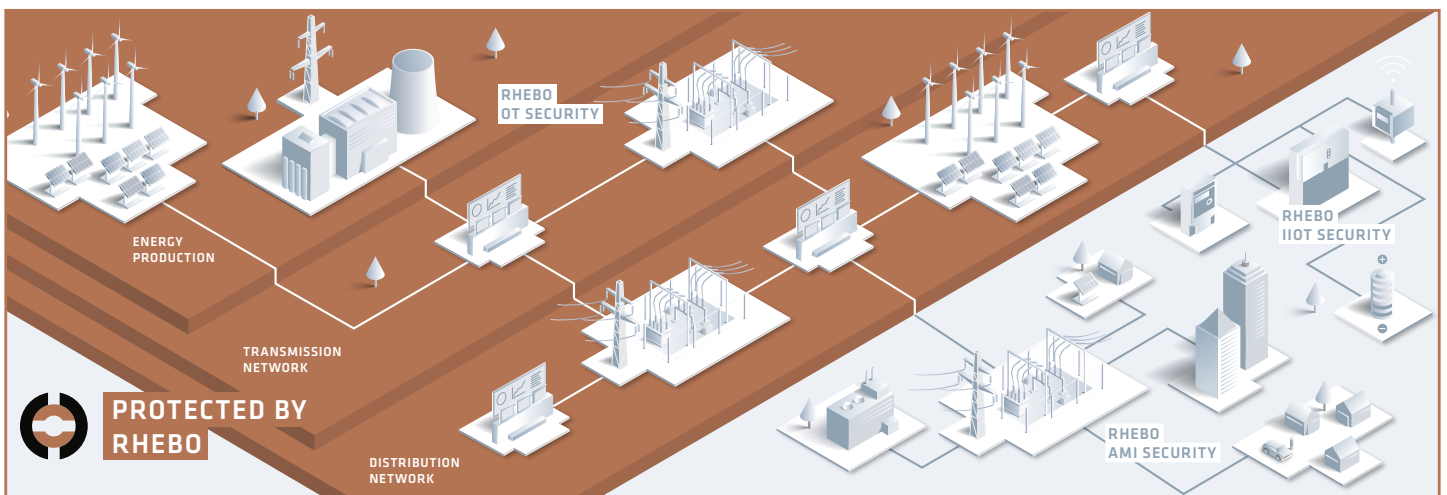
»With Rhebo we can actively make sure that our Industrial Automation & Control System (IACS) is stable and secure. Rhebo provides the detailed visibility into our IACS to rapidly identify and mitigate novel attacks and misconfigurations that have been invisible to us in the past.«

Dipl.-Ing (TU) Sven Hanemann | IT Security Manager | e-netz Südhessen AG

Rhebo provides simple and effective cybersecurity and intrusion detection »Made in Germany« for Operational Technology (OT) and distributed industrial infrastructure. The solution continuously monitors ICS and OT and reports any anomaly within the networks.

Rhebo fully supports companies from the energy sector along the industrial cybersecurity lifecycle from the initial risk analysis to managed OT monitoring with threat & intrusion detection.

Rhebo OT Security Dedicated & Simple



New Security Challenges For Complex Energy Supply Systems

The **power grid is becoming increasingly fragmented** due to the integration of municipal utilities, renewable energy resources and the construction of new substations. The individual stations are often located far away from the central control room. Therefore, control is increasingly carried out digitally via remote access. To secure these peripheral systems, distribution and transmission system operators often rely exclusively on firewalls. These reliably detect known malware. **However, firewalls are blind to novel attack patterns and professional attacks that often run for months or years.** With several hundred of thousands of new malware variants each day¹ cybersecurity limited to identifying known signatures becomes highly unrelia-

ble. **Protection mechanisms in operational technology (OT) and industrial control systems (ICS) are minimal.** On-site personnel are rarely trained and authorized to look after the ICS. Communication within the plants often is a black box the central control room. Incorrect or corrupted communications within substations and other remotely controlled power systems can not be detected until they have already impacted the power supply. **This makes it easy for cyber-criminals** scout OT networks as part of the reconnaissance, move laterally within the infrastructure, advance threat propagation as well as cause and sustain disruption.

