Empowering data communication in your BESS

Ixxat®
BY HMS NETWORKS

We enable reliable data communication

Modern battery energy storage systems combine networked components from many different vendors and are themselves part of a networked smart grid environment. Communication and intelligent networking are the key to efficient operation and seamless integration into a wide range of applications. With components from HMS Networks you can solve all communication requirements for battery storage systems.

The HMS difference

- One source for communications and networking solutions geared for Industry 4.0

- Expertise with CAN-based systems and various energy and cloud protocols

- Partner for concept development, system design, deployment and support

- Reputable, reliable supplier with global availability

- Seamless international project collaboration
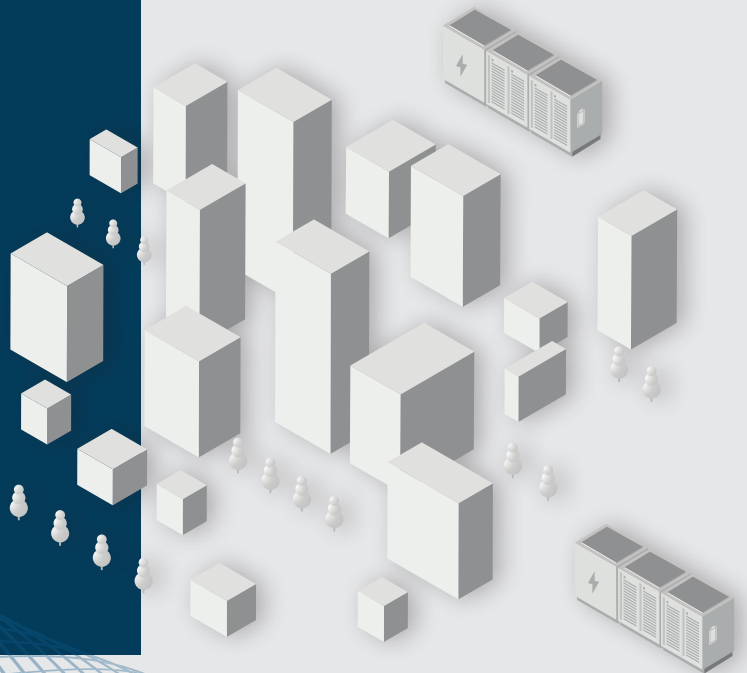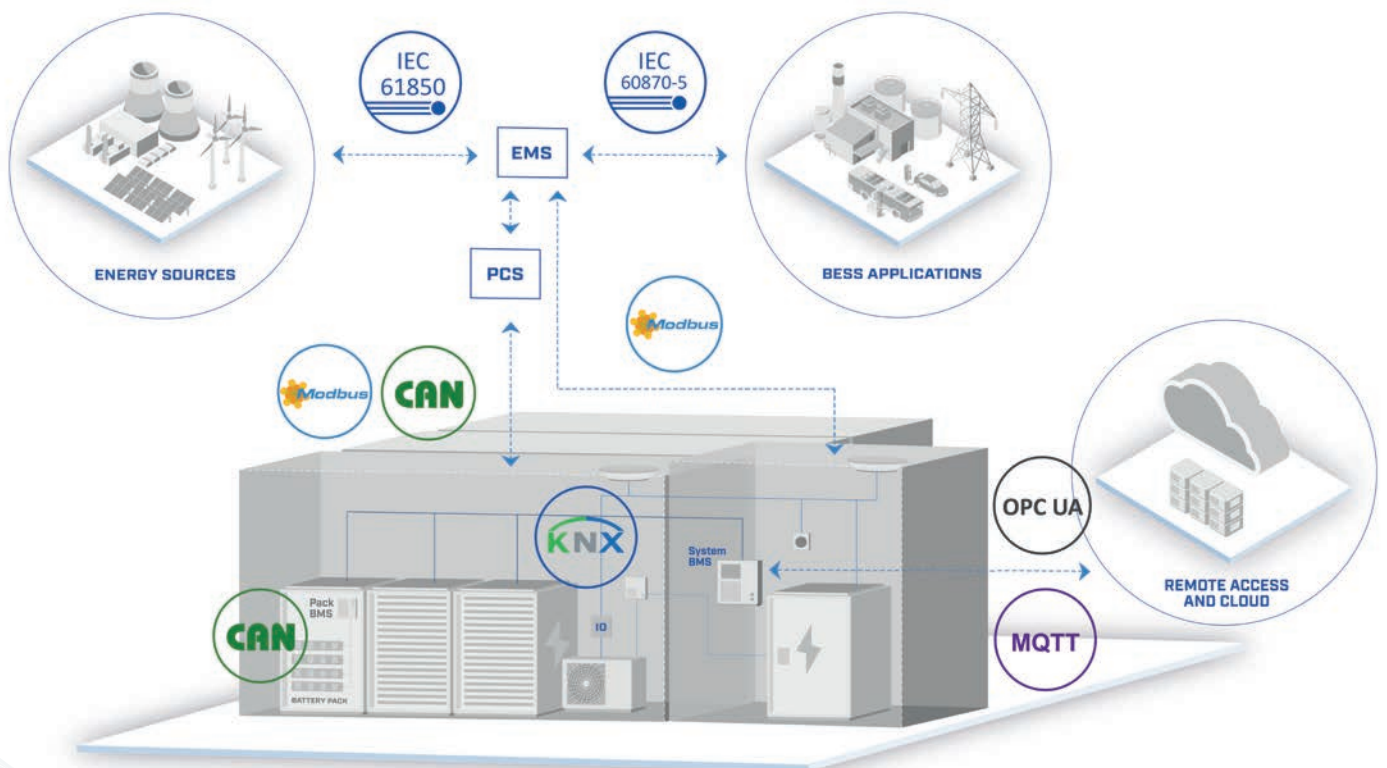
Find out more at
www.ixxat.com/bess

