

## Information notice on [InSite Energy Management System – SCU100]

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)<sup>1</sup>.

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](mailto:eu-data-act@abb.com).

### Details on the Connected Product and Product Data

Connected Product	[Portfolio of InSite Energy Management System, see at this <a href="#">link</a> . ]
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 RTU, Modbus TCP, snmp, smtp, ftp, sftp, Rest Api.</p> <ul style="list-style-type: none"><li>• Modbus RTU communication in the SCU100 is done on a 2-wire (A, B) polarity dependent bus according to the RS-485 standard. Maximum number of devices that can be connected to one physical bus is 247 (which is the same as the individual device address range in Modbus. SCU100 act as a Modbus RTU slave to another interface (e.g., RS-485 port 4/5) to serve data to another master system (e.g., SCADA or BMS). The data that can be exported can be presented in the following <a href="#">static register mapping</a>.</li><li>• Modbus TCP is the Ethernet-adapted version of the Modbus protocol. The SCU100 communicates using IP-based TCP (Transmission Control Protocol) 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 SCU100 features an RJ45 port supporting 10/100 Mbps for physical network connectivity. Both the SCU100 and external polling clients, such as a BMS, are typically 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 can be referred via the mapping mentioned in Modbus RTU section.</li><li>• Data can be exported via SCU100 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 SNMP. To access data from the SCU100 using SNMP, the user must enable SNMP v3 in the device settings, configure the UDP port (default is 161 or any port &gt;1024), and set a security name (username), authentication password, privacy (encryption) password, and engine ID (minimum 12 hexadecimal characters). The authentication password is used with the MD5 protocol, and data is</li></ul>

<sup>1</sup> 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.

	<p>encrypted using DES. Once configured, the user can query the SCU100 using an SNMP manager tool (like Paessler or SNMP walk) by specifying the device IP, SNMPv3 credentials, and the desired OIDs to retrieve real-time or logged data from connected meters and sensors. For more details refer to <a href="#">user manual</a> – Chapter 16.</p> <ul style="list-style-type: none"> <li>• The data can be pushed via emails using the smtp configuration. The user can configure alerts, notifications of periodic data log export in CSV. SCU100 supports only SSL configuration with Port. For more details refer to <a href="#">user manual</a> – 11.2 Email</li> <li>• It is possible to export the data also via FTP and secured FTP. There are fields that must be configured in the webserver of SCU100 with server details (credentials) to allow automatic data export.</li> <li>• 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 <math>2^{53}-1</math> (9007199254740991). For more details refer to <a href="#">user manual</a> – Chapter 11.3.</li> <li>• The HMI communicates with the SCU100 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 SCU100. Through this network connection, the HMI can send configuration commands, retrieve system diagnostics, display energy trends, and receive event or alarm notifications from the SCU100. This setup ensures secure and efficient communication with minimal latency, supporting multi-touch interactions via the capacitive PCAP screen.</li> </ul>
<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 SCU100 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 <math>\neq</math> 0) can create users and</p>

	<p>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 permissions. Thanks to these permissions, we limit access and visibility of individual elements of the website.</p>
Type of Product Data	<p>The SCU100 control unit supports data exchange via both Modbus RTU and Modbus TCP, ensuring compatibility with a wide range of industrial and building automation systems. For Modbus RTU, SCU100 uses a 2-wire RS-485 interface and operates as a Modbus Master, enabling it to poll and retrieve data from multiple downstream slave devices such as meters, sensors, and I/O modules. This communication follows the Modbus Application Protocol Specification V1.1b, with configurable parameters like baud rate, parity, and device ID. For Modbus TCP, SCU100 features a standard RJ45 Ethernet port (10/100 Mbps) and functions as a Modbus TCP Client, actively requesting data from Modbus TCP servers over IP networks, in compliance with the Modbus TCP/IP Protocol Specification V1.0b. Through these interfaces, SCU100 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>
Format of Product Data	<p>All the information about the specific communications can be found in the following <a href="#">link</a> chapter 15 – Modbus RTU/TCP communication interface.</p> <ul style="list-style-type: none"> <li>- 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: <a href="http://www.modbus.org">www.modbus.org</a> If you intend to use Modbus, you should only use ASCII characters in the Web UI. Unicode characters will not be displayed in Modbus.</li> </ul> <p>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> <p>All the device on InSite flat cable like sensors, IO modules, Smart protection devices communicate over standard Modbus protocol explained earlier.</p>
Estimated volume of Product Data	<p>Stored data from SCU100 includes measurements from control unit itself, energy and power meters, current sensors and I/O modules. The volumes of data are highly variables depending upon the configurations of the devices at the user installation. The internal memory to store all the data from SCU100 is about 3GB.</p>
Collection frequency of Product Data	<p>The collection data frequency depends on the type of devices connected downstream to the main control unit.</p> <ul style="list-style-type: none"> <li>For current sensors – the frequency is every second.</li> <li>For IO modules other smart protection devices – the frequency is up</li> </ul>

	<p>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 devices the collection frequency depends on the user configuration which can be 30sec, 60 sec, 900sec.</p>
Storage place of Product Data	The memory architecture of the SCU100 control unit is designed to store both measured and computed values within its internal memory.
Intended duration of retention of Product Data	The memory system is segmented into five distinct storage areas based on sampling intervals: 10 seconds, 15 seconds, 1 hour, 1 day, and 1 week. Each segment retains the latest 1000 values, allowing for different historical depths depending on the interval. For instance, the 10-second interval stores data for approximately 2.8 hours, while the 15-second interval extends storage up to 250 hours. The 1-hour interval can store data for up to 42 days, the 1-day interval covers 143 weeks, and the 1-week interval retains data for an extensive period of 19.2 years. This tiered memory structure allows the SCU100 to provide both short-term high-resolution data and long-term trend analysis, supporting efficient monitoring and diagnostics over time.