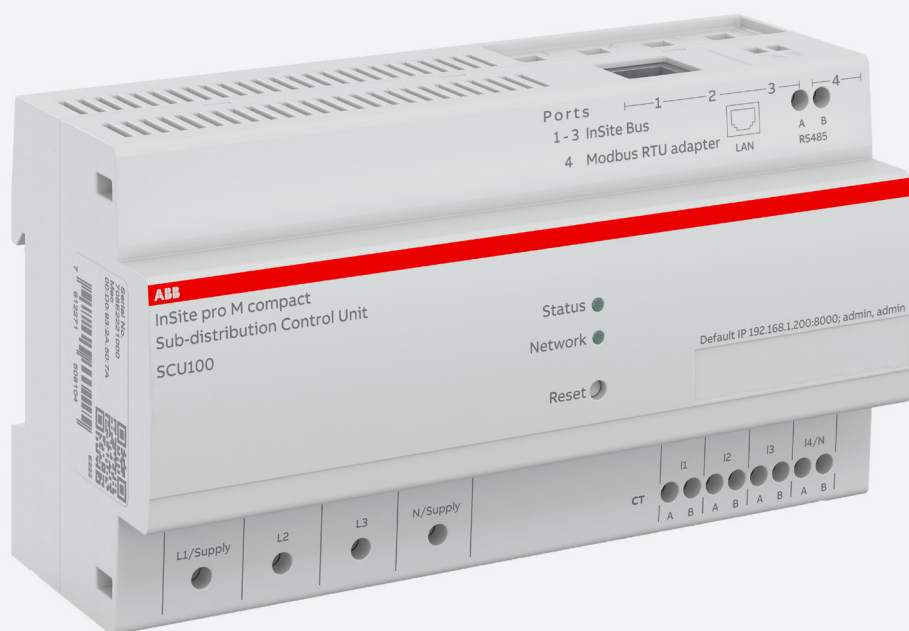


INSITE ENERGY MANAGEMENT SYSTEM

Optimize energy flows, easily.



- Scalable solution for sub and final distribution — from large to small commercial buildings
- Retrofit with minimal impact on the existing installation — brand-agnostic and easy to integrate
- Energy and load management
- Intuitive multi-site cloud platform

ENGINEERED
TO OUTRUN

With the ongoing energy transition, analyzing energy consumption and power quality is the first step to saving energy. Whether you're installing a new system or upgrading an existing one, our solutions provide the flexibility, scalability and openness you need to effectively manage energy flows both on-premise and cloud-based.

Building on this foundation, our InSite energy management system delivers smart energy and load management to enhance efficiency across both sub and final distribution.

TABLE OF CONTENTS

04	InSite energy management system
06–07	Comparative overview of control units
08–11	Control unit SCU100
12–15	Control unit SCU200
16–17	InSite Energy Pro
18–19	Plug-in expansion modules for SCU200
20–29	Power supply for SCU200
30–43	Integrated devices and meters
44–46	Ordering data
47	InSite configurator

InSite energy management system

The InSite energy management system offers smart energy and load management to **enhance energy efficiency in both sub and final distribution**. Its scalability caters to diverse requirements, **from basic monitoring and control to advanced load management**, ensuring all energy management needs are met effectively both **on-premise or cloud-based**.

It provides comprehensive, flexible solutions for a wide range of applications. The central control unit serves as the brain of the system, monitoring energy data via current sensors and enabling control and automation functionalities through smart accessories. This integrated approach allows for advanced energy and load management solutions that are **easily customizable for specific applications**, the number of devices to be managed, and the required functionalities.

The InSite energy management system features two control units – SCU100 and SCU200.

The **SCU100** control unit is designed for **comprehensive monitoring functions with limited control capabilities**. It can connect to a large number of current sensors, I/O modules, and smart signaling devices, making it an ideal choice for applications that require extensive monitoring functionality.

SCU200, on the other hand, is an **advanced, modular** control unit emphasizing flexibility and

scalability. Like SCU100, it can connect with current sensors, I/O modules, smart accessories and Modbus devices, with the option to **expand further through plug-in expansion modules** based on specific protocols and metering requirements. The SCU200 also includes a Wi-Fi version for setups where seamless device access is crucial, minimizing wiring needs and enhancing sophistication.

Protection devices like our digital surge protective device eOVR, or our standard protection portfolio equipped with smart aux/signaling device INS-S/H, are predefined in the SCU100 and SCU200 webserver. The eOVR can be connected directly via Modbus RTU while other devices can be connected via the smart communication or I/O module.

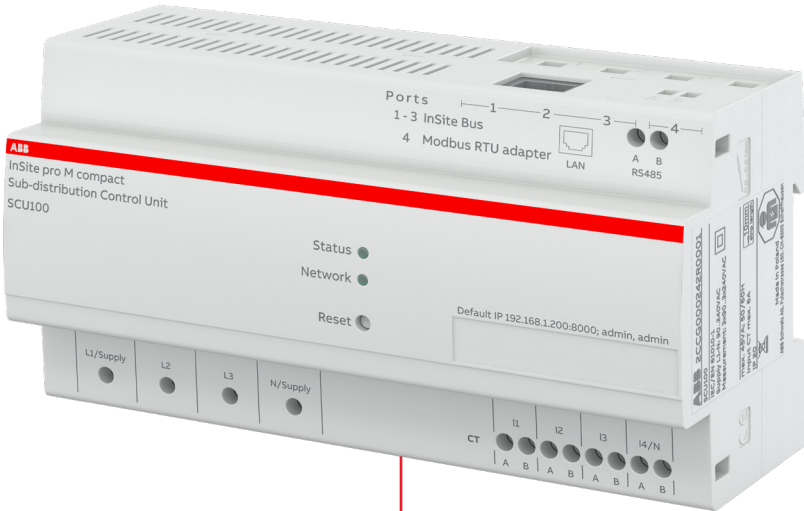
The system's **web server offers a customizable dashboard** for simplified data export, local control, enabling the development of advanced automation logic and comprehensive control over connected devices, including third-party components.

With our **intuitive multi-site energy management cloud platform, InSite Energy Pro**, users can benchmark performance and identify energy-saving opportunities, while real-time monitoring and automated load management enhance energy efficiency and support compliance with sustainability regulations.



Comparative Overview of SCU100 and SCU200

SCU100



Ports 1-3 InSite Bus 4 Modbus RTU adapter LAN RS485

Status Network Reset

Default IP 192.168.1.200-8000; admin, admin

L1/Supply L2 L3 N/Supply CT I1 I2 I3 I4/N



Comprehensive approach



Mainly for installations with high number of branches to be monitored



More suitable for integration with local 3rd party monitoring systems

SUITABLE FEATURES

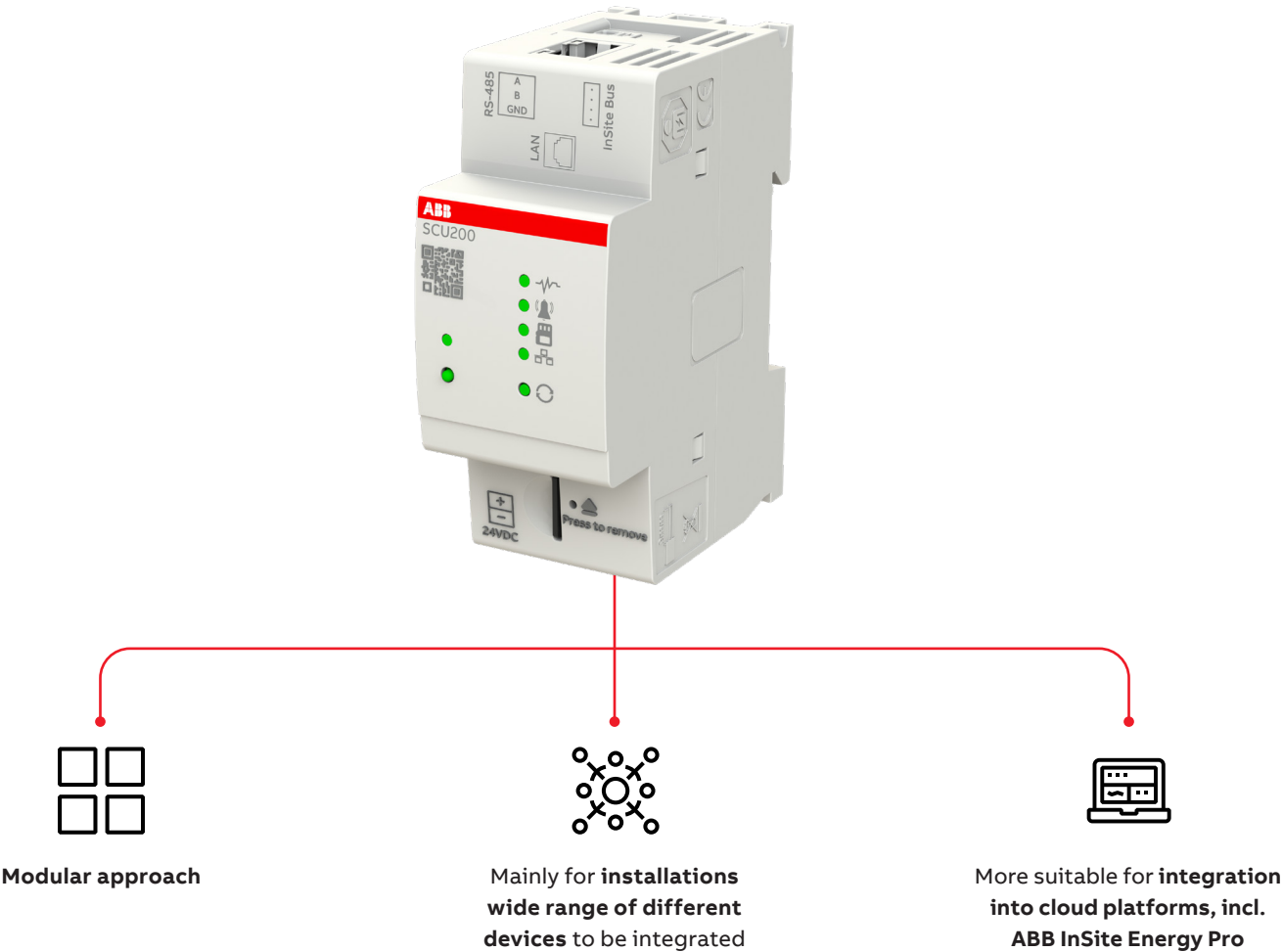
- **Higher number of loads** monitored through sensors by a single control unit
- Smart signal/auxiliary contact available
- **Higher mains current measurements** possible thanks to 5A current transformers
- Compliance with ABB's **cybersecurity regulations**

RECOMMENDED APPLICATIONS

Industry, Data Centers, Large Commercial

Technical feature	Description
Number of connectable devices (Current sensors, IO modules, smart aux/sign)through InSite flat cable	Up to 96
Smart signal/auxiliary contact connection	Yes
Number of integrable Modbus devices	Up to 32 (16 RTU + 16 TCP - 4 registers per device only)
Max current measurable directly by an InSite device	Depending on the 5A current transformers connected to the control unit
Communication protocols available for data transfer upstream (BMS/SCADA/Cloud etc.,)	Modbus RTU, Modbus TCP, SNMP, FTP, SFTP, SMTP, Rest API
Wi-Fi connection	No
Power supply	AC
Expandable memory storage	No

SCU200



SUITABLE FEATURES

- **Comprehensive monitoring** and **advanced control**, connectivity features
 - **Wi-Fi connection** possible
 - **Smart signal/auxiliary contact** available
 - **DC power supply** possible
 - Higher mains current magnitude measurement thanks to metering module (INS-E3-5).
- Direct integration with InSite Energy Pro cloud via cellular connectivity using the LTE module (INS-LTE)
 - Compliance with ABB's **cybersecurity regulations**

RECOMMENDED APPLICATIONS

Residential, Telecom and unmanned substations, Small Commercial

Technical feature	Description
Number of connectable devices (Current sensors, IO modules, smart aux/sign)through InSite flat cable	Up to 32 Up to 96 with 1 INS-HUB Up to 160 with 2 INS-HUB
Smart signal/auxiliary contact connection	Yes
Number of integrable Modbus devices	Up to 32 (16 RTU + 16 TCP/IP)
Communication protocols available for data transfer upstream (BMS/SCADA/Cloud etc.,)	Modbus TCP, FTP, SFTP, SMTP, Rest API
Wi-Fi connection	Yes
Power supply	AC and DC
Expandable memory storage	Yes (SD card)

Control Unit

SCU100

The SCU100 is designed for simple and efficient collection and analysis of measured values and energy data in buildings, data centers, and various industrial settings.

By enhancing the transparency of energy flows, it helps improve energy efficiency and reduce costs across different branches and functional buildings.

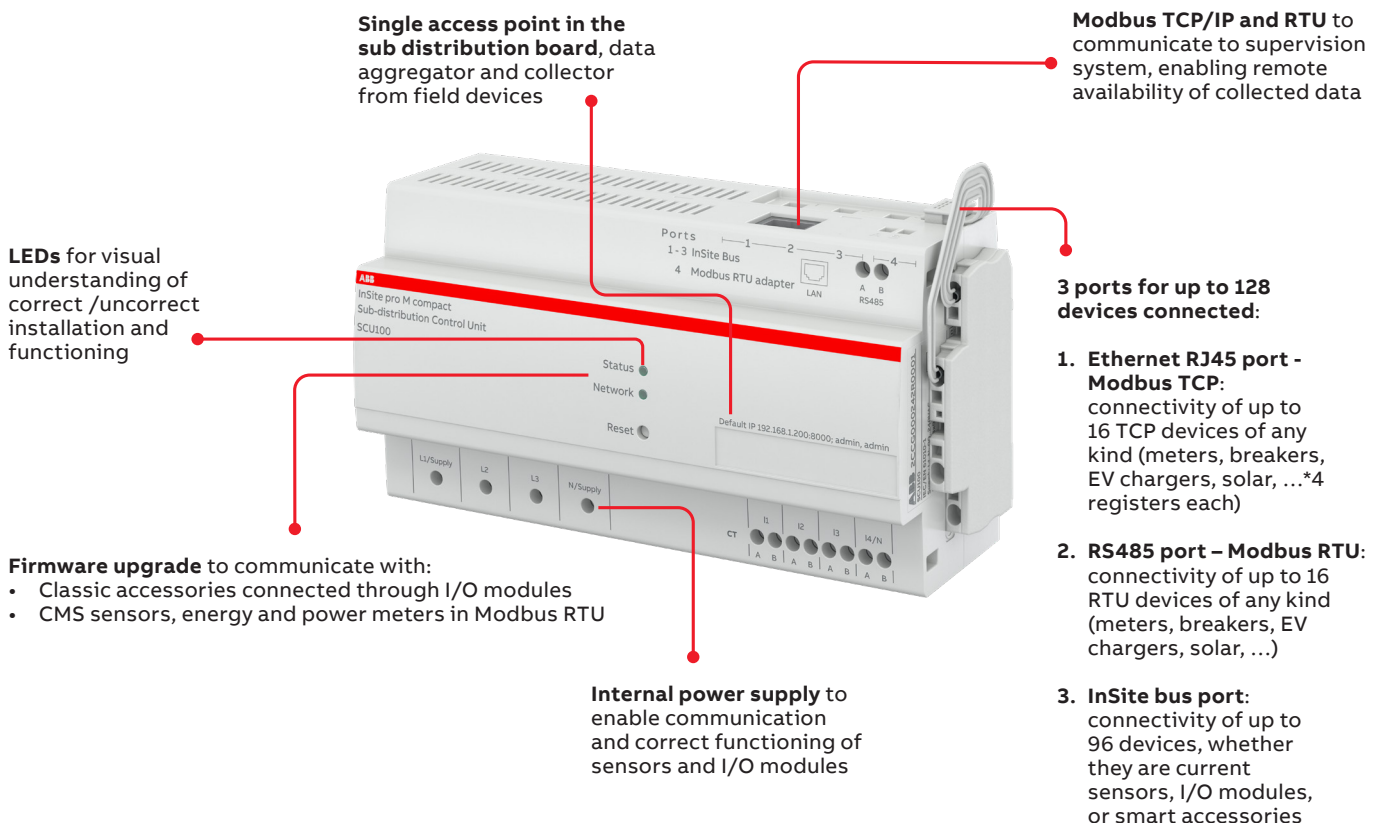
The SCU100 supports connections with various devices, including energy meters, network analyzers, I/O modules, smart auxiliary devices, current sensors.