Support for all communication protocols

Gain valuable data and system control

Our solutions interconnect your BESS components reliably and flexibly, no matter what protocol or network technology you use. From CAN-based battery communication to Smart Grid and SCADA connections – and all steps in between – we offer suitable solutions for your application. Link all network levels to obtain valuable data and enable remote control and monitoring. Combine devices from different industries and take advantage of low prices and proven components, closing the communication gap between building, energy, industry and automotive protocols in your BESS.

Data and communications experts for BESS

Our unique combination of technology toolbox, applications experience and product development aptitude empowers customers to optimize and protect data communication and interconnection of their battey energy storage systems. HMS Networks products and services can be used for various applications within the BESS environment and, if required, can also be adapted to specific customer needs.

Network design

- Network topologies
- Ancillary systems (fire protection, HVAC)
- Identifier change (2nd life batteries)

Cloud connectivity and IIoT

- Remote data / Device access
- MQTT / OPC-UA
- Smart Grid
- SCADA
- Visualization

System and signal protection

- AC/DC noise protection
- Overvoltage protection

Commissioning and maintenance

- Commissioning support tools
- Condition monitoring, logging and maintenance
- Start-up / Network quality
- Device management / Remote commissioning

Purpose-built solutions

- OEM development
- Network interface implementation
- Brand labeling
- Pre-configured devices

HMS Networks offers products for BESS applications under five brands, covering all application scenarios:

