

Communication Interface

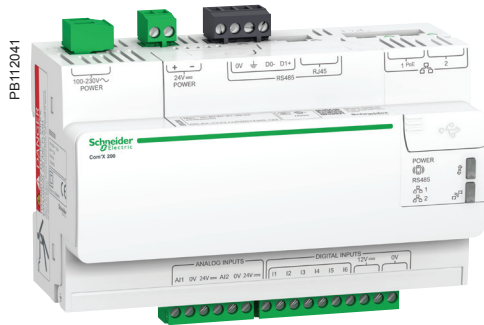
Com'X 200

Technical data sheet



Energy Server Com'X 200

Functions and characteristics



Energy Server Com'X 200

Ethernet GPRS data logger function

The Energy Server Com'X 200 collects and stores WAGES consumptions (Water, Air, Gas, Electricity, Steam) and environmental parameters such as temperatures, humidity, and CO2 levels in a building. Data is periodically transmitted as a report to an Internet database server.

Data processing and display

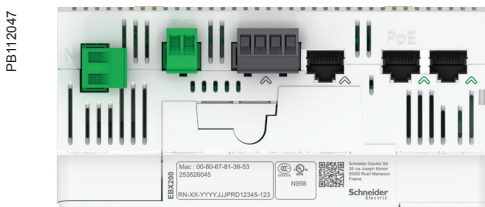
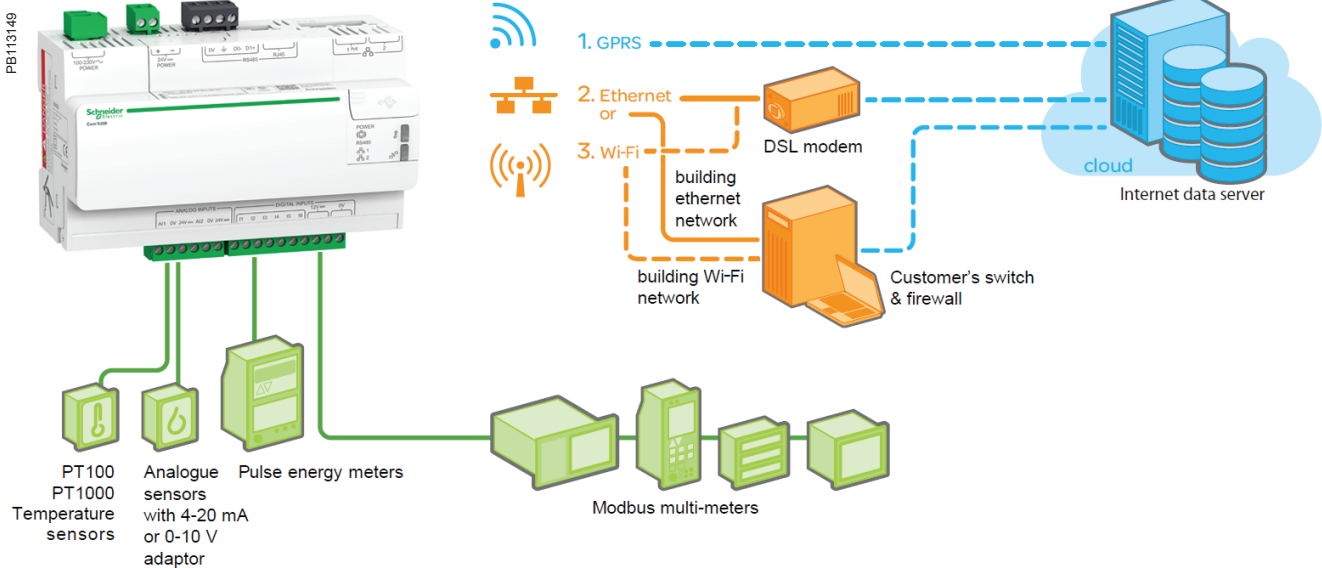
Once received by the server, the data is ready to be processed and displayed as web pages through web services provided by Schneider Electric, such as StruxureWare Energy Operation and StruxureWare Energy On Line.

The Com'X200 also provides a transparent interface between Ethernet-based networks and field devices. This gateway function supports the use of monitoring software for data collection, trending, event management, analysis and further processing of serial Modbus connected devices. This gateway function supports the use of monitoring software for data collection, trending, event management, analysis and further processing of serial Modbus and I/O connected devices.

- Energy Operation
- Energy Online
- or by any private energy management platform.

