

Information notice on [InSite Energy Management System – SCU200]

If you are interested in purchasing, renting or leasing an ABB Connected Product this information notice (“Notice”) provides you with information according to the Data Act (EU Regulation 2023/2854)¹.

All terms in this Notice shall have the same meaning as in the Data Act.

Should you require additional information beyond what is provided in this Notice, please do not hesitate to contact us at eu-data-act@abb.com.

Details on the Connected Product and Product Data

Connected Product	[Portfolio of InSite Energy Management System, see at this link .]
Information on how to directly access and retrieve Product Data	<p>[The device comes with an embedded webserver which can be accessed through https link and the data can be read or visualised in any Computer or dedicated HMI from the InSite portfolio of products. Apart from this the data can also be export via Modbus, LoRa, smtp, ftp, sftp, Rest Api, MQTT.</p> <ul style="list-style-type: none"> • Modbus TCP is the Ethernet-adapted version of the Modbus protocol. The SCU200 communicates over IP using the Transmission Control Protocol (TCP) in a client-server architecture. It exports data to connected clients that poll for information via twisted-pair Ethernet cables (e.g., Cat5e/Cat6). The SCU200 is equipped with an RJ45 port supporting 10/100 Mbps for physical network connectivity. Typically, both the SCU200 and external polling clients, such as a BMS, are connected through a network switch or router, or directly via an Ethernet crossover cable. For successful communication, both devices must have valid IP addresses within the same subnet or be routable across networks. The data exported by the SCU200 can be accessed using either static or dynamic mapping. Static mapping refers to a predefined register address map (available via a provided link) that lists parameter details. In contrast, dynamic mapping allows the SCU200 to forward requests directly to connected downstream devices, eliminating the need for specific SCU200 register addresses. In this case, users can refer to the mapping of the connected devices themselves. • Data collected by SCU200 and corresponding expansion modules can also

¹ Regulation (EU) 2023/2854 of the European Parliament and of the Council on harmonised rules on fair access to and use of data (Data Act) those terms shall have the same meaning as in that Union legislation.

be exported using LoRa protocol. A dedicated module can be connected to the main SCU200 via InSite Bus to export data via LoRa signals. The module works only in Europe in frequency band of 868MHZ, and comes with dedicated antenna, this expansion module is automatically detected by the main control unit and the user will have the possibility to select the list of parameters that they would like to export from the main control unit.

- Data can be exported via SCU200 by allowing the possibility to connect to internet. Once the device is connected to internet – there are different possibilities for the user to push the selected data outside the device. The data can be pushed via emails using the smtp configuration. The user can configure alerts, notifications of periodic data log export in CSV. The port used by the email provider for SMTP communication. Different providers may require different ports depending on whether SSL or TLS is used. SCU200 supports both SSL and TSL. For more details refer the [document](#) chapter 6.7.2 communication.
- It is possible to export the data also via FTP and secured FTP. There are fields that must be configured in the webserver of SCU200 with server details (credentials) to allow automatic data export.
- Rest API allows user to get Online/historical values directly from Control Unit without accessing to the WebUI. It can be disabled/enabled by administrator in this section: to access data through Rest API an authorization token must be provided in Authorization header in every request. The token must be generated in the internal webpage under Rest API. The highest number that can be get properly via Rest API is $2^{53}-1$ (9007199254740991).
- There is a dedicated document that explains the availability of data from the device in different formats – please refer the [document](#) for more details.
- SCU200 can publish data to dedicated cloud platform InSite Energy Pro using MQTT brokers for lightweight, real-time messaging.

Ideal for IoT application. This mode of data export is limited to ABB's cloud platform and cannot be configured to send data to third-party cloud services. A separate subscription to ABB's cloud services is required for activation.

	<ul style="list-style-type: none"> The HMI communicates with the SCU200 via a standard Ethernet connection using the built-in 10/100 Mbit/s RJ45 network interface. This communication is based on standard TCP/IP protocols over Ethernet. The HMI operates on a Linux-based system with a Quad-Core ARM Cortex-A55 processor, allowing it to run a responsive, graphical user interface that visualizes real-time data collected and processed by SCU200. Through this network connection, the HMI can send configuration commands, retrieve system diagnostics, display energy trends, and receive event or alarm notifications from the SCU200. This setup ensures secure and efficient communication with minimal latency, supporting multi-touch interactions via the capacitive PCAP screen.
<p>Information on how to access and retrieve Product Data via a request (indirect access)</p>	<p>[See info in “Information on how to directly access and retrieve Product Data”]</p>
<p>Information on how to delete your User account and the respective data (where a Connected Product requires login via a User account)</p>	<p>The user accounts of SCU200 do not store any data dedicated to user, they are only a way to establish rights to access the data that is collected by the device. Deleting or creating a new user account do not have any impact on the data that is collected by the device.</p> <p>The webpage of the control unit can be accessed for the first time using the printed username and password on the device who access using the credentials and set up the configuration of the device is called the Administrator and has all the rights to visualise the data, create widgets or insights, configure data export options and change settings, password. He can then create other new accounts with assigned roles (Administrator, Operator, Guest). Each role has specific permissions that grant access to selected WebUI resources. There is always one main administrator (id=0 - there is no option to remove this account, who can create, modify, or delete other administrators, other administrators (id != 0) can create users and operators, can also modify their own credentials, but can't create or modify other administrators. Operator can create and modify accounts with the Guest role and modify their own credentials. When editing the administrator with id = 0 account, it is required to enter the current administrator's password. If the user has the appropriate permissions, they can delete accounts. There is a “Remove” button that appears beside each role created to the administrator with ID=0., and after confirming the operation, the account or accounts will be deleted. Apart from the global administrator (id=0), it is possible to create an infinite number of user accounts and give them appropriate</p>