Capable of collecting data from up to 16 energy and power meters via Modbus RTU, 16 energy

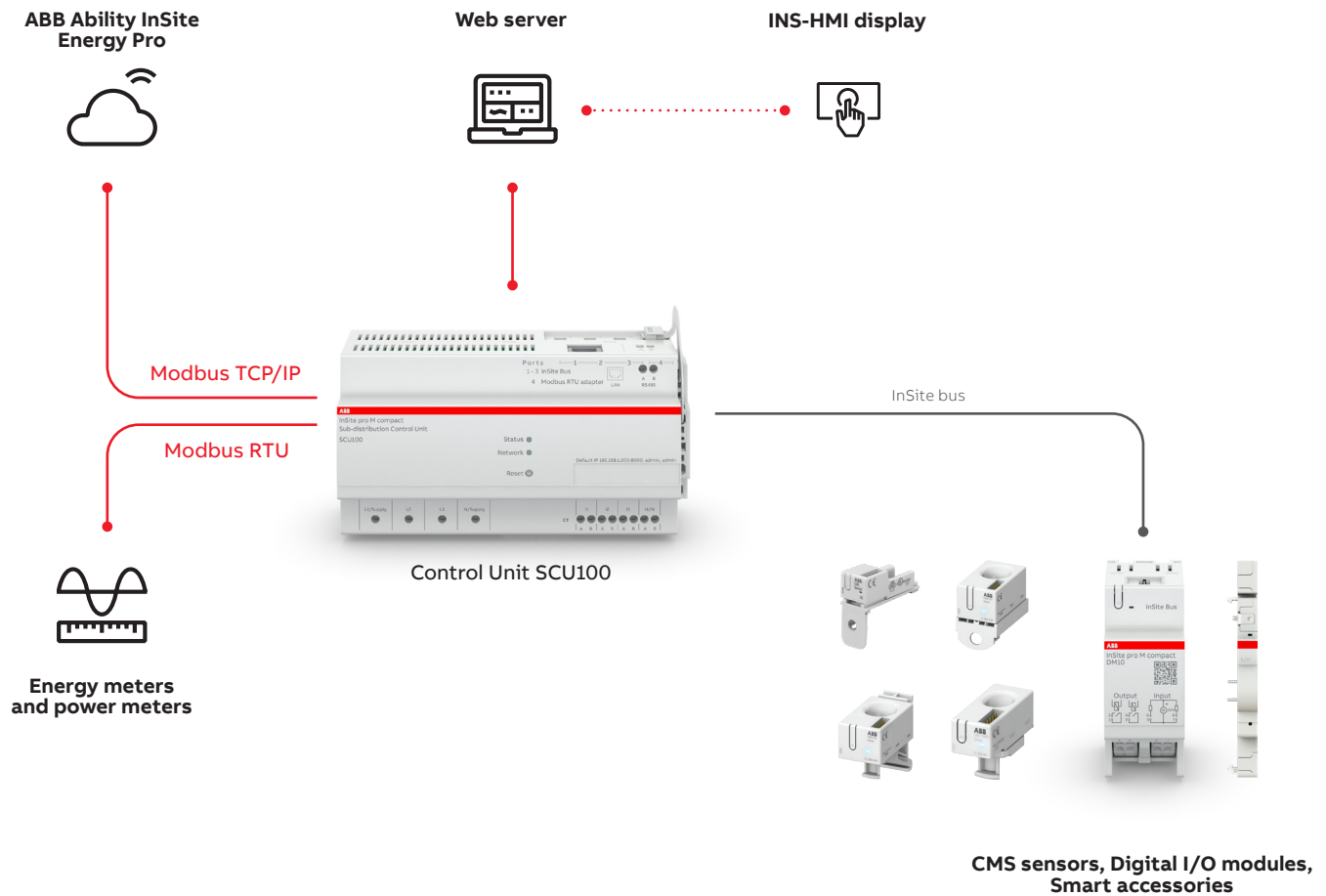
and power meters (limit: 4 registers for each device) via Modbus TCP and 96 current sensors and digital channels simultaneously, the SCU100 calculates energy usage and operational metrics at a single-line level, allowing for period or device comparisons.

Its built-in web server provides intuitive access to measured data, configuration settings, and system parameters without additional software.

Data can be accessed locally or exported automatically via various interfaces, integrating seamlessly into higher-level building management systems.



System Architecture with SCU100



Technical data

SCU100



Sub distribution control unit	Technical feature	Unit	Description
	Supply voltage	[VAC]	80...277 (L1-N, +5%)
	Frequency	[Hz]	50/60
	Power input (L1-N)	[W]	5...45 depending on number of sensors and I/O modules
	Power input , current trtransformer, secondary side	[VA]	Current circuit <2 (per phase)
	Voltage measurement range	[VAC]	80...277 (L1, L2, L3-N)
	Measurement range, current transformer, secondary side	[A]	nominal: 5 max: 6
	Harmonic component	[Hz]	up to 2000
	Data rate of Modbus RTU	[Baud]	RS-485 2- wire, 2400...115200
	Refresh time		1 sec / 30 sec (depending on type of data)
	Data storage and export		Integrated 1-year data storage Automatic CSV data export
	Communication		LAN: Modbus TCP/IP, secured SNMP v1, v2, encrypted v3 RS485: Modbus RTU FTP, SFTP, SMTP and Rest API
	Connected devices		Up to 96 sensors/digital channels Up to 16 meters via Modbus RTU Up to 16 meters via Modbus TCP (limit, 4 registers per device)
	LAN	[Mbit/s]	100
	Conductor cross-section	[mm ²]	0.5...2.5
	Mounting method		35mm DIN rail (DIN 5022)
	Degree of protection		IP20
	Dimensions	[mm]	161.5x87.0x64.9 (9WM)
	Opating temperature	[°C]	-25...+60
	Stirage temperature	[°C]	-40...+85
	Standards		IEC61010-1, UL 508

Main circuit accuracy	Description
Voltage	± 1%
Current	± 1%
Harmonic component (up to 2500Hz)	± 1%
Active power	± 2%
Apparent power	± 2%
Reactive power	± 2%
Power factor	± 2%

Web server

SCU100

Insite SCU100 built-in webserver is a user-friendly, locally accessible interface requiring no cloud connection and provided at no additional cost. With a simple design, it offers a rich set of features, including widgets for an at-a-glance view of real-time values and status across all integrated devices. Users can explore interactive graphs, perform trend analysis, and benchmark consumption trends between devices to gain valuable insights.

The webserver also makes it easy to adjust settings, commission new configurations, export reports, set up automations and alerts, and configure email notifications, providing a comprehensive and intuitive energy management experience.



**Realtime widgets
& Benchmarking**



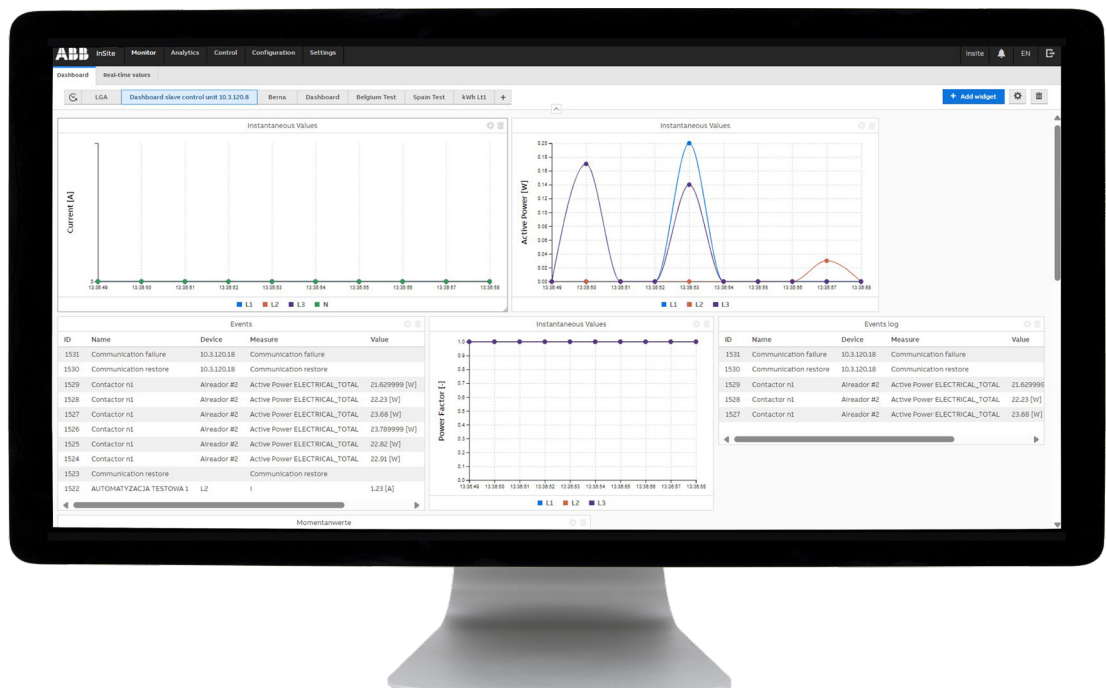
**Complete historical
Analysis**



**Automated
data export**



Alarms & Events



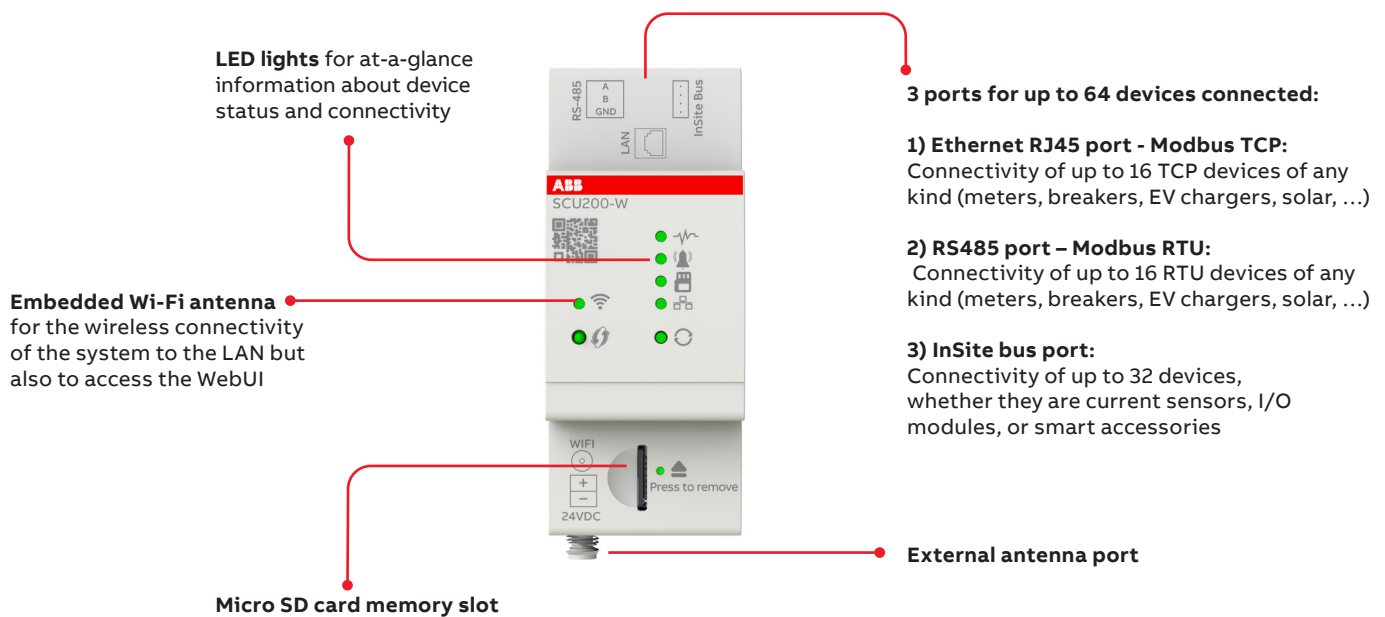
Control Unit

SCU200

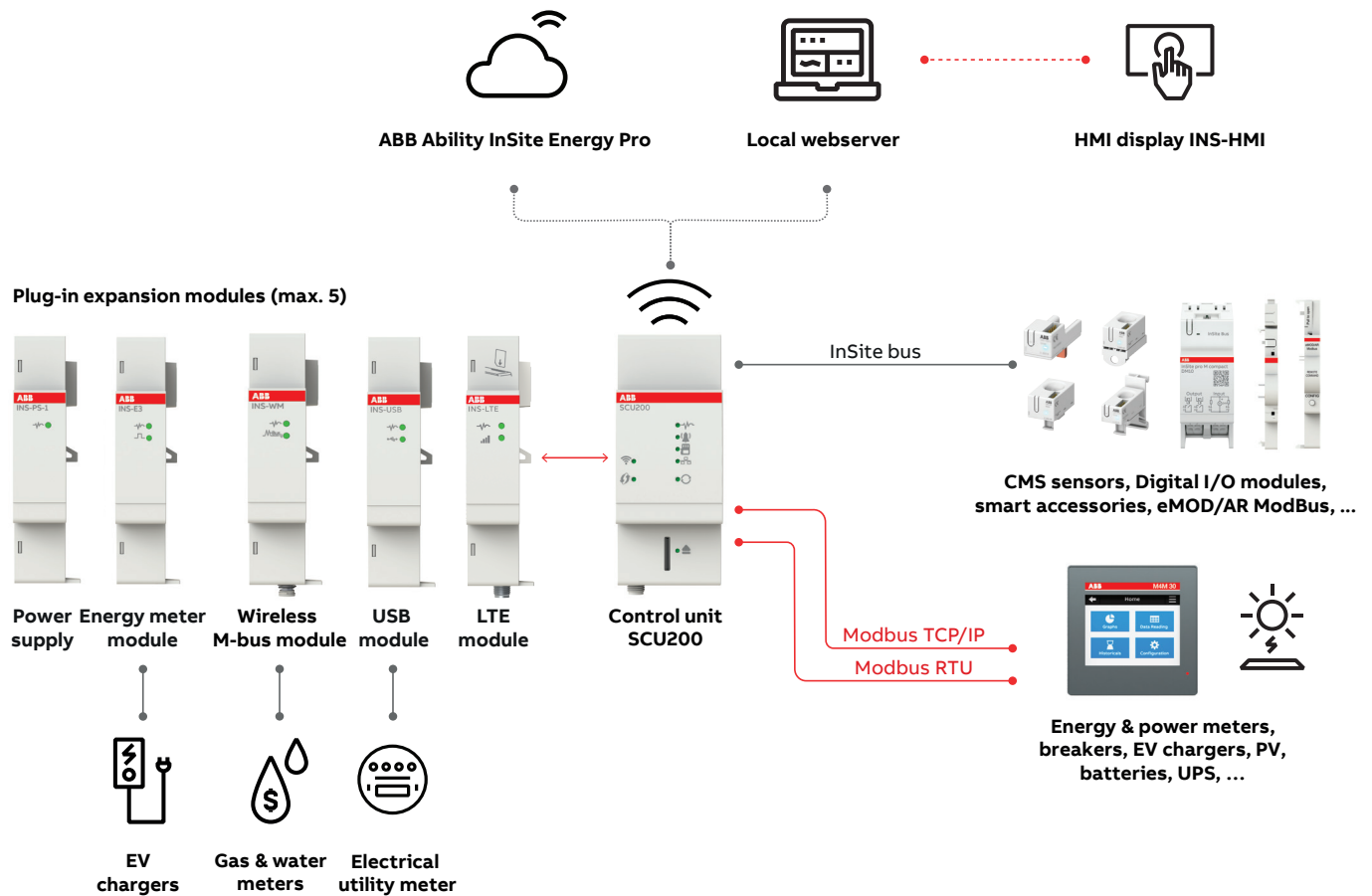
SCU200 elevates smart energy and load management functionalities, offering a comprehensive solution to optimize energy usage in both sub and final distribution.

