

# EMX Advanced True RMS Energy Meter

- BACnet & Modbus
- Pulse kWh, KVAR, kVA
- Revenue grade metering (ANSI C12.20 Class 0.2 Standards)
- Monitor loads from 0.25-6000A & 90-600V
- Accurately measure harmonic loads



## DESCRIPTION

The EMX Advanced is the most user-friendly and quick installation True RMS energy meter on the market. Its line powered with a color OLED screen and data-rich user interface making setup as easy as L1, L2, L3. Equipped with both pulse and RS485 outputs, the EMX Advanced can connect to almost any metering or control device. Ideal for retrofits, the EMX accepts any 0.333V CT or standard metering Rogowski coil with no need for time-consuming and bulky integrators. Mixed or match loads or CT sizes!

## APPLICATIONS

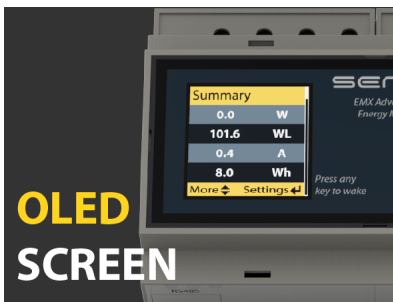
- Energy Management and performance contracting
- Monitoring for commercial tenants
- Activity-based costing in commercial and industrial facilities
- Real-time power monitoring
- Load shedding
- Audits/temporary monitoring
- Distributed generation

**READ.  
WRITE.  
CONFIGURE.**

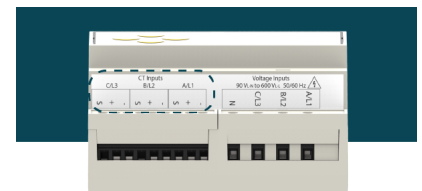
**COMING  
SOON**



Compatible with our upcoming NFC app



OELD screen for easy configuration



**1-3 PHASE VOLTAGE  
90-600V**

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



Supports DIN rail mounting



**ENCLOSURE  
AVAILABLE  
WITH LOCK  
OPTION**

Optional Nema 4X Enclosure with lock option



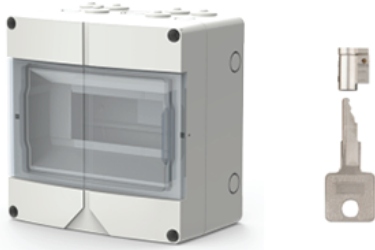
Works with any 0.333V CT or di-dt Rogowski coil

## FEATURES

- OLED screen with user interface that streamlines the setup process
- Self-powered with 1 to 3 phase voltage, 90-600V
- Functions as three independent voltage/current power meters in one--mix and match CT sizes for multiple loads
- 2 pulse inputs for summing multiple meters or for general (configurable) pulse counting from any pulse meter - water, gas, steam, etc
- 2 pulse outputs for separately tracking positive and negative energy usage, additional tracking of power metrics or power quality alarms
- Provides accurate RMS (Root Mean Square) metering of harmonic loads
- One universal meter supports all metering CT options in the product family
- Supports mounting on PR30 (TS 35/F6) DIN rail

## ORDERING

### EMX Enclosure



#### Enclosure Options

- EMX-ENC = Enclosure WITHOUT Lock & Key
- EMX-ENK = Enclosure WITH Lock & Key
- EMX-KEY = Lock & Key ONLY

### Rogowski Current Transducers



See Metering Series Rogowski CT's page to order

PART #: CT-F(XX)

### Split Core Current Transducers



See Metering Series Split-Core CT's page to order

PART #: XH-SCT-(XXXX)

### Fuse Kit



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

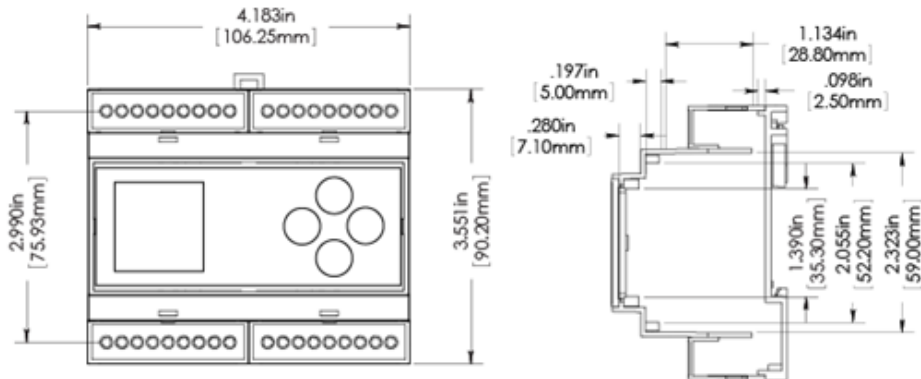
PART #: CVT-FUSE-3PH

Rogowski CT: <https://www.senvainc.com/en/products/energy-measurement/metering-series-rogowski-ct's>

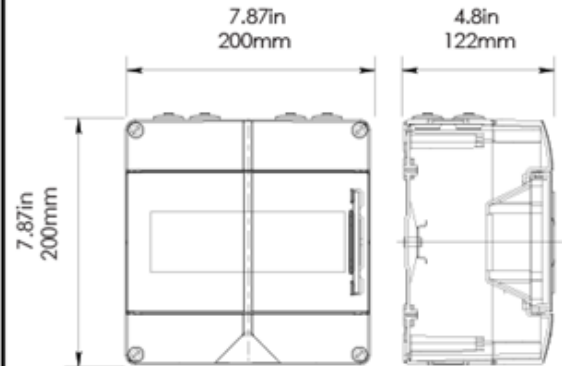
Split-Core Current Transducers: <https://www.senvainc.com/en/products/energy-measurement/metering-series-split-core-ct's>

## DIMENSIONS

### EMX



### ENCLOSURE



SPECIFICATIONS		
Power supply Input	Line/High voltage	90-600VLL (+20%), max 300VLN, 50/60Hz, 1-3 phase
	Power Consumption	5VA max
	Frequency Range	50/60 Hz
Outputs	RS-485	2-wire, BACnet MS/TP, Modbus RTU, Modbus ASCII
	Baud Rates	9600, 19200, 38400, 57600, 76800, 115200
	RS-485 Loading	1/4 unit
Pulse Output	Dual Outputs	Import & Export Energy Outputs
	Type	Solid state dry contact
	Specifications	N.O., 300mA max, 40V max
	Pulse scaling	0.01, 0.1, 1, 10, 100, 1k Wh/Pulse
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 Inputs	Input Rating	3.5 ± 0.5 VDC, short circuit current is 10mA max
	Pulse Rate	50 Hz (default), configurable up to 500 Hz
	Pulse Active	<100 Ohms
	Pulse Undefined	100-1000 Ohms
	Pulse Idle	>1000 Ohms
Service Types	Configurations	1Ph, 2Ph, 3Ph Wye (4-Wire), 3Ph Delta (3-Wire)
	Voltages	90VL-N through 600VL-L
	Frequency	45-65 Hz
EMX Performance	Meter Accuracy	0.2% (ANSI C12.20 Class 0.2 standards)
Operating Environment	Operating Temperature	-22 to 158°F (-30 to 70°C)
	Storage Temperature	-40 to 185°F (-40 to 85°C)
	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
	Dimensions	7.78”h x 7.78”w x 4.8”d
	Material	Polycarbonate

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