28th of May 2025

End-of-Life Disposal Guidelines for Ewon COSY+ Devices

1. Introduction

This document provides guidance for the safe and environmentally responsible disposal of the Ewon COSY+ industrial gateway, manufactured by HMS Networks. Following these steps will help in the proper recycling and disposal of electronic and electrical waste.

These instructions are intended for end-users, installers, recycling partners, and other stakeholders involved in the product lifecycle.

2. Product Overview

- **Product**: Ewon COSY+
- **Manufacturer**: HMS Networks
- **Category**: Industrial Remote Access Gateway
- **Main Components**: Electronic printed circuit boards (PCBs), battery, communication modules, plastic housing, connectors, product labeling & antennas (if applicable)

3. Regulatory Compliance

The COSY+ is designed and manufactured in accordance with the following EU directives and regulations:

- **WEEE Directive (2012/19/EU)** – Proper end-of-life handling of electronic waste.
- **RoHS Directive (2011/65/EU)** – Restriction of hazardous substances in electrical equipment.
- **Battery Directive (2006/66/EC)** – as the product includes a battery.
- **REACH Regulation (EC No. 1907/2006)** – Registration, Evaluation, Authorization and Restriction of Chemicals.

- **Waste Framework Directive (2008/98/EC)** – Reporting on substances of very high concern (SVHCs).

4. Substances According to REACH & WFD

As of the latest assessment, the Ewon COSY+ does not contain any SVHCs above the 0.1% threshold as defined in the REACH Candidate List. Therefore, no additional SCIP notification is required under the Waste Framework Directive.

Should future versions of the COSY+ include such substances, HMS Networks commits to update documentation and reporting accordingly.

5. Safety Precautions & Environmental Notes

- Avoid opening the unit outside controlled environments.
- Use appropriate personal protective equipment (PPE), such as gloves and safety glasses.
- Follow local regulations and guidelines for the handling of electronic waste.
- Be aware of potential hazards, including sharp edges.
- Do not incinerate or place in landfills.

6. Disposal Instructions

Preparation Prior Disposal

- Disconnect from all power sources and data connections.
- Remove user-added media (e.g., SIM, SD cards, USB stick, etc.).
- Ensure data compliance through IT or security policies if applicable.

Required Tools

- Flathead screwdriver
- Containers for sorted materials

Product Disassembly & Materials Sorting Instructions

1) **Open the housing**

After having removed user-added media (e.g., SD cards, USB stick, antennas, etc.), insert a screwdriver into the designated slots at the junction between the left and right parts of the plastic casing. Gently press against the internal hooks to release them, then carefully open the enclosure.

2) **Separate all materials**

- Remove the printed circuit board (PCB) from the housing.
  Note: Ewon devices consist of an assembly of multiple printed circuit boards (PCBs)—up to three. These PCBs can remain soldered together during disposal.
- Remove the battery from the PCB (only one battery per device).
- Detach connectors, cables or any other electronic parts.
- Remove labels from plastic housings.

3) **Sort materials**

Component	**Material**	**Disposal Recommendation**
Plastic Housing	Thermoplastics: ABS (Acrylonitrile Butadiene Styrene) and PC/ABS (Polycarbonate/ABS blend)	Standard curbside recycling programs do not accept ABS or PC/ABS plastic. These plastics require specialized sorting and processing, typically not available through municipal recycling. Do not send to packaging-only plastic recyclers, as these resins are not compatible with PET, PE, or other household-grade materials. ➔ Place plastic components in designated "Technical Plastics" or "Hard Plastics – Non-Packaging" bins. Then these plastics should be delivered to a WEEE-certified recycling center or authorized disposal site.
PCB	May contain lead and other SVHC (less than 0,1% threshold)	Must be handled by specialized processors or delivered directly to a WEEE-certified recycling center or authorized electronics disposal site.
Battery	Lithium, stainless steel	Must be removed and handled under battery regulations
Labels	Adhesive, PET	Labels can be disposed of as non-recyclable mixed waste (not recyclable plastic)
Connectors, Cables, Antennas, etc.		Don’t place them in regular household bins — not biodegradable, not suitable for household recycling.

		Must be treated as small electronic component waste and delivered directly to a WEEE-certified recycling center or authorized electronics disposal site.

4) **Dispose of e-waste responsibility**

- Some PCBs may contain lead and other Substances of Very High Concern (SVHC) as defined under REACH regulation and must be handled as hazardous waste.
- Follow local and EU regulations for e-waste disposal.

Collection and Recycling

- Do not dispose of with household waste.
- Deliver to a certified WEEE recycling center.
- Follow local electronic waste regulations for industrial equipment.

7. Additional Information

For further guidance on sustainability practice, HMS Network's environmental policies, and corporate sustainability goals, visit: https://www.hms-networks.com/sustainability

8. Contact Information

If you would need further assistance or additional guidance, please contact your HMS local representative or visit our webpage https://www.hms-networks.com/contact-us to get our contact information.