The compact control unit collects data from field devices, which can then be accessed via the InSite web server, or any third-party application.

Depending on the specific needs, expansion modules can be selected from a range of options, allowing the system to be customized in a cost- and space-efficient way.



System Architecture with SCU200



Technical data

SCU200



SCU200 / SCU200-W	Technical feature	Unit	Description
	Supply voltage	[V]	24VDC +/- 10%
	Current	[A]	Max 0.7
	Connection		InSite modular bus
	Power consumption	[W]	Max 3.6
	Refresh time		1sec / 30 sec (depending on type of data)
	Data storage and export		Integrated data storage (expandable through microSD card)
			Automatic CSV data export
			Modbus TCP/IP
	Communication protocols		Rest API
			DHCP
			HTTPS
			NTP
			SFTP/FTP
			MQTT (protocol for InSite Energy Pro), SMTP
	Communication ports	[Mbit/s]	Ethernet, 10/100
			RS485 (120Ω termination default)
			WiFi 2.4 GHz IEEE 802.11 b/g/n*
			InSite bus
	External antenna port*		Female SMA / 50Ω / 2.4 GHz
	External Antenna (not included)*		Male SMA / 50 Ohm / 2.4 GHz max 4.7 dBi
	Power supply 24VDC connection		
	Conductor cross section solid /flexible	[mm²]	0.2 ... 1
	AWG	[AWG]	28-17
	Strip length	[mm]	10
	RS485 port connection		
	Conductor cross section solid /flexible	[mm]	0.14 ... 1.5
	AWG solid conductor	[AWG]	28-16
	AWG flexible conductor	[AWG]	26-14
	Strip length	[mm]	8 ... 9
	Connected devices		Up to 32 current sensors/digital channels/smart accessories
			Up to 16 Modbus TCP/IP and 16 Modbus RTU devices
	Mounting method		35mm DIN rail (DIN 5022)
	Degree of protection		IP20
	Dimensions	[mm]	35.8x87x64.9 (2M)
	Weight	[g]	105
	Operating temperature	[°C]	-25... +55
	Storage temperature	[°C]	-40... +85
	Operating altitude	[m]	0... 2000
	Standards		IEC61010-1
			IEC 61326-1

* only on SCU200-W

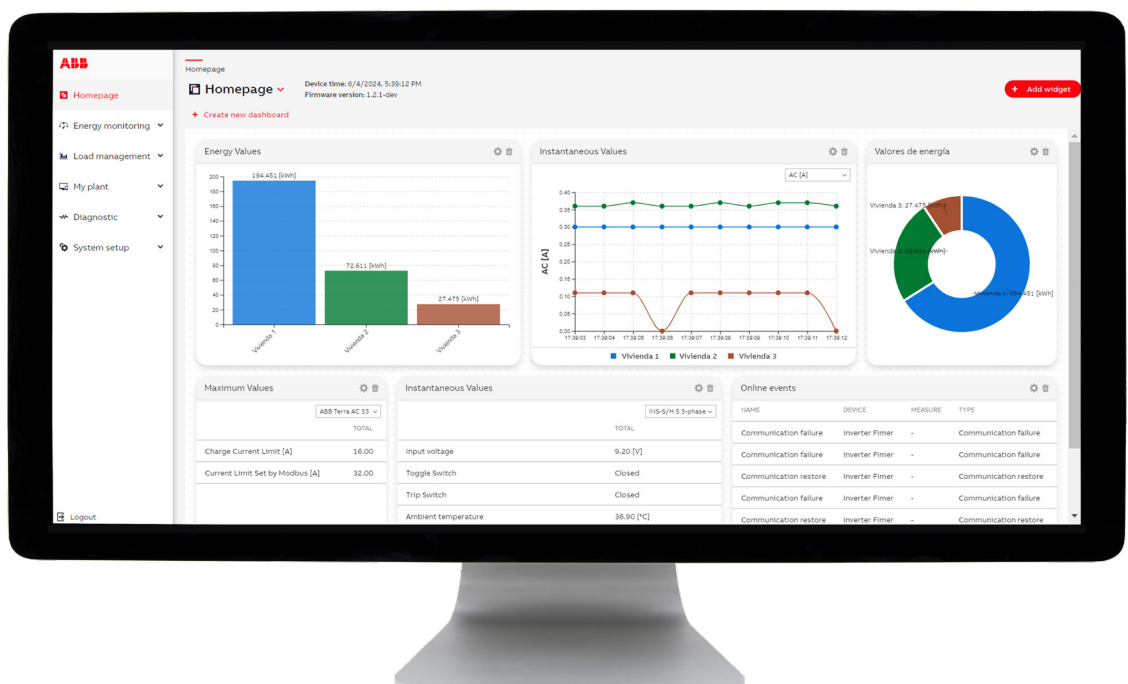
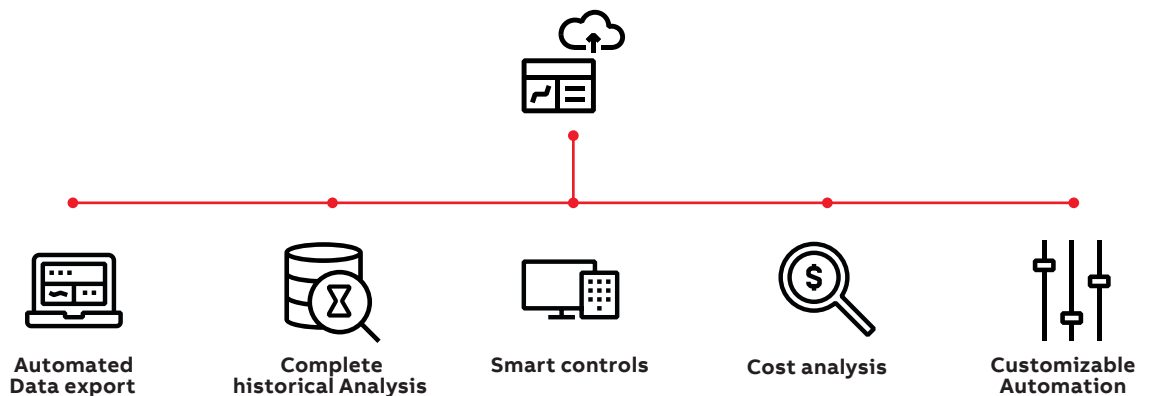
Web server

SCU200

Once the system is installed, it enables connection to the integrated InSite web server with automatic device recognition. Through the SCU200 local web server, real-time insights into energy consumption and power quality are provided. Users can customize widgets such as graphs, charts, and tables, for immediate visibility into consumer allocation, top consumers, and trend deviations. Additionally, the system calculates costs using a range of tariff options and enables the management of multiple contracts for comprehensive financial insight. Consumption trends can be effortlessly tracked and analyzed over time, with data stored in inter-

vals as small as thirty seconds. Moreover, alerts and actions can be automated based on pre-defined conditions.

The system facilitates local device control by providing a dedicated page for each device, featuring writable Modbus variables. Additionally, it allows control of devices from external cloud platforms or BMS systems via REST API or Modbus. This ensures efficient and optimized energy management at your fingertips, customized to meet specific requirements. Thanks to its seamless platform, integrating any third-party device is straightforward and user-friendly, making it remarkably convenient for customers.



Energy management cloud platform

ABB Ability InSite Energy Pro

InSite Energy Pro is a cloud platform for intuitive, multi-site energy management that connects with the InSite system's SCU200 control unit.

SCU200 control unit operates as the main gateway that connects to the cloud and manages energy data across various devices, such as breakers, meters, and Electric Vehicle (EV) chargers.

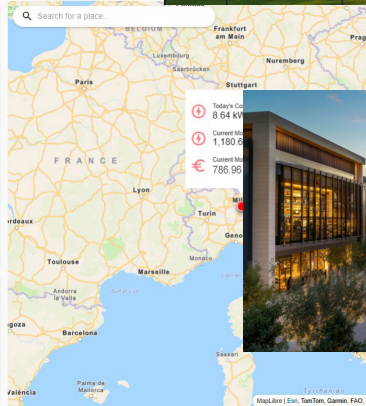
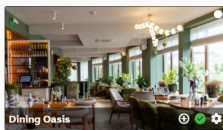
With InSite Energy Pro, users can obtain a holistic view of their energy ecosystem, facilitating decision-making, performance optimization, and cost reduction.

ABB InSite Energy Pro

Dashboards
Properties
Asset Management
Controls
Property Services
Alarms
Reports
Settings

Properties

Sort: Alphabetic (A-Z)



Multi-dwelling units



Commercial buildings

Elevate energy efficiency, from ground to cloud.



solutions.abb.com/insite-energy-pro



Easy implementation and retrofit

- **Reduce complexity, costs and space** with only one control unit as the main gateway
- **Easy retrofit and upgrade of existing installation** at any time, minimizing impact on building operations
- **Enable integration and connection** to other 3rd party systems, using the data from the cloud to enrich the electrical data ecosystem

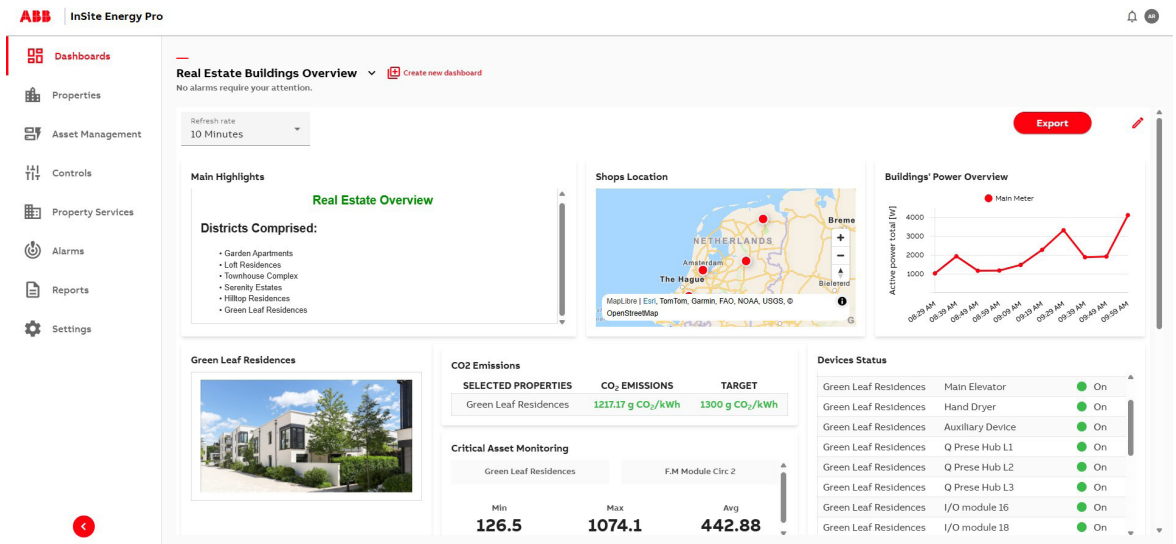


Intuitive energy management

- **User-friendly interface** with multi-location view, property status indicators, and comprehensive property details
- **Customizable dashboards** with a broad range of widgets for tailored views according to each application's needs

Energy management cloud platform

ABB Ability InSite Energy Pro



- **Energy Dashboards:** Create and customize multiple energy monitoring dashboards with a broad variety of widgets.
- **Properties:** A dedicated section to manage and oversee multiple facilities at a glance and in detail.
- **Asset Management:** Keep track of all the devices connected to the system, visualizing their status and details.
- **Control:** Manual control of selected loads (e.g. ABB Terra AC)
- **Property Services:** A dedicated section to enrich your analysis through benchmarking and contracts & tariffs configurations.
- **Alarms:** Configure your alarms to always be aware of any critical situations.
- **Reports:** Keep track of your facilities' performance with dedicated reports, facilitating communication with key stakeholders.
- **Settings:** General configuration and settings for the cloud application.



Accelerate decision-making

- **Remote monitoring** of real time energy data, KPI overview
- **Real-time notifications** and alerts to be always informed and enable proactive behavior
- **Remote control** of selected loads to quickly act in case of any critical situation
- **Benchmark analytics** allow for comparisons between different devices, groups or properties to identify areas of improvement



Reporting and transparency of energy data

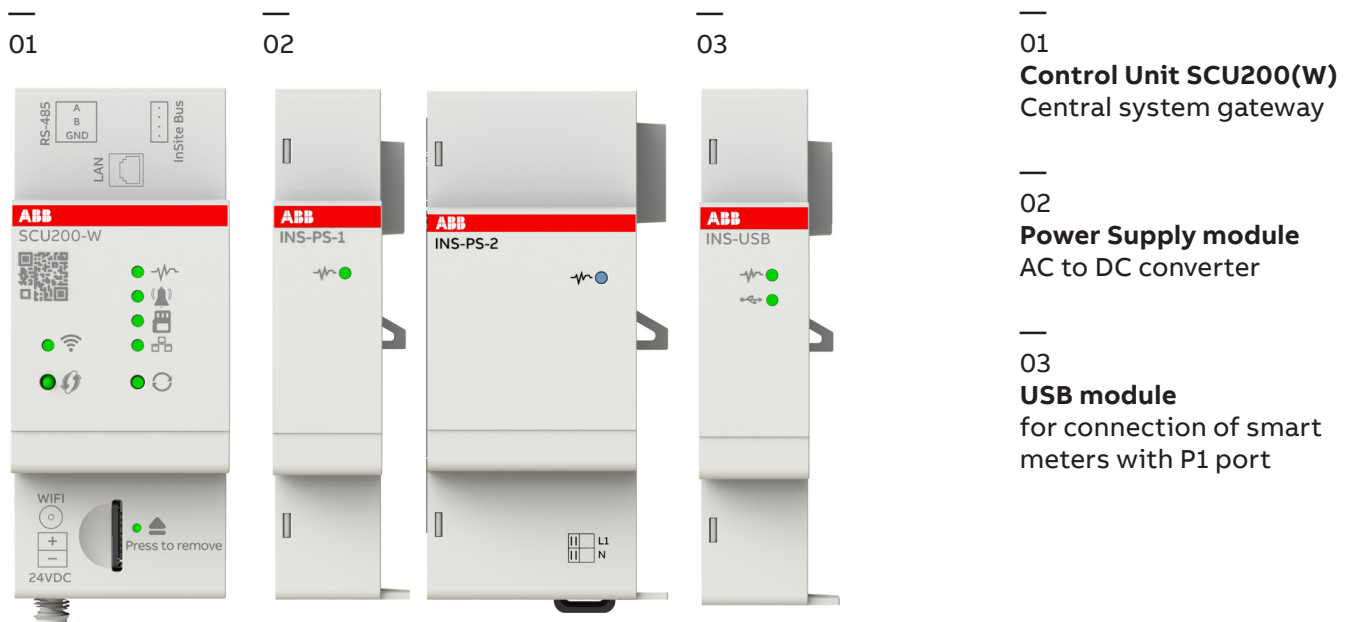
- **Comprehensive reports** that aggregate different data sources to show energy usage and cost distribution across different sites
- **Makes energy data more accessible and transparent**, keeping key stakeholders up-to-date about the overall performance and KPIs
- **Supports compliance** with energy efficiency regulations (e.g. ISO 50001)

Plug-in expansion modules for SCU200

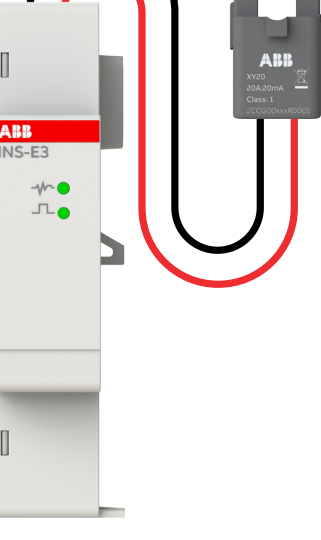
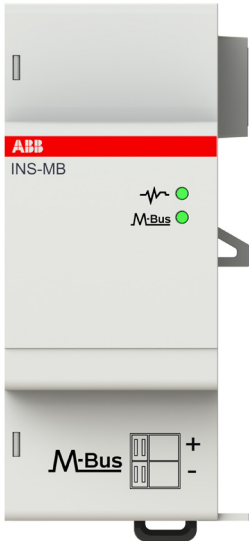


Customize your InSite energy management system with plug-in expansion modules for your specific application needs.

