EMX

True RMS Advanced Energy Meter

Revenue-grade metering (ANSI C12.20 Class 0.2 Standards)
Monitor loads from 0.25-6000A & 90-600V
Compatible with the **SenvaSync** app for quick and easy installation
NEW! EMX-IP for BACnet IP and Modbus TCP/IP
NEW! EMX-L, EMX, for a simplified metering experience



DESCRIPTION

The EMX, Advanced Energy Meter, is the most user-friendly and quick installation True RMS energy meter on the market. With the SenvaSync app, setup is easier than ever and thanks to NFC - even with the device powered off. EMX is line-powered, so no additional power supply is needed. Equipped with your choice of RS-485 or IP, the EMX can connect to nearly any network. Pulse inputs allow the EMX Advanced to relay additional meters to its connected network. Ideal for retrofits, the EMX accepts any 0.333V CT or standard metering Rogowski coil with no need for time-consuming and bulky integrators. As the EMX is a True RMS meter, it can handle heavily distorted loads (harmonics) without losing any accuracy. The EMX truly is a perfect fit for any energy metering needs.

APPLICATIONS

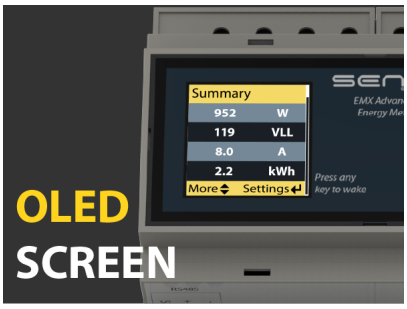
- Energy Management and Performance Contracting
- Monitoring for commercial tenants
- Activity-based costing in commercial and industrial facilities
- Real-time power monitoring
- Load shedding
- Audits/temporary monitoring
- Distributed generation
- Great for data center energy meter sensing



All models are compatible with DIN rail mounting and the SenvaSync App



EMX Lite, and EMX-IP now available!



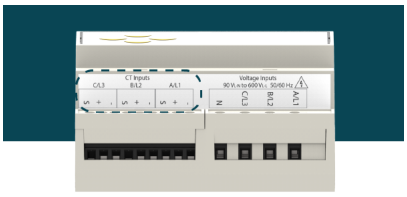
OLED (EMX and EMX-IP) screen for easy configuration



Optional NEMA 4X Enclosure with padlock



Works with any 0.333V CT or di-dt Rogowski coil



1-3 PHASE VOLTAGE 90-600V

Self-powered with 1 to 3 phase voltage, 90-600V

FEATURES

- Configuration App via NFC with **SenvaSync** (all models), available on iOS and Android
- Real-time logging data (EMX-L does not have logging)
- OLED screen with user interface that streamlines the setup process
- Self-powered with 1 to 3 phase voltage, 90-600V
- Modbus and BACnet
- 2 pulse inputs and 2 pulse outputs (EMX-IP does not have pulse outputs)
- Provides accurate RMS (Root Mean Square) metering of distorted loads
- One universal meter supports all metering CT options in the product family
- Supports mounting on PR30 (TS 35/F6) DIN rail
- Modus TCP/IP and BACnet IP!
- Same features as EMX except for RS-485 and pulse outputs
- A simplified EMX, same terminals and most of the features. Removes display, logging, and RTC.

ORDERING

Models

All EMX models share features apart from what is seen in the feature matrix.

		Feature							
		Display	Modbus RTU/ASCII	BACnet MS/TP	Modbus TCP/IP	BACnet IP	Logging	RTC	Pulse Outputs
Model	EMX	✔	✔	✔	✘	✘	✔	✔	✔
	EMX-L	✘	✔	✔	✘	✘	✘	✘	✔
	EMX-IP	✔	✘	✘	✔	✔	✔	✔	✘

Accessories

EMX Enclosure



Enclosure Options

EMX-ENC = Enclosure WITH Padlock

Rogowski Current Transducers



See Metering Series Rogowski CT's page to order

PART #: CT-F(XX)

Split Core Current Transducers



PART # CT-S-(XXXX) and CT-R-(XXXX)

