



# Model EM368-C

## Energy Meter



96 x 96mm

### Features

- Programmable CT / PT Primary / Secondary
- 3Ø Power factor
- Energy (Active, Reactive, Apparent)
- Modbus RTU communication (RS485) (Optional)
- Single pulse output

### Specifications

#### Display Specifications

Display	LCD with backlight
Digits	8 digits
Digit height	0.36"
Resolution	For energy : 0.01k, 0.1k, 1k, 0.01M, 0.1M, 1M,10M (depending upon CT ratio x PT ratio)

#### Input Specifications

Type of measurement	TRUE RMS
Sampling rate	100 Samples / Cycle
Electrical connections	3Ø - 3 wire, 3Ø - 4 wire, 2Ø - 3 wire, 1Ø - 2 wire

#### Input-voltage

PT primary	100V to 500kV (Programmable for any value)
PT secondary	100V to 500V AC (L-L) (Programmable for any value)
Voltage nominal	11 to 300V AC (L - N), 19 to 519V AC (L - L)
Impedance	≥0.8MΩ
Frequency range	45 - 65Hz
VA burden	<0.2VA at 300V AC L-N / Phase

#### Input current

CT ratings primary	1 / 5A to 10kA (Programmable for any value)
CT ratings secondary	1 / 5A (Programmable for any value)
Current nominal	5A
Withstand continuous	120A for 1sec
Frequency range	45 - 65Hz
VA burden	0.5VA at 5A / Phase

#### Measurement accuracy

Power factor	±1%
Power	±1%
Active energy	Class 1

#### Output Specifications

Pulse output	Voltage range : External 24V DC max Current capacity : 100mA max Pulse width : 100ms ±5ms
Device ID & Parity	1 to 255 & None, Odd, Even
Protocol & Interface	RS485 and MODBUS RTU
Baud rate	9600
Transmission mode	Half duplex
Transmission distance	500m maximum
Transmission speed	300, 600, 1200, 2400, 4800, 9600, 19200 (in bps)
Stop bits	1 or 2
Response time	100ms (max and independent of baud rate)
Isolation	Yes

#### Mechanical Specifications

Weight	302gms
Material	LEXAN 923-7035 GRAY
IP degree of protection	IP51 Front only
Torque at terminals	0.68N-m to 0.79 N-m
Wire gauge at terminals	20 to 14AWG;75°C
Mounting position	Vertical

#### Auxiliary Supply Specifications

Supply Voltage:	100 to 240V AC, -15% to +12%, 50 / 60Hz (±5%)
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#### Environmental Specifications

Operating temp.	Meter 0°C to +50°C
Storage temp.	Meter -20°C to +75°C
Humidity	Up to 85% RH (Non-Condensing)
Altitude	Up to 2000 meters (6561 ft.)
Measurement cat.	CAT III
Pollution degree	2



### Compliance

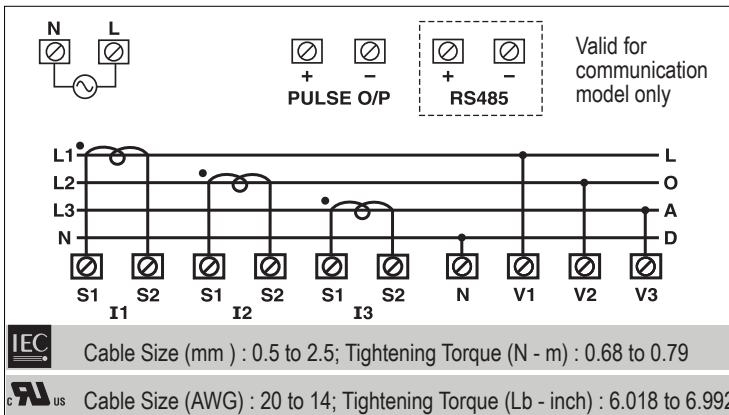
Applicable EMI / EMC Standards  
Product Standard : IEC 61326 - 1

Category	Standards compliance
Electrostatic discharge	IEC 61000 - 4 - 2
Immunity to electromagnetic RF fields	IEC 61000 - 4 - 3
Conducted immunity	IEC 61000 - 4 - 6
Immunity to magnetic fields	IEC 61000 - 4 - 8
Immunity to voltage dips and interruptions	IEC 61000 - 4 - 11
Fast transient	IEC 61000 - 4 - 4
Immunity to surge waves	IEC 61000 - 4 - 5
Conducted and radiated emissions	CISPR-22 / CISPR-11

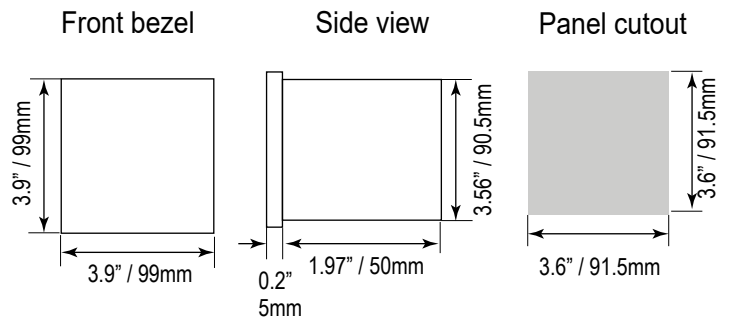
### Safety and Standards

IEC 61326 - 1  
IIEC61010 Edition 3.0 CAT III, Protection class II

### Terminal Connection



### Dimensions



### Ordering Information

Product code	Supply voltage	Output		Certification
		Pulse Output	Comm. (RS485)	
EM368-C-CU	100 to 240V AC	Yes	Yes	CE RoHS & UL