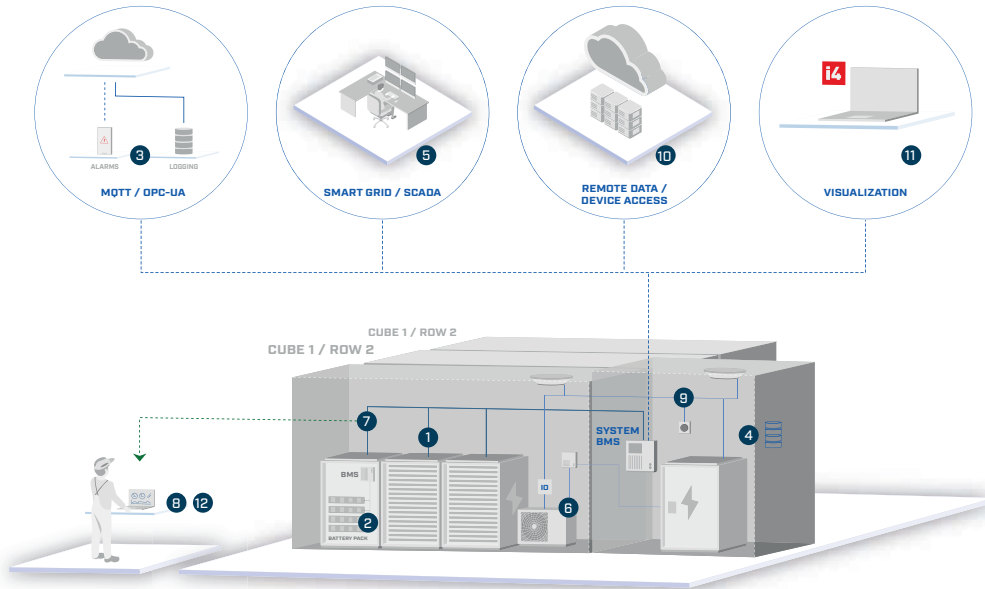**Anybus®** BY HMS NETWORKS   **Ewon®** BY HMS NETWORKS   **Intesis®** BY HMS NETWORKS   **Ixxat®** BY HMS NETWORKS   **WEBfactory®** Member of the HMS group

Applicable products

Hardware and software solutions

① Ixxat
CAN Repeater
For galvanic isolation of devices and segments and signal improvement.

② Ixxat
CAN Bridge
Enables system expansion, tree and star structures, with additional filter and mapping functionality.

③ Ixxat
CAN@net NT
CAN gateway with Ethernet bridge function and MQTT cloud connectivity.

④ Ixxat
CANnector
Multipurpose tool with bridge, gateway, logging function and cloud connectivity.

⑤ Ixxat
SG-gateway
Energy gateway for combining energy protocols with industrial and cloud applications.

⑥ Intesis
AC Interface
For connection of AC devices from well-known manufacturers to common field bus systems.

⑦ Ixxat
USB-to-CAN V2
PC interface for mobile and desktop analysis, configuration and monitoring applications.

⑧ Ixxat
canAnalyser
Windows based tool for CAN online and offline data analysis with powerful data interpretation.

⑨ Anybus
X-gateway
Linking of more than 250 different network combinations – easy and without programming.

⑩ Ewon
Cosy/Flexy
For easy, secure and efficient access to your system, gaining valuable information and insights.

⑪ Webfactory
Webfactory i4
Solutions for data collection, analysis and visualization – easy operation and system adaptation.

⑫ Ixxat
CANcheck
Hand-held installation tester for CAN, allows easy wiring, termination and signal testing.

Customer success stories

See how our customers use HMS Networks products in their applications and what problems they solve with them