Simply plug up to 5 expansion modules into the central Control Unit SCU200(W) without any tools needed. The system will automatically recognize the modules, making them visible in its local webserver and cloud platform.

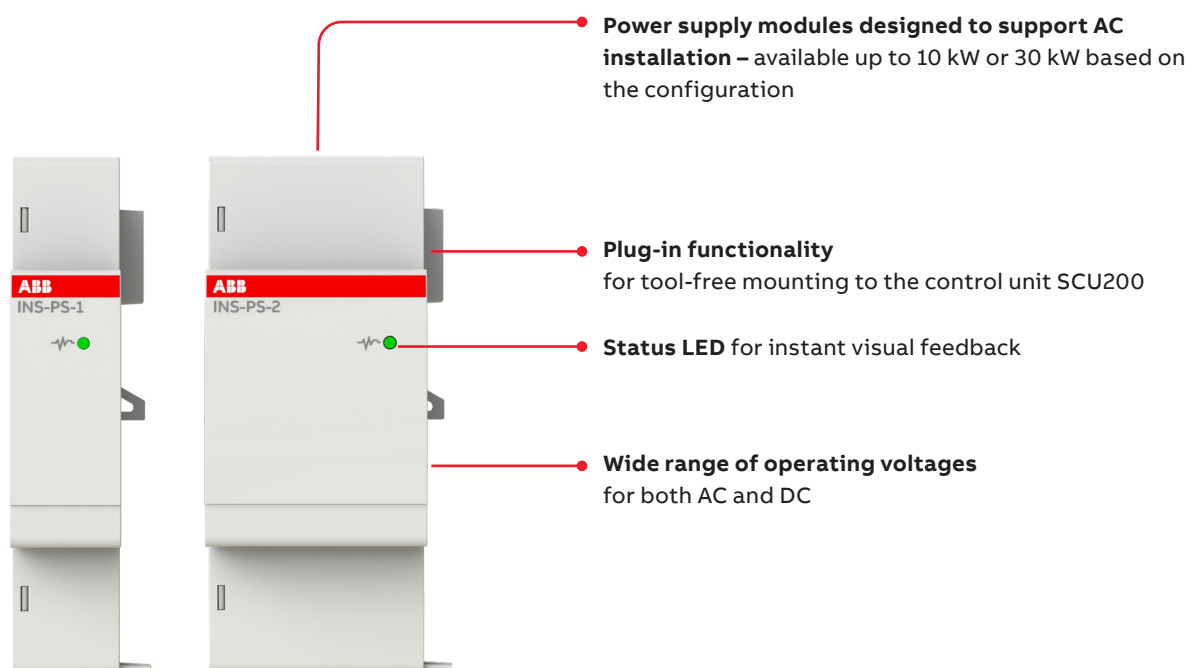


Plug-in expansion modules for SCU200

04  ABB INS-WM Wireless M-Bus	05  ABB INS-E3-5 CT L3 A B L2 A B L1 A B	06  ABB INS-E3 Current Transformer	04 Wireless M-Bus module for the integration of wireless Mbus meters on the field 05 Energy metering module for energy measurements 06 Split-core Current Transformers for INS-E3 metering module, to measure currents up to 80A		
07  ABB INS-LTE LTE	08 	09  ABB INS-LORA LoRa	10  ABB INS-HUB 24VDC	11  ABB INS-MB M-Bus	07 LTE connectivity module for direct connection to the internet via mobile networks 08 Antenna compatible with all InSite products (SCU200-W, INS-LTE, INS-LoRa, INS-WM) 09 LoRa communication module enables LoRaWAN communication for the SCU200 10 Collector Hub module for reaching up to 160 devices via the InSite flat cable 11 Wired M-Bus communication module for connecting wired Mbus meters

Power supply modules

INS-PS-1 and INS-PS-2

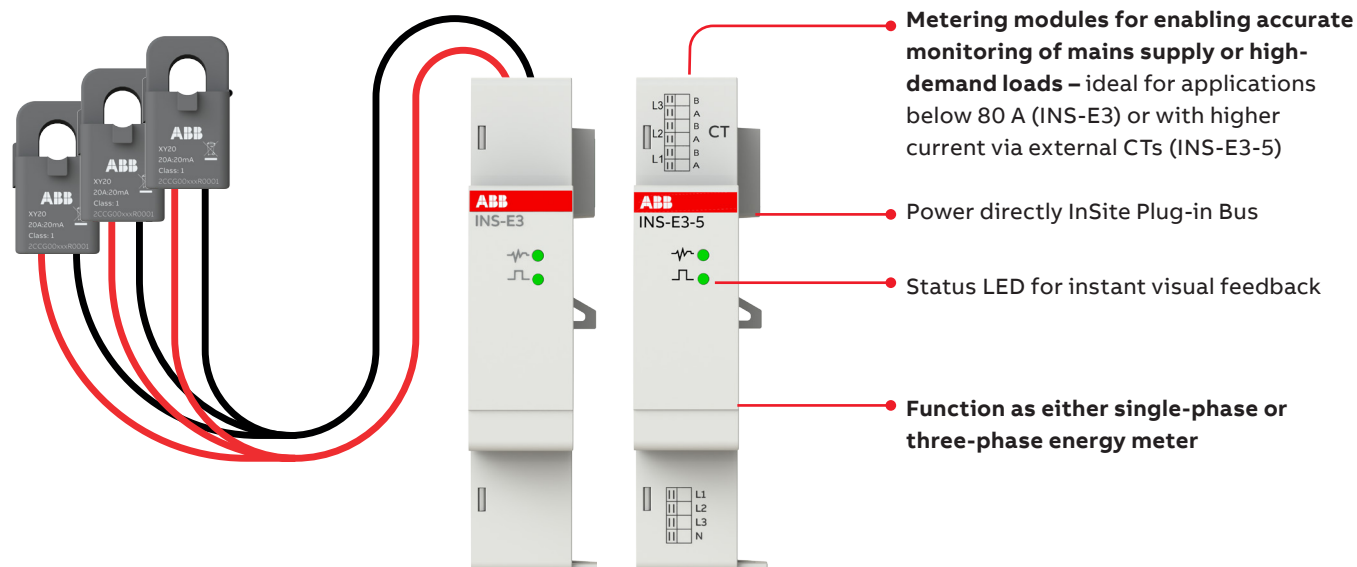


To find the right power supply for your configuration please use the [following link](#)

Technical feature	Unit	INS-PS-1	INS-PS-2
Supply voltage	[V]	100...240 VAC +/-10% 110...350 VDC (tolerance included)	100...240 VAC +/-10% 110...350 VDC (tolerance included)
Connection		InSite modular bus	InSite modular bus
Solid conductor	[mm²]	0.14...1.5 (28...16 AWG)	0.14...1.5 (28...16 AWG)
AWG solid conductor	[AWG]	28...16	28...16
Fine-stranded conductor	[mm²]	0.14...1.5 (26...14 AWG)	0.14...1.5 (26...14 AWG)
Fine-stranded conductor; with insulated ferrule	[mm²]	0.25...0.75	0.25...0.75
Fine-stranded conductor; with uninsulated ferrule	[mm²]	0.25...1.5	0.25...1.5
Strip length	[mm]	8...9 mm (0.31...0.35 in)	8...9 mm
Connection type		screwless	screwless
Power output	[W]	10W nominal / 15W boost	30W nominal / 45W boost
Max input Current	[mA]	180	450
Frequency		50/60Hz ± 5%	50/60Hz ± 5%
Power input (L1-N)		18W max	45W max
Conductor cross-section		1.5mm² max	1.5mm² max
Mounting method		35mm DIN rail (DIN 5022)	35mm DIN rail (DIN 5022)
Degree of protection		IP20	IP20
Dimensions	[mm]	17.5x87.0x64.9 (1WM)	35.8x87x64.9 (2M)
Impact test		IK06	IK06
Weight	[g]	77	110
Operating temperature	[°C]	-25...+60	-25...+60
Storage temperature	[°C]	-40...+85	-40...+85
Operating altitude	[m]	0...2000	0...2000
Standards		IEC 61010-1 IEC 61326-1	IEC 61010-1 IEC 61326-1
Declarations		CE, UKCA	CE, UKCA

Metering modules

INS-E3 and INS-E3-5

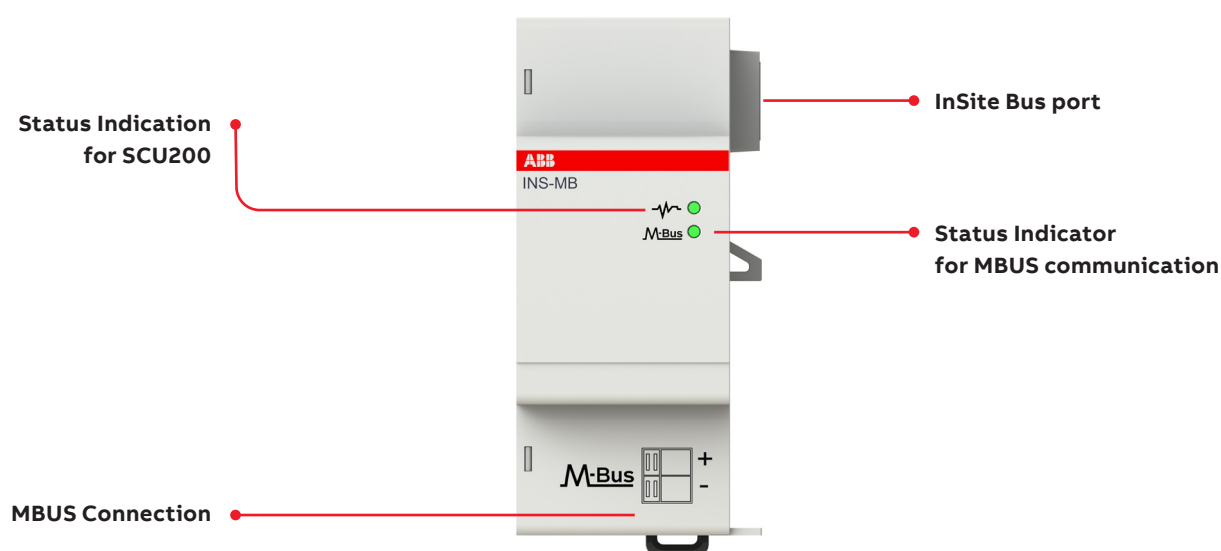


Technical feature	Unit	INS-E3	INS-E3-5
Supply voltage	[VDC]	24V	24V
Connection		InSite modular bus	InSite modular bus
Power consumption	[W]	0.7	0.7
Over Voltage category		II	II
Network Type		-3 phase 4 wires; 3 CT -3 phase 3 wires; 3 CT -3 phase 4 wires; 2 CT -1 phase 2 wires; 1 CT	-3 phase 4 wires; 3 CT -3 phase 3 wires; 3 CT -3 phase 4 wires; 2 CT -1 phase 2 wires; 1 CT
Voltage input connection		Screwless terminal block	Screwless terminal block
Voltage specified measurement range (full accuracy)	[VAC]	80...240 (L1,L2, L3-N)	80...240 (L1,L2, L3-N)
Voltage limit range of operation	[VAC]	0...277	0...277
Frequency	[Hz]	50 / 60	50 / 60
Data availability		SCU200 webserver, Modbus TCP, Rest API, Reports via SMTP / FTP	SCU200 webserver, Modbus TCP, Rest API, Reports via SMTP / FTP
Current transformers			
Current transformers		CTS-20/50/80	Any CT
Current transformer supported on Primary side	[A]	up to 80	No upper limit
Current transformer supported on Secondary side	[A]	nom.: 0.004	nom: 5
Accuracy - INS-E3-5 (@25 °C, PF=1)		Active Energy 1%	Active Energy 1%
Accuracy - CTS-1-XX		Class 1 (EN 61869-2)	
Conductor cross-section			
Solid/fine-stranded conductor	[mm²]	0.14...1.5	0.14...1.5
AWG solid conductor	[AWG]	28...16	28...16
AWG fine-stranded conductor	[AWG]	26...14	26...14
Fine-stranded conductor with insulated ferrule	[mm²]	0.25...0.75	0.25...0.75
Fine-stranded conductor with uninsulated ferrule	[mm²]	0.25...1.5	0.25...1.5
Strip length	[mm]	8...9	8...9
CTS cable length	[m]	0.5	-
Mounting method		35mm DIN rail (DIN 5022)	35mm DIN rail (DIN 5022)
Dimensions	[mm]	17.5x87.0x64.9 (1M)	17.5x87.0x64.9 (1M)
Weight	[g]	52	52
Relative Humidity		0.95	0.95
Over voltage Category		II	II
IK code		IK06	IK06
Pollution degree		2	2
Operating temperature	[°C]	-25...+60	-25...+60
Storage temperature	[°C]	-40...+85	-40...+85
Operating altitude	[m]	0...2000	0...2000

Wired MBus communication module

INS-MB

The wired M Bus communication module for the SCU200 provides a simple and reliable way to integrate M Bus metering devices into your system for data acquisition and monitoring. Designed for fixed installations, it enables stable, multi-drop communication over standard M Bus wiring and supports connecting to 32 meters to a single wired M Bus module, helping you scale meter connectivity while keeping the installation compact and cost-effective.



INS-USB	Technical feature	Unit	Description
	Supply voltage	[V]	24V supplied by the InSite modular bus
	Connection		InSite modular bus
	Power consumption	[W]	0.75 (standby) 8 (max 32slaves)
	Connection		
	Solid conductor	[mm ²]	0.14 ... 1.5 (28 ... 16 AWG)
	Fine-stranded conductor	[mm ²]	0.14 ... 1.5 (26 ... 14 AWG)
	Fine-stranded conductor with insulated ferrule	[mm ²]	0.25 ... 0.75
	Fine-stranded conductor with uninsulated ferrule	[mm ²]	0.25 ... 1.5
	Strip length	[mm]	8 ... 9
	Connection type		screwless
	M-Bus		
	Voltage range	[VDC]	21 ... 42
	Max number of slaves		32
	Baud Rate	[bps]	300 ... 9600
	Mounting method		35mm DIN rail (DIN 5022)
	Degree of protection		IP20
	Class of protection		II
	Dimensions	[mm]	35.8x87x64.9 (2M)
	Impact test		IK06
	Weight	[g]	110
	Operating temperature	[°C]	- 25... + 60
	Storage temperature	[°C]	- 40... + 85
	Relative Humidity	[RH]	max90% (not condensating)
	Operating altitude	[m]	0... 2000
	Standards		IEC 61010-1 IEC 61326-1*
	Declarations		CE, UKCA

For Indoor use only.