¹ Federal Office For IT Security (BSI)



»The audit has given us a clearer picture of all processes in our complex industrial control system. This enabled us to analyze all communication traffic extensively and check the ICS specifically for vulnerabilities. We were impressed by the smooth process. The direct development of effective measures optimally prepared us for future cyber security risks.«

Falk Fischer | Team Leader IT-Systems and Applications | Leipziger Wasserwerke

End-to-End OT Cybersecurity for Critical Infrastructures

Rhebo supports energy and water sector companies along the **entire lifecycle of establishing and maintaining thorough OT cybersecurity.** With Rhebo OT Security, critical infrastructures can rely on the strong Rhebo expertise from the initial OT risk analysis to integrating an OT intrusion and anomaly detection system to (optionally) the continuous operation of the security system.

Rhebo's **Next Generation OT Intrusion Detection System combines passive OT monitoring with non-intrusive anomaly detection.** The system is a dedicated solution for OT cybersecurity covering the entire critical infrastructure from the control rooms and central power plants to substations and renewable energy resources to enable reliable **end-to-end monitoring of the distributed infrastructure.**

Cyberattacks, manipulation, scans and technical error states occurring in the facilities are detected and reported in real time on the basis of the associated communication changes.

Rhebo OT Security supports all common platforms and **can be integrated cost-efficiently** into any industrial automated network via:

- **dedicated** industrial hardware for physical setups;
- **virtual** appliances for the operation in VMware, Hyper-V and other virtual environments;
- **software-based** sensors for common security gateways, edge computing devices and substation servers e.g. by Barracuda, Cisco, INSYS icom Smart Devices, RAD, Siemens RUGGEDCOM, Wago und Welotec.

The solution **fully supports specific substation protocols** such as OPC, IEC 60870-5-104, IEC 61850-8-1 and DNP3, amongst others. With Rhebo OT Security, **resilience and system hardening are improved** as threats can be mitigated quickly, and attacks can be prevented from spreading to other sites or the central systems.

Rhebo OT Security Made Simple



STRONG TRACK RECORD

of industrial security solutions for the energy and water sector.



DEDICATED AND SIMPLE SOLUTION

for cost efficient implementation of OT, Advanced Metering Infrastructure and IIoT cybersecurity.



COMPREHENSIVE SUPPORT

for increasing industrial resilience fast and uncomplicated.



SECURITY AGAINST PREVAILING VULNERABILITIES

through periodic OT cyber risk and maturity assessments.



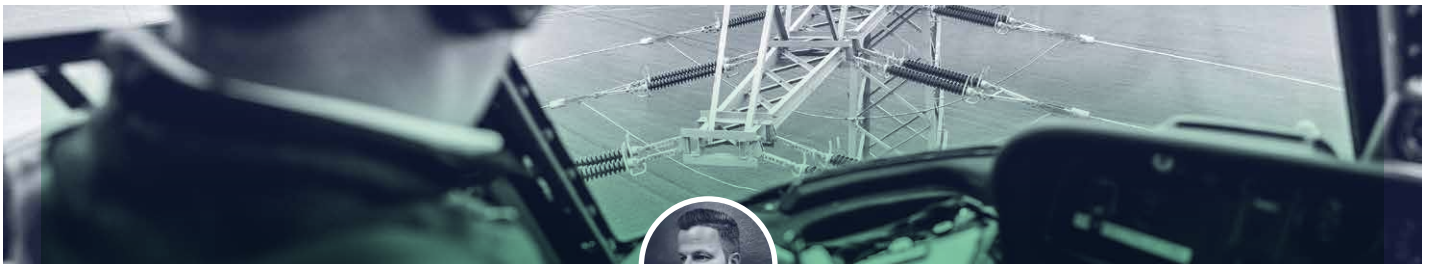
SECURITY AGAINST KNOWN AND NOVEL ATTACKS

through continuous OT monitoring, asset discovery and anomaly detection.