CAN@net NT

Implementation of a cost-effective solution for monitoring and alarm messages

CAN Repeater

Improvement of a BESS CAN network using drop lines and galvanic isolation

CANbridge NT

Enabling sustainable use of 2nd-life batteries in BESS applications

CANnector

Simple and secure cloud connection of BESS enabling data monitoring and logging
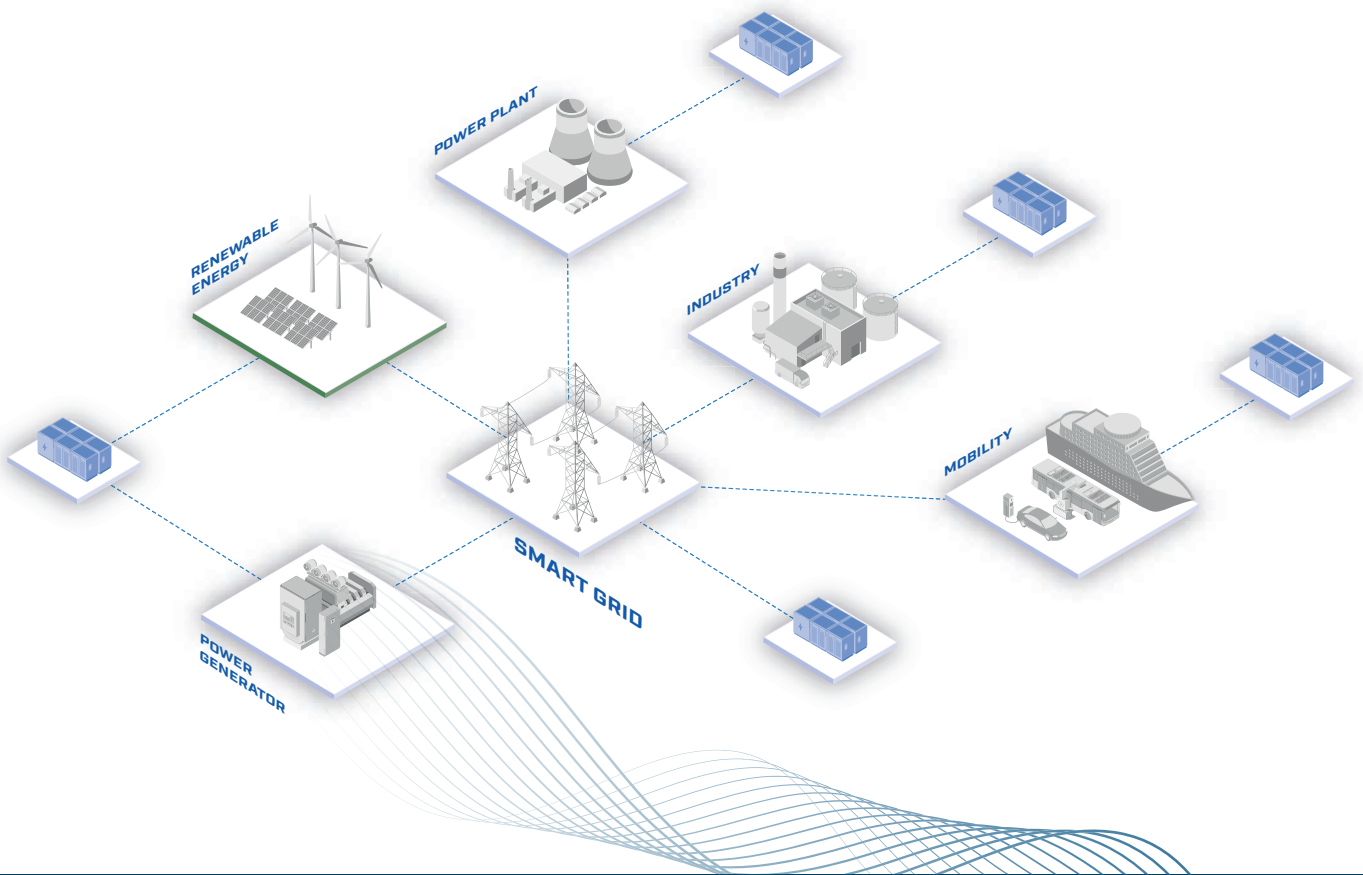
SG-gateway

Connecting a battery storage system to the SCADA system of the central power grid

Find out more on our customer story page on
www.ixxat.com/bess

Integrating BESS into Smart Grid applications

HMS Networks products enable communication
inside battery storage systems as well
as interconnection with the grid

Support for all essential protocols

CAN   CAN FD   ASHRAE BACnet   M Bus   KNX   PROFIBUS®   PROFINET®   EtherNet/IP

OPC UA   MQTT   IEC 61850   IEC 60870-5-104   dnp   GOOSE   Modbus   ASCII
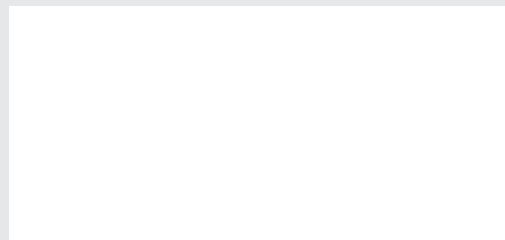
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Work with HMS.
The number one choice for
industrial communication
and IIoT.

HMS Networks - Contact

HMS is represented all over the world.
Find your nearest contact here:

www.hms-networks.com/contact

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