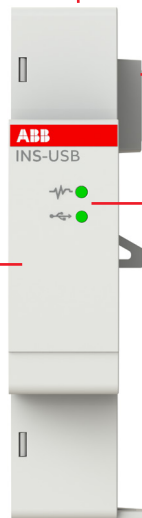
***Caution:** This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

USB Communication module

INS-USB

100mA USB port for the connection of P1 smart meters (energy, gas, water)

USB modules designed to read the real-time data from utility meters (e.g. Linky) and **P1 ports** (selected non-encrypted models with DSMR - 5.0 version)



Plug-in functionality for tool-free mounting to the control unit SCU200

Status LED for instant visual feedback

500mA USB port future additional integrations requiring USB connection

INS-USB	Technical feature	Unit	Description
	Supply voltage	[VDC]	Supplied by the InSite modular bus
	Connection		InSite modular bus
	Power consumption	[W]	0.4 (standby)
	Communication protocol		USB 1.1 (max speed 12Mbps)
	Data availability		SCU200 webserver, Rest API, Reports via SMTP / FTP
	Power capabilities		100mA @5V (USB P1 port) 500mA @5V (bottom USB port)
	Mounting method		35mm DIN rail (DIN 5022)
	Degree of protection		IP20
	Dimensions	[mm]	17.5x87x64.9 (1M)
	Weight	[g]	46
	Operating temperature	[°C]	-25...+60
	Storage temperature	[°C]	-40...+85
	Operating altitude	[m]	0...2000
	Standards		IEC61010-1
			IEC 61326-1

Wireless Mbus Communication module

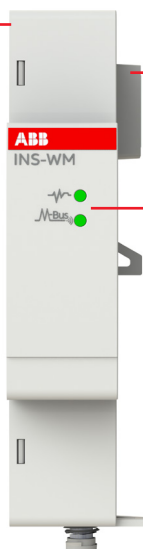
INS-WM

Integrate up to 32 wireless M-bus meters into SCU200 through a wired M-bus module each

Plug-in functionality for tool-free mounting to the control unit SCU200

Status LED for instant visual feedback

Wireless M-bus gateway provided with connection for external antenna

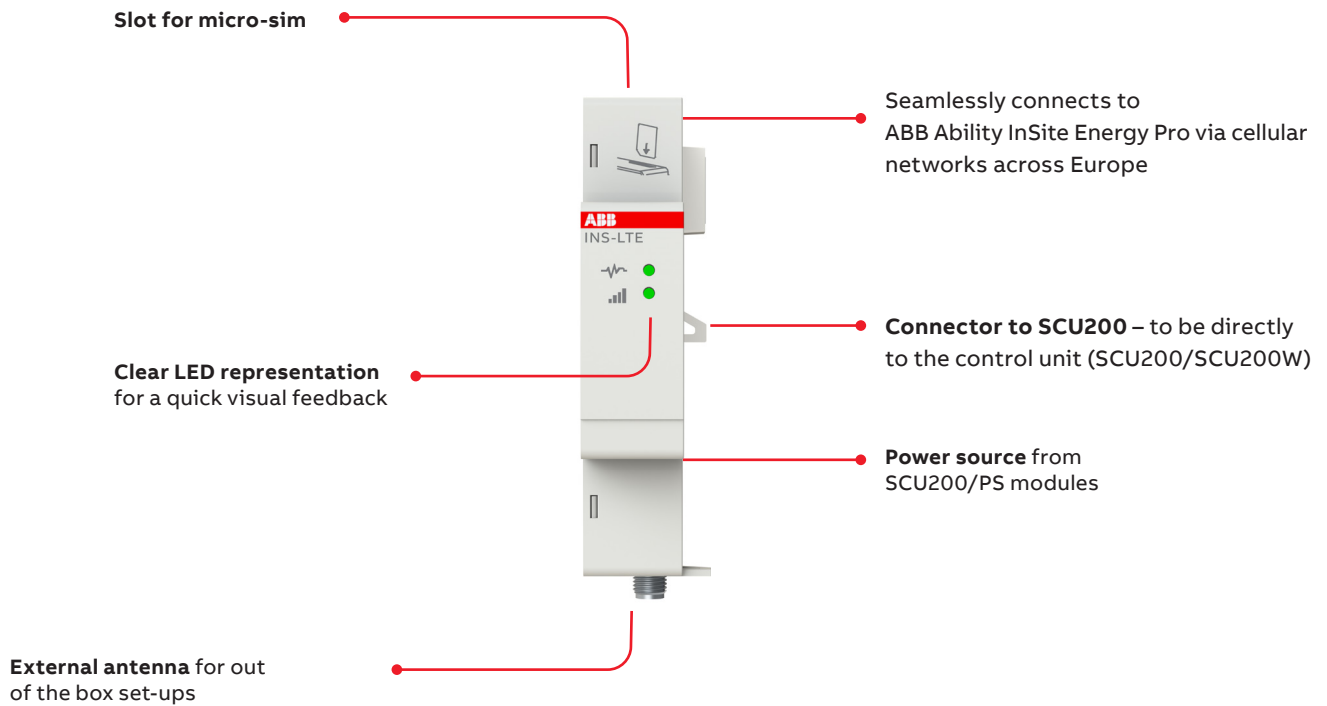


INS-WM	Technical feature	Unit	Description
	Supply voltage	[VDC]	Supplied by the InSite modular bus
	Connection		InSite modular bus
	Power consumption	[W]	0.5
	Communication protocol		Wireless M-bus
	Data availability		SCU200 webserver, Rest API, Reports via SMTP / FTP
	Number of meters that can be read unit		Up to 32 meters on filed
	RF mode		C1 and T1
	Frequency band	[MHz]	868.95
	Max RF output power		RF mode – receiver only
	Max RF input power	[dBm]	10
	External antenna (not included)		male SMA / 50 Ohm / 868.95MHz
	Mounting method		35mm DIN rail (DIN 5022)
	Degree of protection		IP20
	Dimensions	[mm]	17.5x87x64.9 (1M)
	Weight	[g]	48.54
	Operating temperature	[°C]	-25...+60
	Storage temperature	[°C]	-40...+85
	Operating altitude	[m]	0...2000
	Standards		IEC61010-1
			IEC 61326-1

Only one INS-WM can be connected to each SCU200 controller.

LTE Connectivity module

INS-LTE

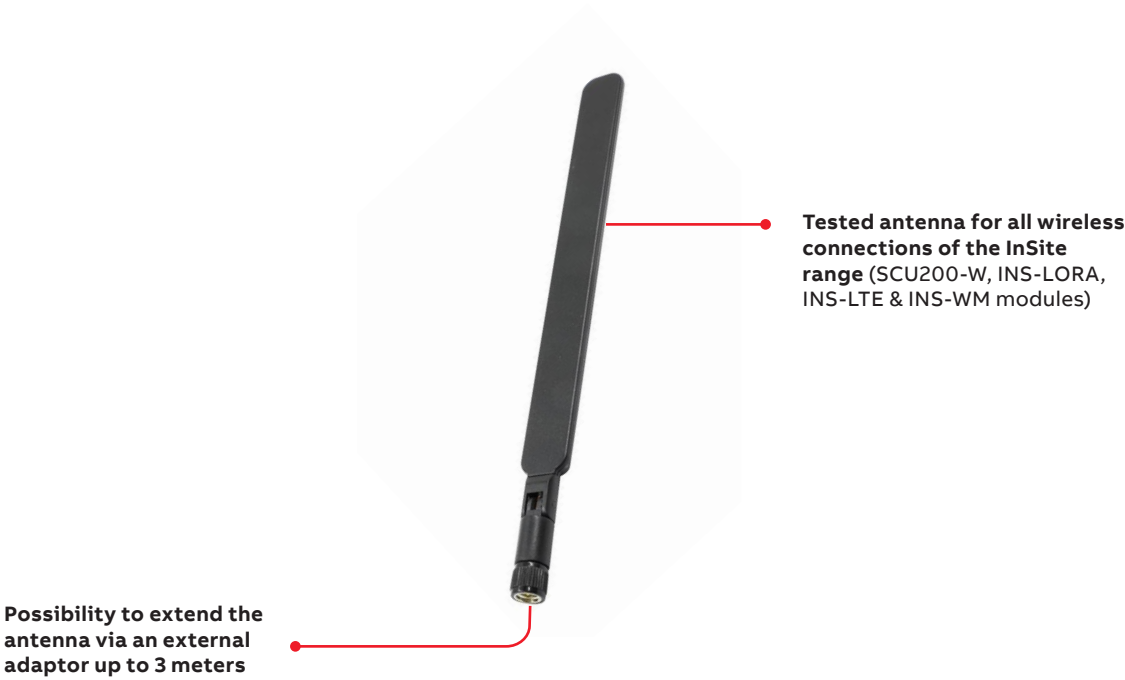


INS-LTE	Technical feature	Unit	Description
	Supply voltage	[VDC]	24 VDC Supplied by the InSite modular bus
	Connection		InSite modular bus
	Power consumption	[W]	0.24 (idle mode)
	Communication protocol		LTE/4G
	Sim size		Micro SIM (3FF)
	Frequency band		LTE-FDD B1/B3/B5/B7/B8/B20
	Max RF output power	[dBm]	23
	External antenna specs (no internal antenna available)		Male SMA / 50 Ohm 0.8 - 2.6 GHz
	Market region		EU
	Antenna extension cable	[m]	< 3
	Mounting method		35 mm DIN-rail (DIN 5022)
	Degree of protection		IP20
	Dimensions	[mm]	17.5x87x64.9 (1M)
	Weight	[g]	~70
	Operating temperature	[°C]	-25...+60
	Storage temperature	[°C]	-40...+85
	Operating altitude	[m]	0...2000
	Standards		EN 61010-1 / IEC 61010-1
			EN IEC 61326-1
			ETSI EN 300-489-52
			ETSI EN 301-908-1
	ABB Antenna		2CMA269075R1000

For indoor use only. For European countries only.

Antenna for the InSite system

INS-ATE



INS-ATE	Technical feature	Unit	Description
	Category		RF and Wireless RF Antennas
	Compatibility		InSite wireless system: SCU200 W, INS-LORA, INS-LTE, INS-WM
	Antenna type		Whip, straight
	Communication protocol		LTE
	Part Status		Active
	RF Family/Standard		Cellular
	Frequency Group		Wide Band
	Frequency (Center/Band)	[MHz, GHz]	829MHz, 1.228GHz, 1.505GHz, 1.762GHz, 1.94GHz, 2.43GHz, 3.65GHz, 4.5GHz, 5.5GHz
	Frequency Range	[MHz, GHz]	698MHz ~ 960MHz, 824MHz ~ 1.28GHz, 1.176GHz ~ 1.61GHz, 1.4GHz ~ 2.17GHz, 1.71GHz ~ 2.69GHz, 2.17GHz ~ 2.7GHz, 3.3GHz ~ 4GHz, 4GHz ~ 5GHz, 5GHz ~ 6GHz
	Number of Bands		9
	VSWR		3
	Gain	[dBi]	1.7dBi, 1.9dBi, 3dBi, 2.6dBi
	Termination		SMA Male
	Mounting method		Connector Mount
	Ingress protection		IP55
	Height (Max)	[" , mm]	7.480" (190.00 mm)

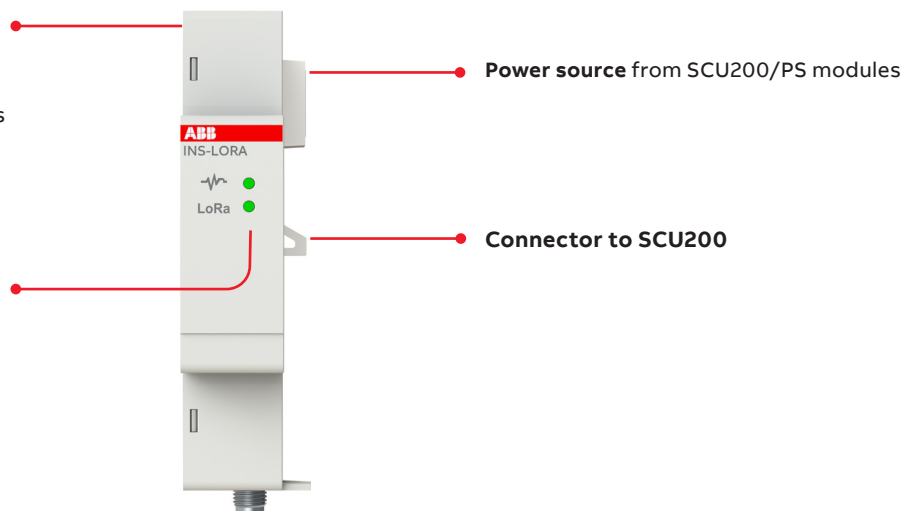
LoRa Communication module

INS-LORA

Enables the wireless transmission of device data from the SCU200 to public or private LoRa networks via LoRa gateways

Clear LED representation for a quick visual feedback

External antenna for out of the box set-ups

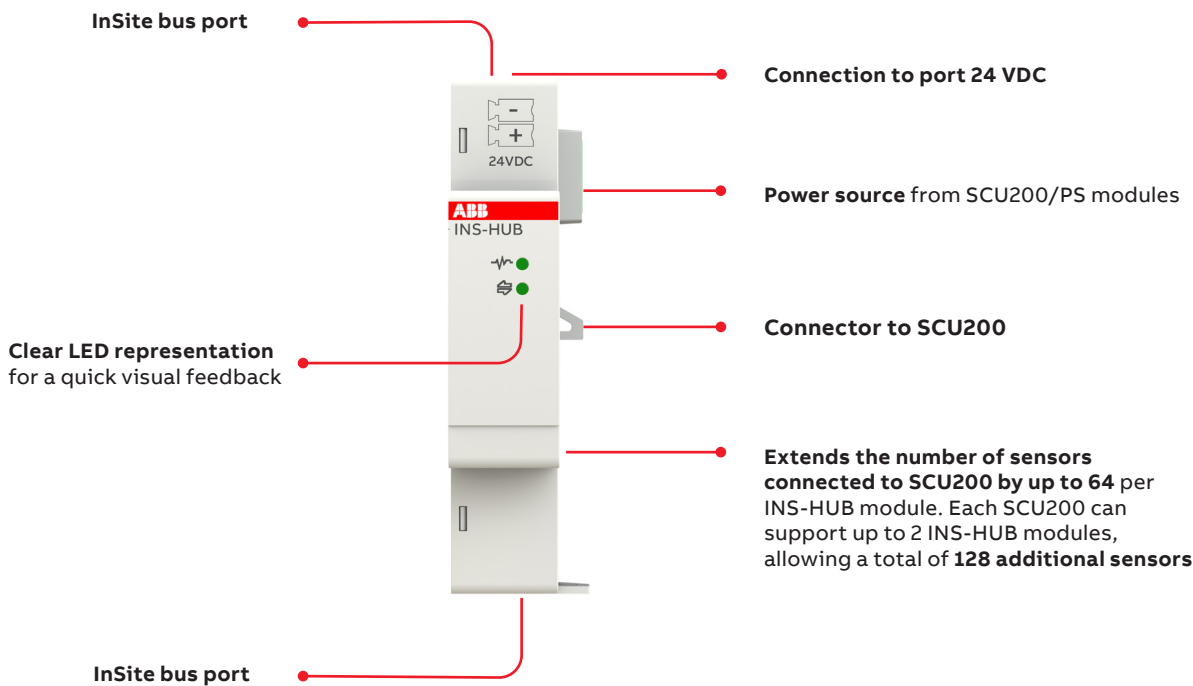


INS-LORA	Technical feature	Unit	Description
	Supply voltage	[VDC]	24 VDC Supplied by the InSite modular bus
	Connection		InSite modular bus
	Power consumption	[W]	0.5
	Communication protocol		LoRa WAN
	Frequency band	[MHz]	868
	Market region		EU
	RF output power	[dBm]	+22 (max.)
	Embedded internal antenna	[dBi]	-0.4 peak gain
	External antenna (not included)		Male SMA / 50 Ohm / 868 MHz
	Extension cable length	[m]	< 3
	Mounting method		35 mm DIN-rail (DIN 5022)
	Degree of protection		IP20
	Dimensions	[mm]	17.5x87x64.9 (1M)
	Weight	[g]	65
	Operating temperature	[°C]	-25...+60
	Storage temperature	[°C]	-40...+85
	Operating altitude	[m]	0...2000
	Standards		EN 61010-1 / IEC 61010-1
			EN IEC 61326-1
			ETSI EN 301-489-3
			ETSI EN 300-220-2
	ABB Antenna		2CMA269075R1000

For indoor use only. For European countries only.