Fuse Kit



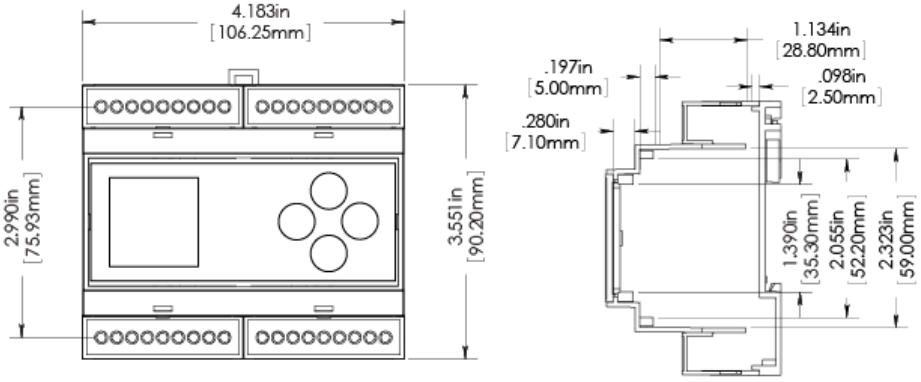
Fuse Kit, 600V, 1/2A, 3 Phase

PART #: CVT-FUSE-3PH

Rogowski CT:https://www.senvainc.com/en/products/energy-measurement/metering-series-rogowski-ct's
Split-Core Current Transducers: https://www.senvainc.com/en/products/energy-measurement/metering-series-split-core-ct's

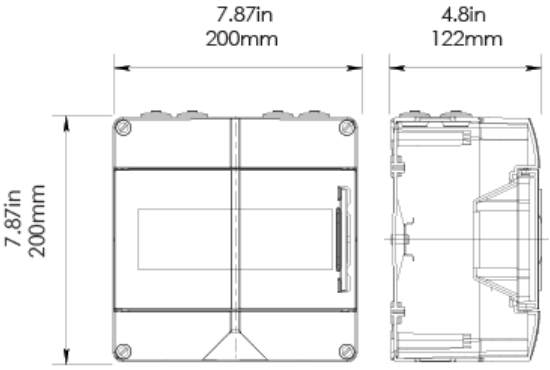
DIMENSIONS

EMX



(Dimensions apply to all three EMX products)

ENCLOSURE



Warning: The datasheet is designed for reference only. Refer to installation instructions that accompany the product and heed all safety instructions. Product improvement is a continuing process at Senva. Changes may occur to products without prior notice.

SPECIFICATIONS

Power supply Input	Line/High voltage	90VLN-600VLL (+20%), 50/60Hz, 1-3 phase
	Power Consumption	4W Typ.
	Frequency Range	50/60 Hz
Communications - RS-485 (EMX and EMX-L Only)	Protocols	Modbus RTU, Modbus ASCII, BACnet MS/TP
	Baud Rates	9600, 19200, 38400, 57600, 76800, 115200
	RS-485 Loading	1/4 unit
Communications - IP (EMX-IP Only)	Protocols	Modbus TCP/IP and BACnet IP
	Speeds Supported	10M/100M Base-T
EMX Wiring Requirements	Conductor gauge	24-14 AWG; Power terminals: 24-12 AWG
	Terminal torque rating	0.37 ft-lb (0.50 N•m)
Pulse Output (EMX and EMX-L Only)	Dual Outputs	Import & Export Energy Outputs
	Type	Solid state dry contact
	Specifications	N.O and N.C. 300mA max, 40Vac/dc
	Pulse scaling	0.01, 0.1, 1, 10, 100, 1k Wh/Pulse
	Duration	10, 25, 50, 100, 250, 500 (ms)
Pulse Inputs	Input Rating (EMX and EMX-L)	3.5 ± 0.5 VDC, short circuit current is 10mA max
	Input Rating (EMX-IP)	7 ± 0.5 VDC, short circuit current is 10mA max
	Pulse Length	Accepts pulses >10ms, rejects pulses < 5ms
Service Types	Configurations	1Ph, 2Ph, 3Ph Wye (4-Wire), 3Ph Delta (3-Wire)
	Voltages	90VL-N through 600VL-L
	Frequency	45-65 Hz
	Measurement	CAT III
EMX Performance	Meter Accuracy	0.2% (ANSI C12.20 Class 0.2 standards)
	System Accuracy	1% for V, A, kW, kVAR, kVA
Operating Environment	Operating Temperature	-22 to 158ºF (-30 to 70ºC)
	Storage Temperature	-40 to 158ºF (-40 to 70ºC)
	Humidity	0-95% non-condensing
	Environmental Rating	IP20; Front display IP40
EMX Meter Enclosure	Material	Polycarbonate/ABS
	Dimensions	3.55”h x 4.18”w x 2.26”d
	DIN Rail Compatibility	PR30 (TS 35/F6)
Industrial Enclosure (Optional)	Environmental Rating	NEMA 4X/ IP65
	Optional enclosure dimensions	7.78”h x 7.78”w x 4.8”d
	Material	Polycarbonate
Compliance	Agency	UL Listed, cUL Listed, File E489498
	Standards	RoHS, CE (requires metal enclosure)

** Product improvement is a continual process at Senva and product features and specification may change without prior notice. Refer to instructions that accompany the product for installation and wiring.*