	<p>permissions. Thanks to these permissions, we limit access and visibility of individual elements of the website.</p>
<p>Type of Product Data</p>	<p>The data can be exchanged via Modbus RTU/ Modbus TCP, wireless Mbus, USB. The Modbus protocol is specified in its entirety in Modbus Application Protocol Specification V1.1b. For Wireless Mbus, USB, see comments at the next point.</p> <p>Through these interfaces, SCU200 provides access to real-time electrical measurements like current, voltage, power factor, power, energy etc., I/O, breaker status, sensor values, alarms, and historical logs.</p>
<p>Format of Product Data</p>	<p>All the information about the specific communications can be found in the following link chapter 7 – SCU200 communication interfaces.</p> <ul style="list-style-type: none"> - The Modbus protocol is a Master-Slaves protocol. This means that only one master and one or more slave nodes (max. 247) can be connected to the same serial bus. A Modbus communication is always initiated by the master and there is only one transaction at the same time. For further information: www.modbus.org If you intend to use Modbus, you should only use ASCII characters in the Web UI. Unicode characters will not be displayed in Modbus. The maximum size for a Modbus frame is 256 bytes. Modbus uses a big-endian allocation for addresses and data items. This means that, when a numerical quantity larger than a single byte is transmitted, the most significant byte is sent first. Example: 1234h → first 12h then 34h. <p>All the device on InSite flat cable like sensors, IO modules, Smart protection devices communicate over standard Modbus protocol explained earlier – however for dedicated register readings and address details – please refer to the following manual – chapter 7 (7.1 Modbus RTU/TCP readings).</p> <ul style="list-style-type: none"> - SCU200 with the expansion module of Wireless Mbus, can also integrate meters sending data on Wireless Mbus protocol. Each wireless MBUS module can be configured to listen on Wireless MBUS mode C1 or T1. They are fixed to operate on 868.95MHz radio frequency. In addition, each module has selectable antenna port (internal is default). Modules can securely store Wireless MBUS encryption key with meter ID and manufacturer identification. Supported security modes are mode 5 and mode 7. Also unencrypted data from meters are supported. In T1 and C1 modes, meters periodically transmit data (unidirectional) to the master using RSP_UD telegrams, typically every few seconds or minutes. In Mode 5, the data is unencrypted and mainly used for testing or in non-secure environments. In Mode 7, the telegrams are AES-128 encrypted, providing a

	<p>secure communication channel suitable for billing or critical applications.</p> <p>The master (e.g., SCU200 with a compatible receiver) listens to these periodic broadcasts to collect metering data. Since this is a one-way (unidirectional) communication mode, the master cannot send commands or requests back to the meter.</p> <p>- USB (Universal Serial Bus) is a host-controlled communication protocol that enables SCU200 to manage connected peripherals through a structured, hierarchical bus system. SCU200 acts as the USB host, automatically detecting up to five USB hubs at startup and monitoring each port for status, overcurrent, and lock conditions. SCU200 uses USB control and data transfer protocols (such as bulk, interrupt, or isochronous transfers, depending on device type) to exchange data. For serial-based devices like Linky or P1 meters, data is collected through USB-to-serial adapters, which convert serial communication into USB packets that SCU200 interprets and logs via its internal data handling software. The USB layer ensures reliable data framing, error detection, and device-specific data polling, allowing SCU200 to gather measurements, statuses, or diagnostics in real time.</p>
<p>Estimated volume of Product Data</p>	<p>without any external storage cards, the device can store data up to 3GB, however the amount of data stored depends on the configurations of each individual users and it varies from use case to use case.</p>
<p>Collection frequency of Product Data</p>	<p>The collection data frequency depends on the type of devices connected downstream to the main control unit.</p> <p>For current sensors – the frequency is every second.</p> <p>For IO modules other smart protection devices – the frequency is up on the occurrence of events or signals. For standard instantaneous electrical parameters, the data collected can be every 1sec, 30sec, 60sec, 900sec.</p> <p>For Modbus & Mbus devices the collection frequency depends on the user configuration which can be 30sec, 60 sec, 900sec.</p> <p>For Metering modules, the data is collected every 30sec, 60 sec, 900sec.</p>
<p>Storage place of Product Data</p>	<p>There is a possibility to choose internal or external storage option inside the device. The internal storage is fixed to around 3GB, whereas the external storage can be expanded with no limits using the standard SDXC and SDHC cards.</p>
<p>Intended duration of retention of Product Data</p>	<p>If the user selects internal storage option in simple configuration with only current sensors – the user can store data up to 1 year, however this time can be extended if the user has opted for external storage options using SD cards, depending on the capacity of the card.</p>