Collector Hub module

INS-HUB



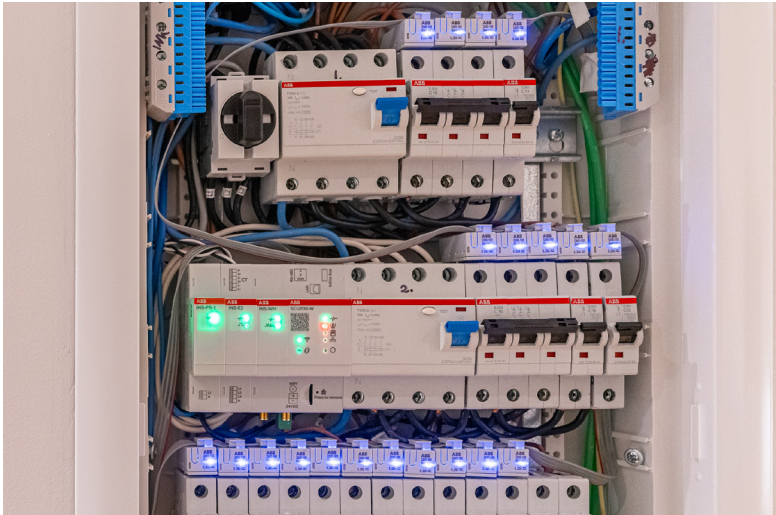
INS-HUB	Technical feature	Unit	Description
	Supply voltage*	[VDC]	24 +/- 10%
	Connection		InSite modular bus
	Power consumption	[W]	1 (Idle mode - without sensors) 20 (full mode - with full sensors)
	Communication ports		InSite bus (x2)
	Power supply 24 VDC connection		
	Conductor cross section solid/flexible	[mm²]	0.2...1
	AWG	[AWG]	28...17
	Strip length	[mm]	10
	Mounting method		35mm DIN-rail (DIN 5022)
	Degree of protection		IP20
	Dimensions	[mm]	17.5x87x64.9 (1M)
	Weight	[g]	~ 56
	Operating temperature	[°C]	-25...+60
	Storage temperature	[°C]	-40...+85
	Operating altitude	[m]	0...2000
	Standards		EN 61010-1 / IEC 61010-1
			EN IEC 61326-1

*INS-HUB has to be supplied by external 24V power supply, each branch of flat cable requires about 10W power.

For indoor use only.

Notes

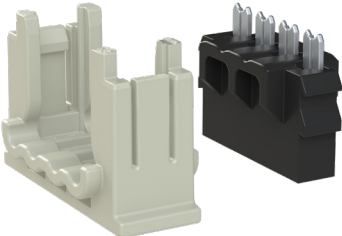
Integrated devices with SCU100 and SCU200



The InSite energy management system monitors a wide range of connected devices, including breakers, meters, EV chargers, and further electrical assets.

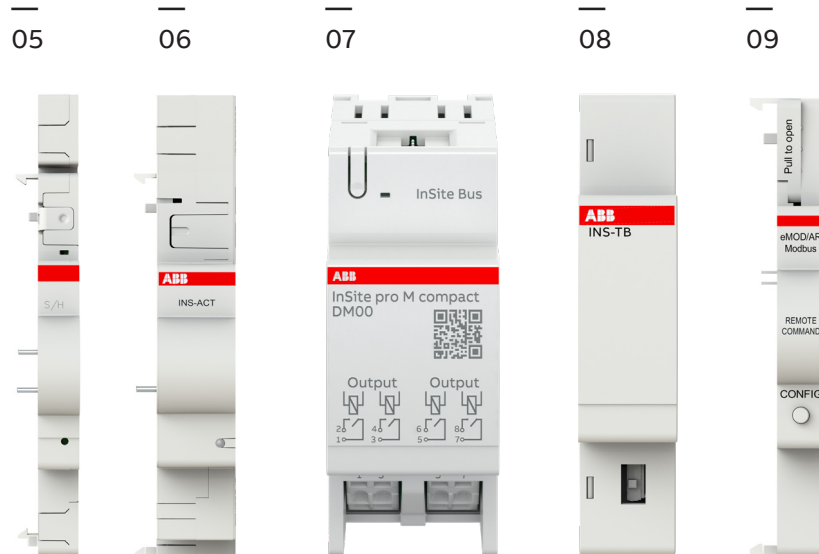
Integrated devices such as current sensors and smart accessories are automatically recognized by the InSite system once they are connected.

Branch monitoring sensors

- | | | |
|---|---|--|
| <p>— 01</p>  | <p>— 02</p>  | <p>— 01
Solid-core sensor</p> <p>— 02
Open-core sensor</p> |
| <p>— 03</p>  | <p>— 04</p>  | <p>— 03
Connectors</p> <p>— 04
InSite flat cable (INS)
for an easy and fast connection
of CMS sensors, I/O modules and
smart accessories</p> |

Integrated devices with SCU100 and SCU200

Smart accessories



05 **Smart Auxiliary and Signalling device** for protection device smart monitoring

06 **InSite Smart Actuator** for branch level voltage reading, OVR and UVR functionalities

07 **Digital I/O modules** for recognizing digital inputs or sending digital outputs

08 **Tap-off Box module** for conversion of flat cable communication to RJ45 and vice versa

09 **ModBus Interface for MOD/AR ranges** eMOD/AR ModBus

Meters, protection devices, and displays



10 **Energy meters**

11 **Power meters**

12 **Digital surge protective device** eOVR

13 **Network Analyzers**

14 **HMI Display INS-HMI**

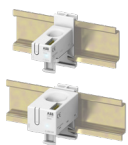
They can be easily mounted and, despite their small size, deliver exceptional performance and are capable of monitoring AC, DC, and mixed (TRMS) currents up to 160 A, including harmonic components.

Each sensor is equipped with a microprocessor to process signals and transmit data digitally to the control unit via the bus interface. This reduces cabling needs, enhances transmission reliability, and eliminates common issues associated with analog data.



Tailor the integration of the current sensors to your installation by selecting from up to four different mounting options, depending on the specific application, to ensure a simple and uncomplicated process.



	System pro M, SMISSLINE		S800	DIN rail	Cable tie
					
Mounting method	for all MCBs, RCDs, RCBOs with twin terminals	for MCBs (S200, SMISSLINE) and RCBOs (SMISSLINE)	for fuse holders E90	for all S800 devices with cage terminals	universally usable
Open-core sensors					
AC accuracy* of $\leq \pm 1.0\%$					
The laying method influences the accuracy.					
18-mm overall width					
CMS-120xx (80 A)	CMS-120PS	CMS-120LA	-	CMS-120DR	CMS-120CA
CMS-121xx (40 A)	CMS-121PS	CMS-121LA	CMS-121FH	CMS-121DR	CMS-121CA
CMS-122xx (20 A)	CMS-122PS	CMS-122LA	CMS-122FH	CMS-122DR	CMS-122CA
Solid-core sensors					
AC accuracy* of $\leq \pm 0.5\%$					
18-mm overall width					
CMS-100xx (80 A)	CMS-100PS		CMS-100S8	CMS-100DR	CMS-100CA
CMS-101xx (40 A)	CMS-101PS		CMS-101S8	CMS-101DR	CMS-101CA
CMS-102xx (20 A)	CMS-102PS		CMS-102S8	CMS-102DR	CMS-102CA
25-mm overall width					
CMS-200xx (160 A)			CMS-200S8	CMS-200DR	CMS-200CA
CMS-201xx (80 A)			CMS-201S8	CMS-201DR	CMS-201CA
CMS-202xx (40 A)			CMS-202S8	CMS-202DR	CMS-202CA

* All accuracy specifications refer to the relevant full scale value and apply to 25°C



CMS-120LA



CMS-120FH



CMS-120PS



CMS-120CA

Open core sensors 18 mm

Sensor type		CMS-120xx	CMS-121xx	CMS-122xx
Measurement range		[A] 80	40	20
Measurement method		TRMS, AC 50 / 60 Hz, DC		
Peak value of the distorted wave-form		≤ 1.5	≤ 3	≤ 6
AC accuracy (TA = 25 °C)*		≤ ± 1 %		
AC* temperature coefficient		≤ ± 0.04 %		
DC accuracy (TA = 25 °C)*		≤ ± 1.2 %	≤ ± 1.4 %	≤ ± 1.8 %
DC* temperature coefficient		≤ ± 0.14 %	≤ ± 0.24 %	≤ ± 0.44 %
Resolution	[A]	0.01		
Internal sampling rate	[Hz]	5000		
Respond time (±1 %)	[sec]	Type 0.34		
Max. diameter of the cable	[mm]	9.6		
Insulation		690 V AC /1500 V DC		
Operating temperature		[°C]	− 25...+70	
Storage temperature		[°C]	−40 ...+ 85	
Size	CMS-120PS series	[mm]	17.4 x 41.0 x 26.5	
	CMS-120CA series	[mm]	17.4 x 41.0 x 29.0	
	CMS-120DR series	[mm]	17.4 x 51.5 x 43.2	
	CMS-120LA series	[mm]	17.4 x 41.0 x 38.9	
	CMS-120FH series	[mm]	17.4 x 41.0 x 38.9	
Reference standard		IEC 61010-1 UL508 / CSA C22.2 No 14		

* All accuracy specifications refer to full scale value and apply at 25 °C.
In the case of open-core sensors, the position of the cable affects accuracy.



CMS-120DR



CMS-100PS



CMS-100S8



CMS-100DR



CMS-100CA



CMS-200S8



CMS-200DR



CMS-200CA

Solid-core sensors 18 mm

Sensor type		CMS-100xx	CMS-101xx	CMS-102xx
Measurement range		[A] 80	40	20
Measurement method		TRMS, AC 50 / 60 Hz, DC		
Peak value of the distorted wave-form		≤ 1.5	≤ 3	≤ 6
AC accuracy (TA = 25 °C)*		≤ ± 0.5 %		
AC* temperature coefficient		≤ ± 0.036 %		
DC accuracy (TA = 25 °C)*		≤ ± 0.7 %	≤ ± 1.0 %	≤ ± 1.7 %
DC* temperature coefficient		≤ ± 0.047 %	≤ ± 0.059 %	≤ ± 0.084 %
Resolution	[A]	0.01		
Internal sampling rate	[Hz]	5000		
Respond time (±1 %)	[sec]	Type 0.25		
Max. diameter of the cable	[mm]	10		
Insulation	[V]	690 V AC / 1500 V DC		
Operating temperature	[°C]	-25 ... +70		
Storage temperature	[°C]	-40...+85		
Size	CMS-100PS series	[mm]	17.4 x 41.0 x 26.5	
	CMS-100S8 series	[mm]	26.5 x 45.5 x 31.8	
	CMS-100DR series	[mm]	17.4 x 51.5 x 43.2	
	CMS-100CA series	[mm]	17.4 x 41.0 x 29.0	
Reference standard		IEC 61010-1 UL508 / CSA C22.2 No 14		

* All accuracy specifications refer to the relevant full scale value and apply at 25° C.

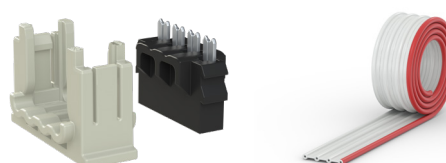
Solid-core sensors 25 mm

Sensor type		CMS-200xx	CMS-201xx	CMS-202xx
Measurement range		[A] 160	80	40
Measurement method		TRMS, AC 50 / 60 Hz, DC		
Peak value of the distorted wave-form		≤ 1.5	≤ 3	≤ 6
AC accuracy (TA = +25°C)*		≤ ± 0.5 %		
AC* temperature coefficient		≤ ± 0.036 %		
DC accuracy (TA = +25°C)*		≤ ± 0.7 %	≤ ± 1.0 %	≤ ± 1.7 %
DC* temperature coefficient		≤ ± 0.047 %	≤ ± 0.059 %	≤ ± 0.084 %
Resolution	[A]	0.01		
Internal sampling rate	[Hz]	5000		
Respond time (±1 %)	[sec]	Type 0.25		
Max. diameter of the cable	[mm]	15		
Insulation	[V]	690 V AC /1500 V DC		
Operating temperature	[°C]	-25...+70		
Storage temperature	[°C]	-40...+85		
Size	CMS-200S8 series	[mm]	26.5 x 43.0 x 38.5	
	CMS-200DR series	[mm]	25.4 x 43.0 x 43.2	
	CMS-200CA series	[mm]	25.4 x 43.0 x 35.7	
Reference standard		IEC 61010-1 UL508 / CSA C22.2 No 14		

* All accuracy specifications refer to the relevant full scale value and apply at 25 °C.

InSite flat cable and connector set

The control units require a flat cable to gather information from current sensors and digital I/O modules. A connector set contains 35 connector housings and connectors for connecting the flat cable to the sensors smart accessories. InSite flat cables come in different lengths (2, 5, 10 and 30m). These devices can be placed at customizable distances as needed for the specific application.



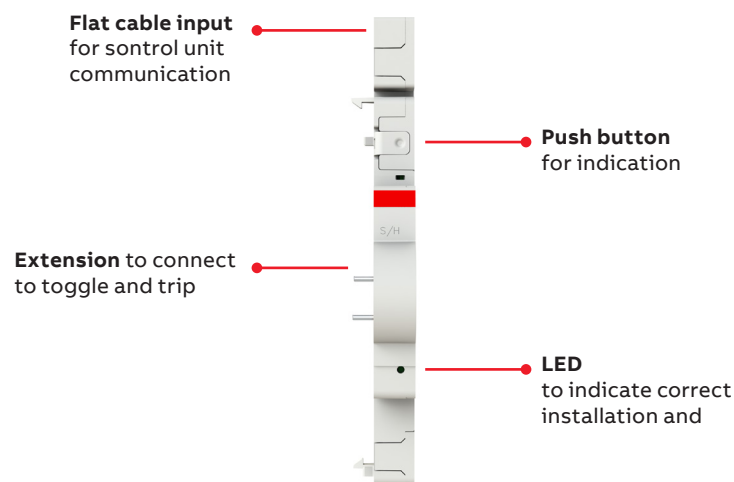
Smart Auxiliary & Signalling device

INS-S/H

The InSite system features smart signaling devices that combine the functions of both a signaling device and an auxiliary device in a sleek design, occupying just 0.5 module width. These devices can be connected directly to the control units using the flat cable and are automatically detected and

assigned in the webserver.

When the adjacent breaker trips, they alert users or provide information about the trip and toggle switch position. The SCU100 control supports connectivity for up to 96 smart signaling devices, while SCU200 can accommodate up to 32 smart signaling devices.



