Firewall

ENERCON
Shield

ENERCON Shield

ENERCON Shield is the next-generation firewall (NGFW) solution and will increase the security of all ENERCON wind farms from 2025 onwards.

Are your wind farms safe from cyber threats?

As cyberattacks intensify and evolving EU legal requirements (such as NIS2) tighten, the need for robust protection has never been greater.

ENERCON Shield is the state-of-the-art cyber security solution for the continuous operation of your wind farm and supports compliance with industry standards, helping you maintain secure and reliable operations.

Why choose ENERCON Shield?

✓ ENERCON Shield reduces downtimes and financial risk from cyber security incidents.

✓ Firewalls are legal requirements for critical infrastructure (e.g. as per NIS2).

✓ ENERCON Shield is a tailored and scalable security solution to meet your needs.

ENERCON Shield comprises the implementation and management of next-generation firewalls (NGFWs) with a robust and modern network architecture (e.g. network segmentation and SD-WAN). Furthermore ENERCON Shield supports compliance employing measures such as an intrusion prevention system (IPS), detailed event logging and effective risk management to ensure a secure and resilient infrastructure.
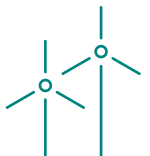
ENERCON Shield is available as a subscription model tailored to suit your operational needs.

To meet the different needs of operators, firewall redundancy and VPN-connection (Site-to-Site) are bookable as options.

Functional Overview –
Your security is our priority

Network segmentation:
Divides the network, isolating critical systems
to control threats.

Automatic software updates:
Software is updated automatically to the latest version
to protect against the latest threats.

Intelligent WAN management (SD-WAN):
Ensures fast, reliable data transmission,
with reduced latency.

Intrusion prevention system (IPS):
Proactively monitors and blocks potential threats
in real time.

Real-time NOC & SOC logging:
Provides logs of network and security events, enabling
rapid detection and response.

OT application control:
Identifies and limits unauthorised operational technology
processes within the network.

	Features	Example Router	ENERCON Shield		
			Basic Security	**Active Security**	**OT Pro Security**
Hardware	Hardware	Router	Firewall	Firewall	Firewall
	Network ports	DLS, LTE, ETHERNET	ETHERNET	ETHERNET	ETHERNET
	Internet protocol security	VPN	VPN	VPN, Remote Access	VPN, Remote Access
	Redundant WAN ports		✓	✓	✓
	Redundant power supply		✓	✓	✓
Software	Automatic software updates		✓	✓	✓
	SD-WAN		✓	✓	✓
	Network segmentation		✓	✓	✓
	Read-only access for audit		✓	✓	✓
	Next-generation firewall		incl. Classic Firewall	✓	✓
	Intrusion prevention system (IPS)			✓	✓
	Realtime NOC-& SOC log forwarding			✓	✓
	OT application control				✓
	OT security service				✓
	Attack surface security				✓
	Managed by ENERCON *	✓	✓	✓	✓
	Firewall redundancy **		(✓)	(✓)	(✓)
	VPN connection (Site-to-Site)**		(✓)	(✓)	(✓)

* Inclusive installation, configuration and operation (only available with an active service contract) / ** available as AddOn

What is NIS2 and why is it important?

NIS2 is an EU-level directive (in force since 2023) and defines the minimum requirements for information security in critical infrastructures. The number of affected organisations with critical infrastructure has increased significantly.

The NIS2 mandates:

- 24/7 reporting of major security incidents

- Stricter security protocols for wind farms

- Compliance with IT security best practices

- Robust technical and organisational measures

The directive affects various groups in the energy industry, such as wind turbine operators.

How do we make a difference in your NIS2 compliance?

- We offer state-of-the-art security solutions with an intrusion prevention system (IPS).

- We keep the impact of security incidents as low as possible thanks to minimised recovery times.

- Comprehensive logging and attack detection enable timely and compliant reporting.

- Our ENERCON Shield security solution is specially tailored to ENERCON wind farms, ensuring seamless implementation and reliable operation.

ENERCON Shield helps to fulfil the NIS2 technical requirements. NIS2 legal compliance remains the operator's responsibility.

Are you ready to safeguard your wind farm **with ENERCON Shield?**

Visit our website or contact your Sales or After Sales Manager to learn more about how ENERCON Shield can protect your operations and help you comply with the latest regulations.

Also available in combination with ENERCON SCADA Edge