



# Cybersecurity for AlphaESS energy storage systems

**Modern energy storage systems are smart, connected, and potentially vulnerable to attacks.**

AlphaESS offers powerful cloud functions for greater comfort, efficiency, and service. At the same time, we do our utmost to protect your data and your system from cyberattacks.

**On the back you will learn what we do for your security – and how you can actively contribute yourself.**

## Security is a matter of trust



**Our good reputation and your trust mean a lot to us.**

That is why at AlphaESS we place special emphasis on security. Our systems are state-of-the-art and offer you remote access, monitoring, and automatic updates – GDPR-compliant and convenient.

**But: Cybersecurity only works together!**

That is why we show you here what we do for your security – and what you can do yourself to protect your system.

**By the way: Would you like to play it safe?**

You can easily disconnect the connection to our cloud and restore it if needed, either by unplugging the network cable or making appropriate settings in your firewall. Offline operation is only possible to a limited extent under the standard warranty; full warranty coverage applies when actively using online functions, with a premium warranty, or for devices purchased before October 2025.

In offline mode, only the serial data interface is available – but you can return to online services at any time as soon as you need them.

# 1. Ensuring data protection & privacy

**Example:** An attacker reads your consumption data and knows when you are at home.

## How we protect you:

- ✓ Encrypted data connections (HTTPS for app & browser)
- ✓ Hosting on Microsoft Azure within the EU (GDPR-compliant)
- ✓ Access only by certified specialist dealers and trained employees.

## How you protect yourself:

- ✓ Choose a strong password for your user account
- ✓ Activate API access only when needed, store keys securely
- ✓ Critically review third-party access (e.g., VPP)

# 2. Avoiding loss of use

**Example:** An attack blocks your storage – no more charging or feeding in possible.

## How we protect you:

- ✓ Only signed, tested firmware updates via the AlphaCloud
- ✓ No local terminal or web server on the storage unit, no default password
- ✓ Remote maintenance exclusively via a secured cloud connection

## How you protect yourself:

- ✓ Secure the Modbus interface in your home network (e.g., VLAN/firewall)
- ✓ Regularly check monitoring for alarms or error messages
- ✓ Only use apps and tools approved by AlphaESS

# 3. Preventing property damage & hazards

**Example:** Manipulated software overheats the battery or inverter – fire hazard!

## How we protect you:

- ✓ Firmware cannot be manipulated – updates are digitally signed
- ✓ Operating parameters can only be set within safe limits
- ✓ Multi-level safety functions for battery and electronic fire protection

## How you protect yourself:

- ✓ Secure the storage unit and home network locally against unauthorized access
- ✓ Participate in the automatic distribution of system updates
- ✓ Regularly visually inspect the system (alarms, dirt, damage, etc.)

## AlphaESS stands for quality, security, and responsibility.

Contribute through attentiveness, secure passwords, and responsible use. This way your energy storage system remains not only long-lasting and efficient but also secure.

### 📞 Questions about the security of your system?

Talk to your **AlphaESS specialist partner** – we are happy to help.

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