INS-S/H	Technical feature	Unit	Description
	Supply voltage	[VDC]	Supplied by the InSite bus
	Connection		InSite bus
	Power loss	[W]	0,1
	Mounting Position		Right
	Pluggable accessories		S2CHR (x2)
			S2C-S/HR (x2)
	Mounting method		35mm DIN rail (DIN 5022)
	Degree of protection		IP20
	Dimensions	[mm]	8.8x103x74
	Weight	[g]	30
	Operating temperature	[°C]	-25... +60
	Storage temperature	[°C]	-40... +85
	Operating altitude	[m]	0... 2000
	Standards		IEC61010-1
			IEC 61326-1
			IEC 60068
			IEC / EN 62019 for Main functionality
			IEC 60947-5-1 for Main functionality
			IEC61009 for RCDs compatibility
			EN 60898-1 for MCBs compatibility

Compatible ABB ranges with INS-S/H

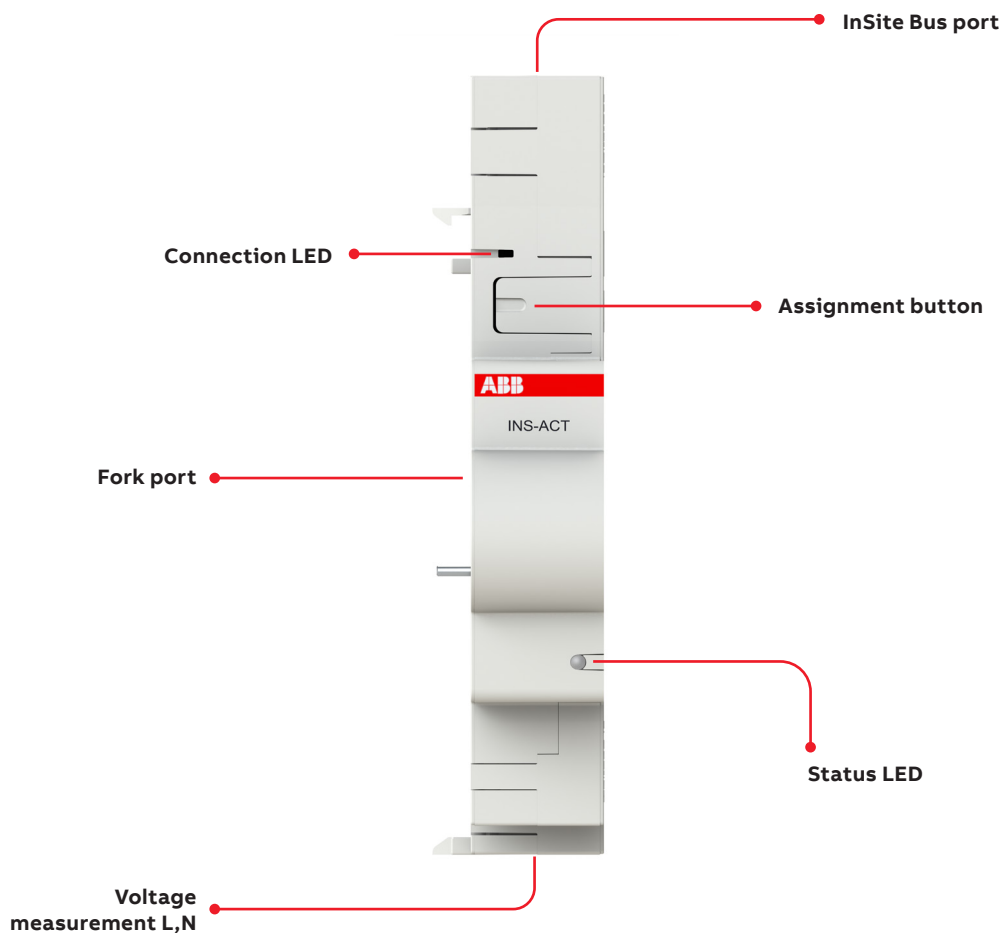
Type of device	ABB System pro M compact
Miniature circuit breakers (MCB)	S200, S300P
Residual current devices (RCD)	F200, DS201
Arc fault detection devices (AFDD)	S-ARC1, DS-ARC1
Switch disconnectors	SD200

InSite Smart Actuator

INS-ACT

Bringing advanced protection and control into a compact design, INS-ACT connects to the InSite Energy Management System via the InSite-Bus and operates independently from line voltage. The device combines actuator capability, configurable over- and undervoltage protection, and branch-level voltage measurement, all controlled directly from the SCU200 control unit.

Compatible with SCU200 for both manual and automated triggering, INS-ACT is automatically detected in the webserver and adds remote monitoring and control functionalities to the installation. With customizable OVR and UVR thresholds, it offers flexible adaptation to different application needs, enhancing the intelligence and automation potential of the InSite system.



Technical data

INS-ACT	Technical feature	Unit	Description
	Supply voltage	[VDC]	Supplied by the InSite modular bus
	Connection		InSite bus
	Power loss	[W]	0,1
	Main Line (for voltage measurement)		
	Voltage range	[VAC]	110÷230 V
	Frequency	[Hz]	50÷60
	External fuse*	[A]	10 A (curve B)
	Measurement accuracy		6%
	Overvoltage category		II
	Main Line Connection (for voltage measurement)		
	Solid conductor	[mm²]	0.14 ... 1.5
	AWG solid conductor	[AWG]	28-16
	Fine-stranded conductor	[mm²]	0.14 ... 1.5
	AWG fine-stranded conductor	[AWG]	26-14
	Fine-stranded conductor with insulated ferrule	[mm²]	0.25 ... 0.75
	Fine-stranded conductor with uninsulated ferrule	[mm²]	0.25 ... 1.5
	Strip length	[mm]	8 ... 9
	Connection type		Screwless
	Mounting Position		Right
	Pluggable accessories		S2CHR (x2) S2C-S/H6R (x2) S3C-A/S3C-UA/S3C-OVP SCC-IH6R, DSCC-IH6R INS-S/H
	Suitable for Product Type		Miniature Circuit Breaker Residual Current Device Switch Disconnecter Arc Fault Detections Devices
	Suitable For		MCBs S200 series, S300P MCBs SN201 RCDs F200, DS201, DS203NC, DS202CR eRCBOs DSE201M, DSN201E AFDDs S-ARC1, DS-ARC1 SD200
Mounting method			35mm DIN rail (DIN 5022)
Degree of protection			IP20
Pollution degree			2
Dimensions		[mm]	17.5x103x74 (1M)
Weight		[g]	70
Operating temperature		[°C]	-25... +60
Storage temperature		[°C]	-40... +85
Relative Humidity		[RH]	max90% (not condensating)
Operating altitude		[m]	0... 2000
Standards			EN 61010-1 / IEC 61010-1 EN IEC 61326-1 BS EN 62019:1999 IEC 62019:1 for Main functionality
For indoor use only			

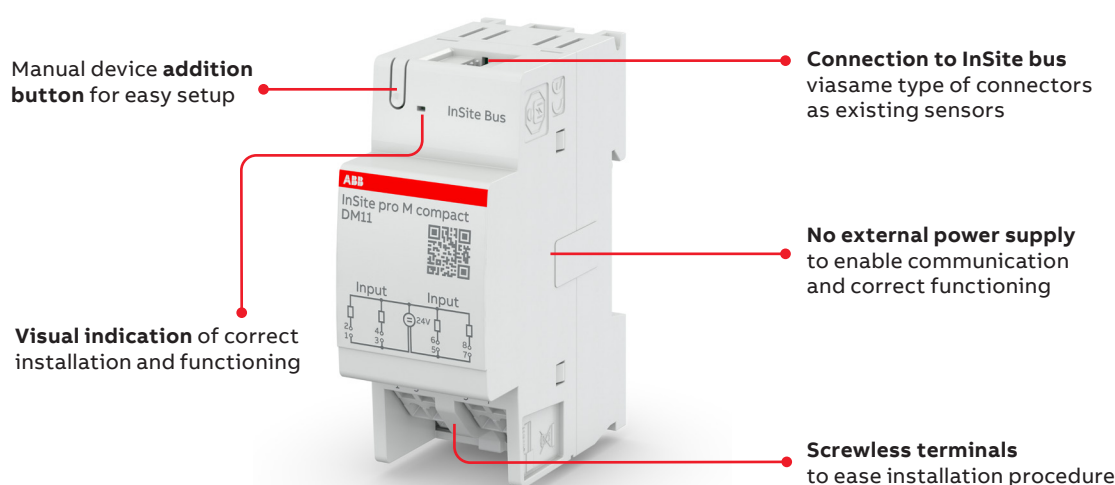
* External fuse is needed upon schematic

Digital I/O modules

DM00, DM10, DM11

The digital Input/Output (I/O) modules offer a versatile range of functions, including reading contact status, activating or deactivating lines, and collecting utilities' consumption. The three types of digital signaling modules can be connected to both SCU100 and SCU200 control units and cater to diverse requirements: DM00, which reads up to 4 output signals, DM11, which generates 4 input signals, and DM10, featuring 4

ports of 2 input signals and 2 output signals. These modules can be connected to System pro M compact® accessories of MCBs and RCDs, as well as to other DIN-Rail products with digital input or output, and to pulse meters (e.g. water and gas meters). In addition to reading contact status and collecting utility consumptions, the output modules can generate signals on demand to control loads or activate or deactivate lines.



Input and Output modules	Technical feature	Unit	Input module DM11	Output module DM00	Input and Output module DM10
	Number of digital channels		4 Input	4 Output	2 Input + 2 Output
	Voltage (min - max)*		active input: 22-26 Vdc	relay output: 5V DC-240V AC	active input: 22-26Vdc relay output: 5V DC-240V AC
	Current (min - max)*		active input: 4mA	relay output: 5mA-2.5A Max 4,5A (<5sec)	active input: 4mA relay output: 5mA - 2.5A Max 4,5A (<5sec)
	Pulse minimum duration**	[ms]	5	n/a	5
	Pulse frequency**	[Hz]	100	n/a	100
	Terminals cross section	[mm ²]	2,5	2,5	2,5
	Mounting method		35 mm DIN rail (DIN 50022) or SMISSLINE TP plug base		
	Degree of protection		IP20	IP20	IP20
	Dimensions	[mm]	36x88x65	36x88x65	36x88x65
	Operating temperature	[°C]	-25...+60	-25...+60	-25...+60
	Storage temperature	[°C]	-40...+85	-40...+85	-40...+85
	Standards		IEC 61010	IEC 61010	IEC 61010

*Relay output values reported are applicable to resistive load **Applicable only to active inputs

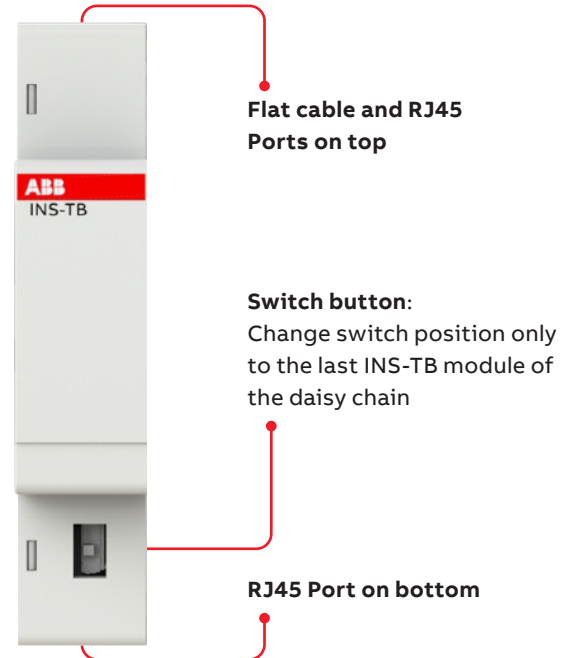
Compatible ABB ranges with DM modules

Type of device	ABB System pro M compact
Molded case circuit breakers (MCCB)	Tmax XT
Miniature circuit breakers (MCB)	S200, SN200, S300P, S800
Residual current devices (RCD)	F200, DS200, DS800, DDA
Arc fault detection devices (AFDD)	S-ARC1, DS-ARC1
Switch disconnectors	SD200

InSite Tap-off Box module

INS-TB

With the SCU200 installed only in the main (master) box, Tap-off Box modules extend its capabilities up to many meters, allowing easy integration of sensors at multiple tap-off points, the exact distance that can be extended between the main Tap-off module and the last tap off module depends on multiple factors like loading on each tap-off module and distance between them, please use the calculator (linked below) to design the configuration as per the requirements.



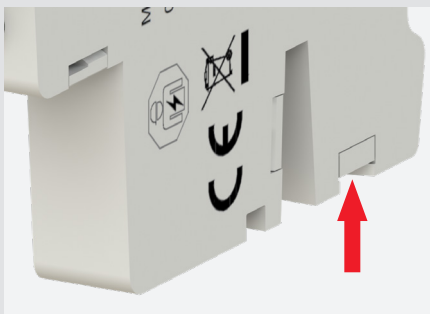
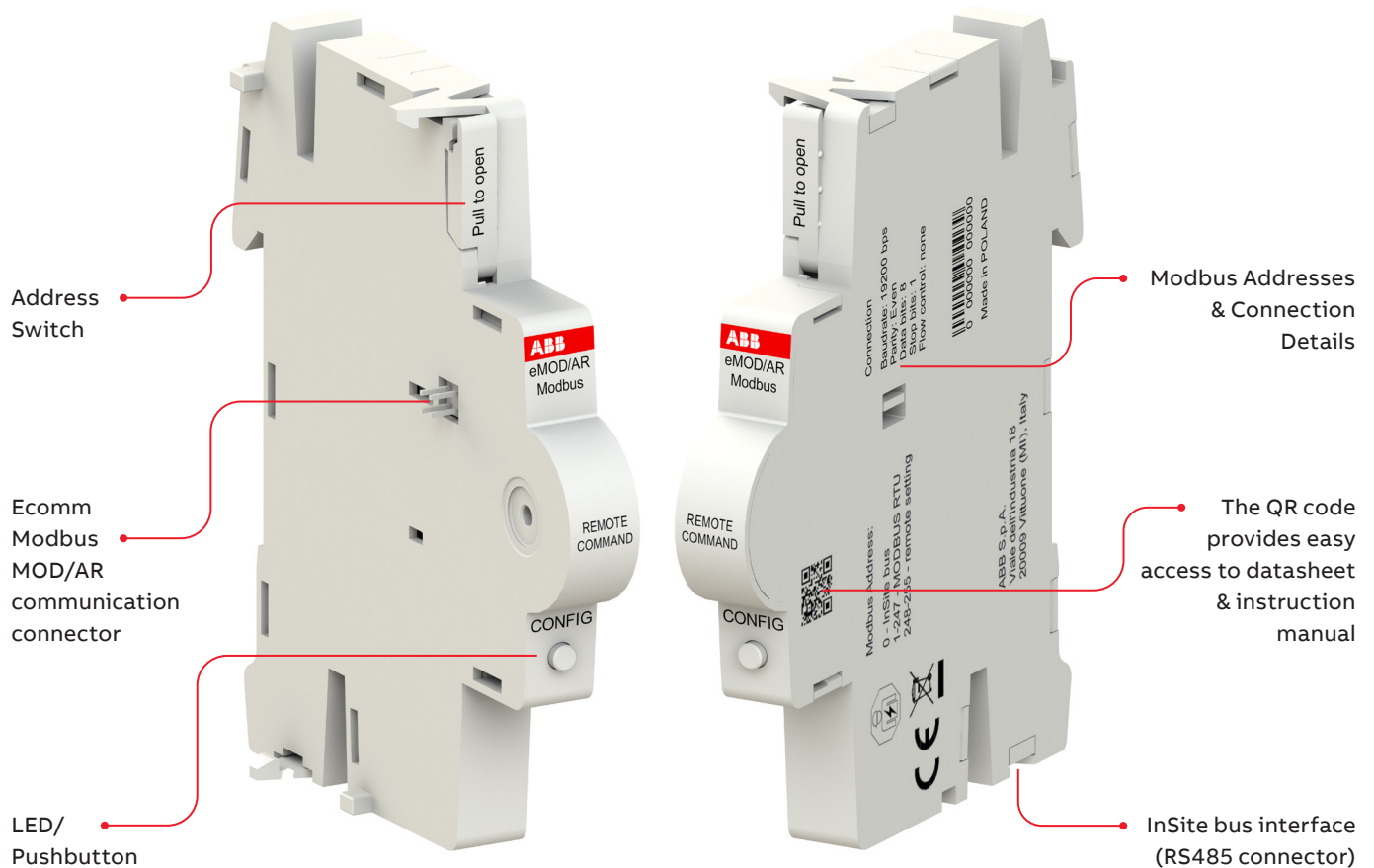
INS-TB	Technical feature	Unit	Description
	Supply voltage	[VDC]	Passive device
	Connection		InSite bus and Ethernet
	Mounting method		35mm DIN rail (DIN 5022)
	Degree of protection		IP20
	Dimensions	[mm]	17.5x87.0x64.9 (1M)
	Weight	[g]	45
	Pollution degree		2
	Operating temperature	[°C]	-25...+60
	Storage temperature	[°C]	-40...+85
	Standards		EN 61010-1 / IEC 61010-1
	Declarations		UKCA / CE
	Voltage level	[DC]	7V (min) - 9.5V (max)
	All connection shall be done with SELV circuit		
	Ethernet communication ports type		10baseT (IMPORTANT: DO NOT CONNECT THIRD PARTY EQUIPMENT TO DEVICE, INTERNAL PROPRIETARY PROTOCOL)



Please use the cable length calculator to determine the maximum allowable length of RJ45 cables.
<https://search.abb.com/library/Download.aspx?DocumentID=9AKK108471A3289&LanguageCode=en&Doc>

ModBus Interface for MOD & AR

eMOD/AR ModBus



Connectivity

Ensures seamless integration with the InSite energy management system and enables communication with third-party services.