SECURITY AGAINST INTRUSION SPILL-OVER

through end-2-end security monitoring with anomaly detection of the OT, IIoT and the 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



OT SECURITY MADE SIMPLE

through OT-focused analysis & intelligent event visualization.



SECURING ACTIONABILITY

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



SYSTEM SECURITY

through flexible and cost-efficient integration of Rhebo solutions on IIoT devices and network components.



SECURITY AGAINST UNPREDICTABLE TCO

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



SECURING COMPLIANCE

through Next Generation IDS for OT based on national security laws and international security standards.



SECURITY OF TRUST MADE IN GERMANY

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

Simple & Effective

3 Steps To Uncompromising OT Security

1



The first easy step
to OT security:

Rhebo Industrial Security Assessment

Cybersecurity starts with visibility.

The **Rhebo Industrial Security Assessment** is an OT cyberrisk and vulnerability analysis that provides a deep understanding of your ICS / OT assets, risk exposure as well as recommendations for effective measures for hardening the systems.

You profit from

- the identification of all devices and systems within the OT including their properties, firmware versions, protocols, connections and communication behavior (Asset Discovery & Inventory);
- an in-depth analysis of existing CVE-documented vulnerabilities;
- the identification of risk exposure, security gaps and technical error states;
- a detailed audit report and workshop with actionable recommendations.

2



The seamless transition
to comprehensive OT security:

Rhebo Industrial Protector

Cybersecurity does not end at the network perimeters.

The OT monitoring with next generation OT threat and intrusion detection **Rhebo Industrial Protector** provides enterprise-ready OT-dedicated security. It advances the existing perimeter firewall security by integrating holistic anomaly detection that does not interfere with the critical industrial processes.

You profit from

- real-time visibility of communication behavior of all OT and ICS assets (protocols, connections, frequencies);
- real-time reporting and localization of events (anomalies) that indicate cyberattacks, manipulation or technical error states;
- early identification of attacks via backdoors, previously unknown vulnerabilities and internal adversaries that firewalls fail to detect (defense-in-depth).

3



The recipe to peace of mind.
We monitor so you don't have to:

Rhebo Managed Protection

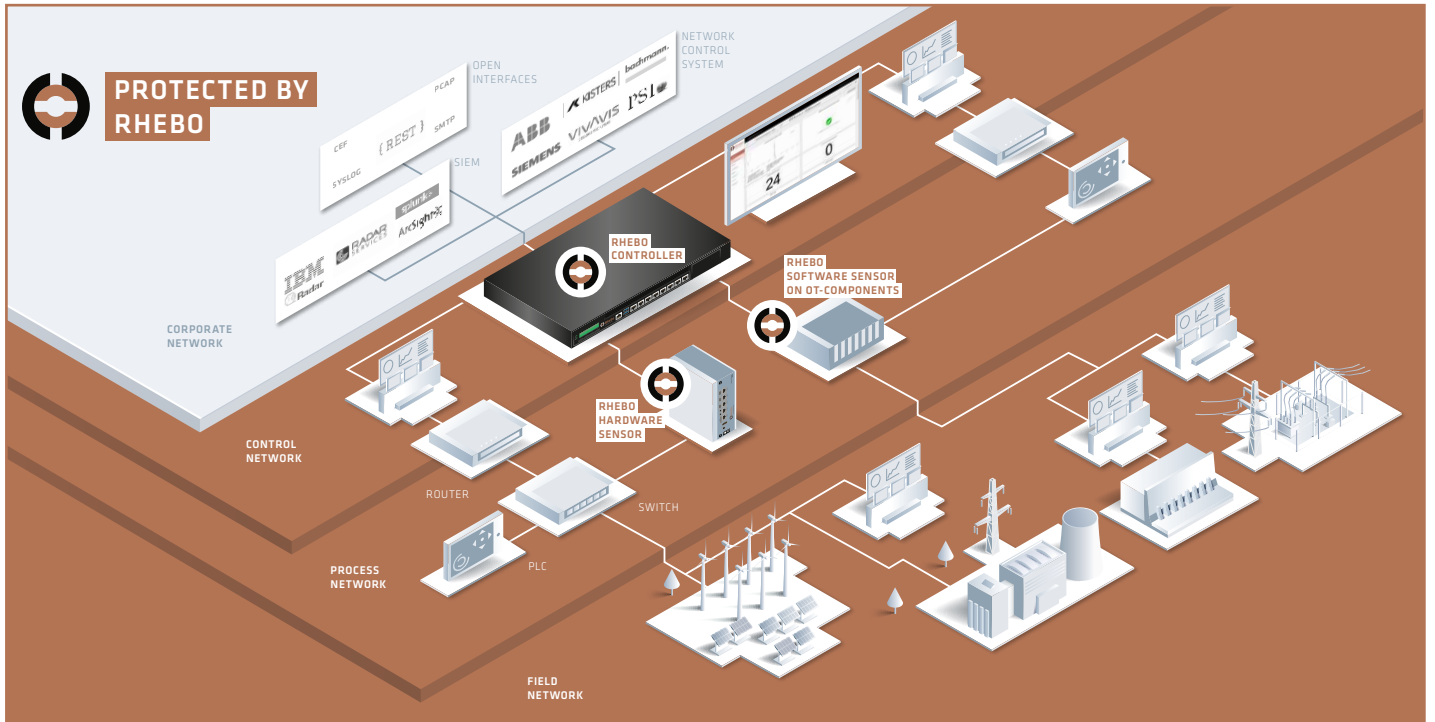
Cybersecurity needs resources and know-how.

With **Rhebo Managed Protection**, we support you in operating the OT security monitoring with anomaly detection, 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 OT security monitoring system;
- fast forensic analyses and assessment of OT anomalies;
- fast actionability in case of incidents;
- regular OT cyber risk analyses and maturity assessments for continuous improvement.