Architecture

Access to the web: choice of 3 media



Energy Server Com'X 200 - top view

Features

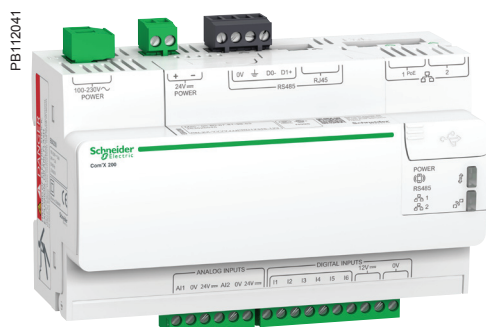
- From a simple metering installation with 1 device to large metering systems, Com'X 200 collects data from any Modbus TCP or serial devices, from any pulse meters, actuators and analogue sensors.
- Automatic discovery of connected Modbus devices.
- Connectivity to the cloud through Ethernet, WiFi and GPRS.
- 2 Ethernet ports to separate upstream cloud connection from field devices network.
- Protocols: HTTP, HTTPS, FTP, SMTP with Proxy management.
- Data export: Native connection to Schneider Electric Service platforms (Energy Operation, Energy Online) – CSV file export for other database servers.
- Gateway functionality via Modbus TCP/Modbus RTU.
- Setup through convenient built-in web pages.
- Compliant with electrical switchboard environment (Temperature, electro-magnetic compatibility).
- Storage of data in case of communication failure.
- Local backup of the configuration parameters.
- Supports custom models of tier devices (non-SE).

When associated with SE Services:

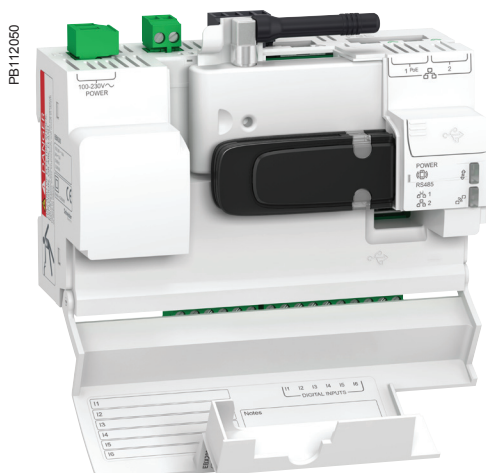
- Remotely managed (configuration backup, troubleshooting, parameters setting).
- GPRS contract management with SIM card provided.

Energy Server Com'X 200

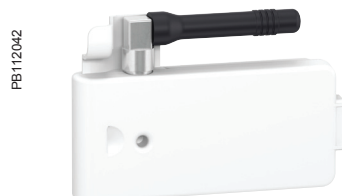
Functions and characteristics (cont.)



Energy Server Com'X 200



Energy Server Com'X 200 with the front face in open position, GPRS modem and Wi-Fi USB stick are connected.



GPRS modem (antenna in folded position)

Ethernet GPRS data logger

Characteristics

Inputs

6 Digital inputs

Max impulse frequency	25 Hz (min duration 20ms) IEC 62053-31 Class A
Power Supply	Provided by Com'X 200: 12 V DC – 60 mA External: from 10 to 30 V DC

2 Analogue inputs

Sensor compatibility	PT100 – PT1000 2-wires probes (accuracy 1%) Sensors with 4 - 20 mA or 0-10 V output (accuracy 0.5%)
Power supply	Provided by Com'X 200: 24 V DC - 50 mA per input

Communication

Meter Network	1 RS485 Modbus serial port, RJ45 connector, for 32 Modbus components maximum
Configuration / Data transfer	2 Ethernet ports RJ45 10/100 Base, DPWS ready
Ethernet 1	PoE class 3 (802.3af), DHCP client
Ethernet 2	DHCP client or server
Protocols	IPv4, IPv6 – HTTP, HTTPS, Modbus TCP/IP
USB Ports	2
For memory stick	USB port on front face
For Wi-Fi stick	USB port 2 behind cover
GPRS modem Frequency range	880-915 MHz 1710 MHz - 1785 MHz 824-849 MHz 1850-1910 MHz
External antenna (Tri band) Frequencies	GSM: 880-896 MHz/900 MHz USA PCN: 1710-1880 MHz; DCS: 1850-1990 MHz UMTS: 2.1 GHz

LED indicators	11
	Power / Boot status
	GPRS modem status and signal level
	Modbus communication
	Ethernet communication
	Wi-Fi communication mode (Access point / Infrastructure) and status
	Digital inputs status and pulse reception

Power Supply

AC	100-230 V (+/- 15%)(50-60Hz)
DC	24 V (+/- 10%)
Power over Ethernet	15.4 W DC
Max power	26 W max

Mechanical

IP	Front face IP40, terminals IP20
Dimensions (HxWxD)	91 x 144 x 65.8 mm
Weight	450 g

Environment

Operating temperature	-25° to +60°C (-13° to +140°F)
Storage temperature	-40° to +85°C (-40° to +185°F)
Humidity	5 to 95% relative humidity (without condensation) at +55°C
Pollution	Class III

Safety standards / regulation

International (CB scheme)	IEC 60950
USA	UL508
Canada	cULus 508
Europe	EN 60950

Quality Brands

	CE, UL
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PB112045



External GPRS antenna

PB112044



Wi-Fi USB stick

Part Numbers	
Energy Server Com'X 200	
Com'X 200 Ethernet data logger	EBX 200
Wi-Fi USB stick	EBXA-USB-WiFi
GPRS modem with SIM card	EBXA-GPRS-SIM
GPRS modem without SIM card	EBXA-GPRS
External GPRS antenna	EBXA-ANT-5M

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