Control & Easy access to data

Remote control and continuous monitoring provide easy access to both real-time and historical data through the InSite Energy Management Platform.



Compactness

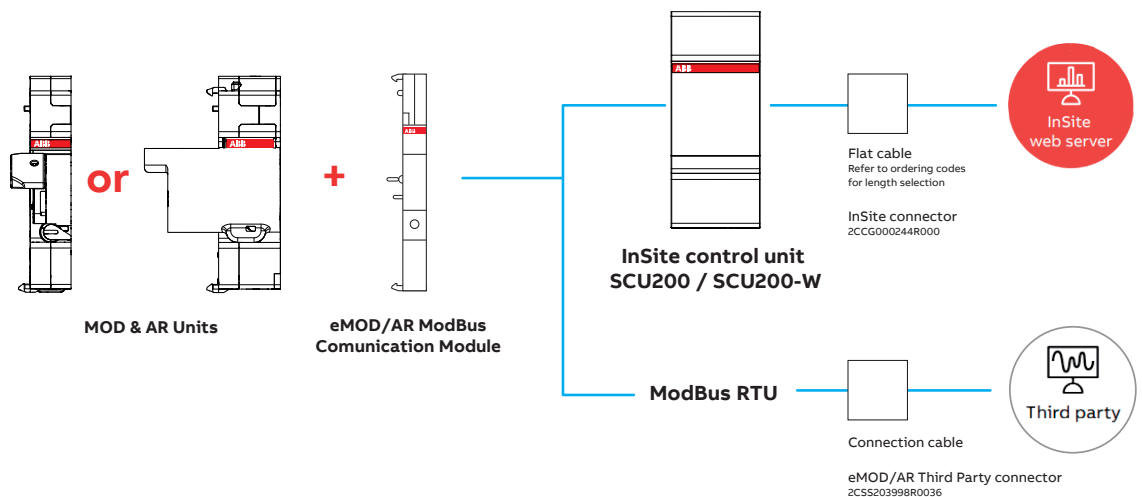
Extremely compact, taking up only 0.5 modules of space, which ensures efficient space-saving.



eMOD/AR ModBus	Technical characteristic	Unit	Description
	Suitable for *		S3C-MOD230, S3C-MOD24, F3C-AR24, F3C-AR230, F3C-AR230 D, F3C-AR230 C, F3C-AR230C H
	Number of modules		Half module
	Connection		InSite control unit (SCU200 / SCU200-W) or Third-party Network
	Communication Protocol		ModBus RTU
	RS485 Cross-section of conductors		
	Solid/flexible	mm ²	0.14...0.15
	Solid	AWG	28-16
	Flexible	AWG	26-14
	Power loss	W	<1.0
	Mounting Position		Right for compatible devices
	Pluggable accessories		Not allowed
	Mounting method		35mm DIN rail (DIN 5022)
	Degree of protection		IP40
	Maximum number of eMOD/AR units that can be connected to the SCU200		8
	Parity		Even (default), Odd, None
	Transmission speed (Baud Rate)		2400, 4800, 9600, 19200 (default), 38400, 57600, 115200
	Dimensions	mm	8.8x85x74
	Weight	g	30
	Operating temperature	°C	-25...+60
	Storage temperature	°C	-40...+70
	Operating altitude	m	0...2000
	Standards		EN 61010-1 / IEC 61010-1 / EN IEC 61326-1

* eMOD/AR is compatible with S3C-MOD230, F3C-AR230, F3C-AR230 D produced only after 31/01/2025. The production date of S3C-MOD230, F3C-AR230, F3C-AR230 D is reported on external label on the packaging and on the device (format WWYY).

The Motor Operating Devices (MOD) & Auto-Reclosing units (AR), when combined with the ModBus Interface (eMOD/AR ModBus), can connect to either the InSite web server or a third-party network.



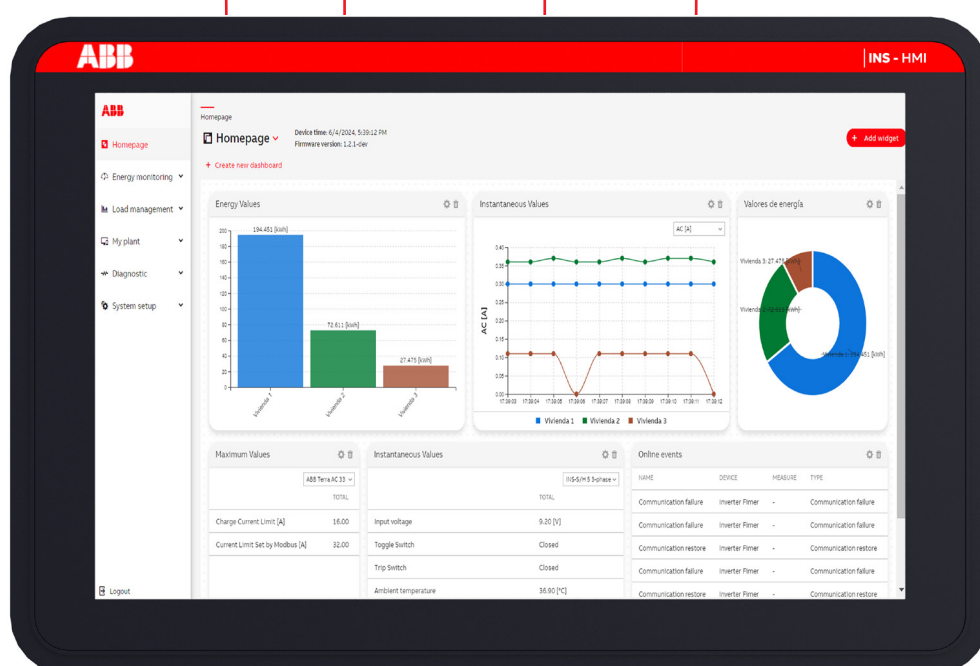
HMI Display

INS-HMI

RJ45 LAN port

2 USB ports

SD card slot

Connection to
port 24 VDC

Effortless access

- No laptop required to connect to the Web UI



Field-friendly device

- Simplified view from the InSite web server, tailored for field personnel



Rapid response & instant visibility

- Clear visualization of events and data for quick, informed decisions
- Provides instant access to electrical parameters measured and collected by the InSite energy management system

INS-HMI	Technical feature	Unit	Description
	Power		
	Supply voltage	[VDC]	24 +/- 10%
	Power consumption	[W]	3.6 idle mode, 36 rated
	Protection against reverse polarity		Yes
	Connection at the panel		DC standard: Ø5.5, Ø2.5 (plug included)
	Product data		
	Size diameter		10.1"
	Resolution		1280 x 800 pixel
	Type		TFT LCD, 16M colors
	Touch screen		Capacitive PCAP multi-touch glass cover lens brightness 300 CD/Mq
	System properties		
	Processor type		Quad-Core ARM Cortex-A55
	Operating system		Linux
	RAM		2GB LPDDR4
	Flash memory		16 GB eMMC
	Card slot		micro SD card / TF card
	Interfaces		
	Network Interface		1 x 10/100 Mbit/s RJ45
	USB port 1		2.0 - max. 500 mA
	USB port 2		2.0 - max. 500 mA
	Environmental conditions		
	Operating temperature	[°C]	-10...+50
	Storage temperature	[°C]	-20...+60
	Humidity		90% RH, non-condensating
	Operating altitude	[m]	0...2000
	Mechanical specifications		
	Dimensions	[mm]	262 x 176 x 41 (+/-1)
	Degree of protection		IP64 front - IP20 rear
	Mounting method		Panel mounting in cutout
	Mouting variant		Landscape mode
	Weight	[kg]	1.3
	Standards		
			EN 61010-1 / IEC 61010-1
			EN 55032 / EN 55035

For indoor use only.

Ordering data

Control units, modules and accessories

Description	GTIN 7612271 EAN	Ordering details		Weight of 1 unit (kg)	Packaging unit (pce.)
		Brief description	Order code		
Control Units					
Control Unit	516284	SCU200	2CCG001158R0001	0.101	1
Control Unit with wireless interface	516277	SCU200-W	2CCG001157R0001	0.105	1
Sub-distribution Control Unit	508104	SCU100	2CCG000242R0001	0.329	1
Integrated devices					
Smart Signal/Auxiliary Contact	516826	INS-S/H	2CCG001213R0001	0.028	1
Smart actuator	799153	INS-ACT	2CDS200940R0001	0.098	1
Digital Input Module (4 inputs)	508135	DM11	2CCG000245R0001	0.075	1
Digital Output Module (4 outputs)	508142	DM00	2CCG000246R0001	0.085	1
Digital Input and Output Module (2 inputs, 2 outputs)	508159	DM10	2CCG000247R0001	0.080	1
Tap-off Box Module	680758	INS-TB	2CMA268075R1000	0.045	1
COMM Third Party conn	834151	Connector 25,5 mm	2CSS203998R0036	0.005	1
Modbus Interface for MOD/AR ranges	540151	eMOD/AR ModBus	2CSS201998R0036	0.030	1
InSite HMI display	784654	INS-HMI	2CMA278465R1000	1.300	1
Metering, expansion and communication modules for SCU200					
Split-core Current Transformer - 20A	516437	CTS-1-20	2CCG001154R0001	0.045	1
Split-core Current Transformer - 50A	516444	CTS-1-50	2CCG001155R0001	0.045	1
Split-core Current Transformer - 80A	516451	CTS-1-80	2CCG001156R0001	0.045	1
Energy Meter Module - 40mA	516291	INS-E3	2CCG001159R0001	0.052	1
Energy Meter Module - 5A	681359	INS-E3-5	2CMA268055R1000	0.052	1
Power Supply Module - 10W	516406	INS-PS-1	2CCG001160R0001	0.077	1
Power Supply Module - 30W	516420	INS-PS-2	2CCG001172R0001	0.110	1
Wireless M-bus Module	516413	INS-WM	2CCG001171R0001	0.048	1
Wired MBus module	834359	INS-MB	2CMA283435R1000	0.110	1
USB Module	518202	INS-USB	2CCG001351R0001	0.046	1
LTE Connectivity Module	681250	INS-LTE	2CMA268125R1000	0.100	1
Antenna for the InSite system	690757	INS-ATE	2CMA269075R1000	0.0075	1
LoRa Communication module	681359	INS-LORA	2CMA268135R1000	0.100	1
Collector Hub Module	784555	INS-HUB	2CMA278455R1000	0.100	1
Flat cable connection accessories					
Flat cable 2m	519803	INS102	2CCG001491R0001	0.017	1
Flat cable 5m	508111	INS105	2CCG000243R0001	0.046	1
Flat cable 10m	519810	INS110	2CCG001493R0001	0.090	1
Flat cable 30m	519827	INS130	2CCG001494R0001	0.270	1
Connector set (35pcs)	508128	INS135	2CCG000244R0001	0.024	35

Ordering data

Current sensors

**CMS-120LA****CMS-120PS****CMS-120DR****CMS-120CA****CMS-100PS****CMS-100S8****CMS-100DR****CMS-100CA**

Description	GTIN 7612271 EAN	Ordering details		Weight of 1 unit (kg)	Packaging unit (pce.)
		Brief description	Product no.		
Open-Core Sensors, 18 mm					
Retrofit for DIN-rail protection devices and SMISSLINE					
80 A	498627	CMS-120LA	2CCA880225R0001	0.012	1
40 A	498610	CMS-121LA	2CCA880226R0001	0.012	1
20 A	498603	CMS-122LA	2CCA880227R0001	0.012	1
Mounting on DIN-rail protection devices and SMISSLINE					
80 A	452957	CMS-120PS	2CCA880210R0001	0.012	1
40 A	452971	CMS-121PS	2CCA880211R0001	0.012	1
20 A	452995	CMS-122PS	2CCA880212R0001	0.012	1
DIN-rail mounting					
80 A	453077	CMS-120DR	2CCA880240R0001	0.015	1
40 A	453091	CMS-121DR	2CCA880241R0001	0.015	1
20 A	453114	CMS-122DR	2CCA880242R0001	0.015	1
Mounting on cable with cable tie					
80 A	453015	CMS-120CA	2CCA880220R0001	0.011	1
40 A	453039	CMS-121CA	2CCA880221R0001	0.011	1
20 A	453053	CMS-122CA	2CCA880222R0001	0.011	1
Solid-Core Sensors, 18 mm					
Mounting on DIN-rail protection devices and SMISSLINE					
80 A	419202	CMS-100PS	2CCA880100R0001	0.012	1
40 A	419219	CMS-101PS	2CCA880101R0001	0.012	1
20 A	419226	CMS-102PS	2CCA880102R0001	0.012	1
Mounting on High Performance Circuit Breakers S800					
80 A	426552	CMS-100S8	2CCA880124R0001	0.014	1
40 A	426569	CMS-101S8	2CCA880125R0001	0.014	1
20 A	426576	CMS-102S8	2CCA880126R0001	0.014	1
DIN-rail mounting					
80 A	426583	CMS-100DR	2CCA880128R0001	0.015	1
40 A	426590	CMS-101DR	2CCA880129R0001	0.015	1
20 A	426606	CMS-102DR	2CCA880130R0001	0.015	1
Mounting on cable with cable tie					
80 A	426613	CMS-100CA	2CCA880107R0001	0.011	1
40 A	426620	CMS-101CA	2CCA880108R0001	0.011	1
20 A	426637	CMS-102CA	2CCA880109R0001	0.011	1

Ordering data

Current sensors



Description	GTIN 7612271 EAN	Ordering details		Weight of 1 unit (kg)	Packaging unit (pce.)
		Brief description	Order code		
Solid-Core Sensors, 25 mm					
Mounting on High Performance Circuit Breakers S800					
160 A	426644	CMS-200S8	2CCA880136R0001	0.028	1
80 A	426651	CMS-201S8	2CCA880137R0001	0.028	1
40 A	426668	CMS-202S8	2CCA880138R0001	0.028	1
DIN-rail mounting					
160 A	426675	CMS-200DR	2CCA880132R0001	0.030	1
80 A	426682	CMS-201DR	2CCA880133R0001	0.030	1
40 A	426699	CMS-202DR	2CCA880134R0001	0.030	1
Mounting on cable with cable tie					
160 A	426705	CMS-200CA	2CCA880117R0001	0.026	1
80 A	426712	CMS-201CA	2CCA880118R0001	0.026	1
40 A	426729	CMS-202CA	2CCA880119R0001	0.026	1

InSite configurator

Start configuring now!

The screenshot displays the ABB InSite configurator web application interface. The top navigation bar includes the ABB logo, 'InSite configurator', a 'Global' selector, and a 'Homepage' link. The main content area is divided into several sections:

- InSite configurator:** A section with a description: 'InSite configurator is a web-based application that offers its users the ability to configure the InSite Energy Management System inside the electrical panels.' It includes a 'New Project +' button.
- Recent projects:** A section with a table of recently created projects.

	Last modified	Project name	Building type	Collaborators
▼	20/12/2024	test	Small Commercial Building	
- News:** A section with a news article titled 'Energy efficiency for sub and final distribution'.
- How to:** A section with a video tutorial titled 'Energy efficiency'.
- Bill of Materials:** A detailed view of the Bill of Materials for 'Panel 1'. It lists products and their quantities.

Panel name	Products quantity	
Panel 1	18	Open
Products	Quantity	
INB35 2CC05000244R0001	1	
DM20 2CC05000247R0001	1	
CTS-1-50 2CC05000135R0001	3	
SCU200-W 2CC05000137R0001	4	
INS-E3 2CC05000139R0001	1	
INS-P6-1 2CC05000136R0001	4	
INS-S/H 2CC05000213R0001	4	
- Project details:** A section showing project information:
 - Project name: test
 - Building type: Small Commercial Building
 - Panels: 1
 - Number of products: 18
- Documents to download:** A section with a 'Download all' button.
- Buy products:** A section with a 'Buy now' button.



InSite configurator



ABB Inc.

ABB Electrification
Smart Buildings Division

solutions.abb/energyefficiencydevices