Sample Controller & Sensor Deployment In OT Infrastructure

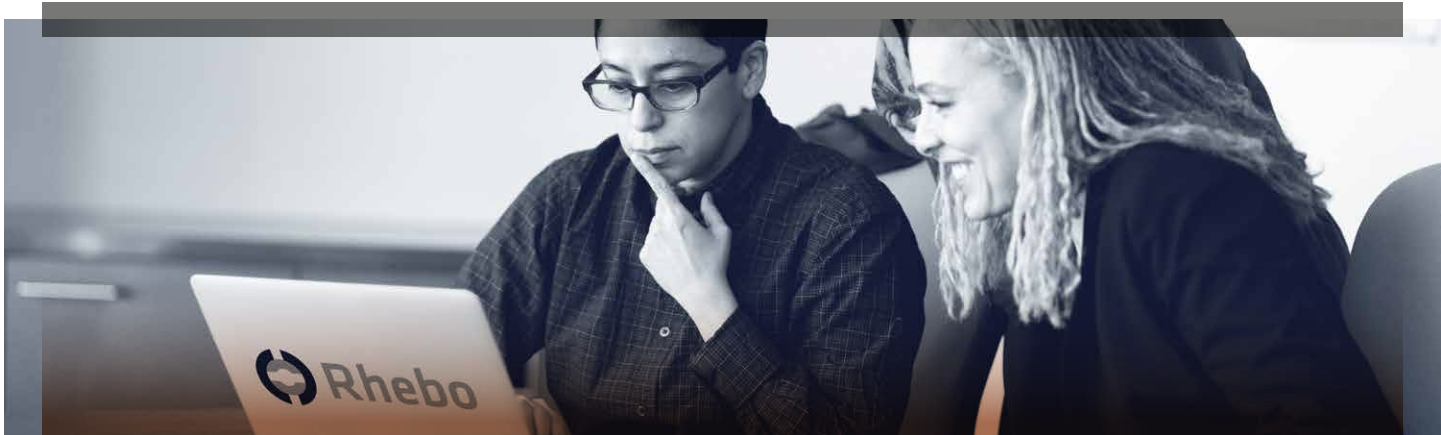


Literacy Means Knowledge Protocols Detected & Analyzed With Rhebo OT Security*

ABB Redundant Network Routing Protocol	ESET Remote Administrator	Internet Printing Protocol	MRP	Remote Desktop Protocol	Stream Control Transmission Protocol
Acronis Backup	EtherCAT	Internet Small Computer Systems Interface	Munin Data Exchange Protocol	Remote Shell	Symantec Endpoint Protection Manager
Adobe Server	FTP Control	Inter-Switch Message Protocol	MySQL Client-Server Protocol	RK 512	Syslog
ARP	FTP Data	IPsec Authentication Header	Nagios	Routing Information Protocol	TCP Keep-Alive
AXIS Camera-Management	General Electric	IPsec Encapsulating Security Payload	NetBIOS	S7/S7+	TDS
BACnet	General Inter-ORB Protocol	IPv6	NFS	SentinelSRM	Telnet
Boot Service Discovery Protocol	GigE Vision Control Protocol	Java Remote Method Invocation	NTP	Sercos III	TFTP
Canon BJNP	GigE Vision Streaming Protocol	Kerberos	Omicron OMFind	Siemens Spectrum Power TG	Tivoli Storage Manager
CIP	Haag Damon	Landis+Gyr Outside Data Exchange Protocol	ONVIF Simple Object Access Protocol	Siemens SICAM PAS/PQS	TNS
Cisco CDP	HART	Line Printer Daemon Protocol (LPD)	OpenProtocol	Simple Object Access Protocol	Undo License Manager
Cisco CGMP	HP	Link Aggregation Control Protocol	Operation, Administration, Maintenance	SKINNY	Veritas Backup Exec Client
Cisco DCE	HP DTC	Link Aggregation Marker Protocol	OSPF	Slow Protocol	VMware Server Console
Cisco DTP	HP Extended LLC	LDAP	PIM	SMA	VNC
Cisco EIGRP	HP PROBE	LLDP	Powerlink	SMB	Web-Based Enterprise Management
Cisco WLCCP	HSR	LLMNR	Proficy iFix	SMTP	Web Services Discovery
Codesys	HSRP	LonTalk	Profinet	SNMP	WinCC
COTP	HTTP/S	McAfee ePO	Profinet-IO CM	SqlNet2	X11
DCE/RPC	iba Device Configuration Protocol	mDNS	PSI	SQL Server Resolution Protocol	.NET TCP Binary Protocol
DECnet	ICMP	Modbus	PTP	SSDP	
DHCP	IEC60870-5-104	MQTT	QUIC	SSH	
DLMS/Cosem**	IEC61850-GOOSE		Realtek Remote Control Protocol	SSL	
DNP3	IEC61850-GSSE		Real Time Streaming Protocol	STOMP	
DNS	IEC61850-MMS			STP	
EAP over LA	IEC61850-SMV				
ECTP	IGMP				
EGP	Intel Advanced-Network-Services				
ELCOM-90					

Highlighted protocols:
industry-specific protocols

* as of september 2022
** available in january 2023



**Order your custom OT network security assessment
or book a demo**

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➤ Rhebo IIoT Security

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MITNETZ
STROM

OT Security Made In Germany

OT SECURITY
Made in Germany

TeleTrust
Pioneers in IT security.

CYBERSECURITY
MADE IN EUROPE

Allianz für
Cyber-Sicherheit

PLATTFORM
INDUSTRIE 4.0

Initiated by ECSC. 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