# GE Grid Solutions

# Multilin Meter Enclosure

# Enclosure Option for GE's EPM 2200/6000/6010/7000 Meters Pre-Wired, Configured and Economical Solution for Retrofit and Small Metering Systems

Expanding existing switchgear or installing new metering capability can be challenging due to space limitations, downtime and installation and equipment costs. GE's Multilin™ Meter Enclosure is a pre-wired configured, economical solution for both retrofit expansions and small scale meter installations that allows the expansion of existing switchgear capability without expensive and time-consuming design.

When ordered as a meter option the enclosure provides a factory pre-wired, installation-ready metering solution that further drives energy cost savings, by enabling the measurement of key energy usage information along multiple metering points for new or existing systems.

Ordering the enclosure is simple when selected as an option during meter configuration ensuring correct pre-wired meter-compatible delivery.

# Key Benefits

- Easy, rapid installation for new or existing switchgear capability through a factory-wired, tested enclosure with installed meter, eliminating ordering, wiring and installation errors
- Extend metering capability with new systems and existing switchgear without system installation downtime
- Factory tested and installation ready with guaranteed compatibility with GE's EPM meter family
- Simplified ordering through an enclosure option ensures correct pre-wired meter-compatible delivery
- NEMA 1 tested and UL/CUL certified

# Applications

GE's Multilin<sup>™</sup> Meter Enclosure can be used for both new and retrofit meter installations where no metering compartment is available. Common example applications include expanding meter functionality for:



**Industrial Tenant Monitoring:** Increasing tenant or energy awareness by adding targeted metering to existing systems for industrial applications, such as commercial/residential buildings, data centers, manufacturing and educational campuses.



Advanced Metering: Adding advanced metering functionality to an existing switchgear installation to meet new requirements for energy management, power quality and metering data communications.





# Easy and Rapid Installation

- Factory pre-wired, installation-ready, GE's metering solution eliminates wiring and associated errors for rapid installation
- Extend metering capability of new systems and existing switchgear without system installation downtime

# Cost-Effective Retrofit Solution

- Save up to 200% versus the addition of a new switchgear cabinet
- Compact footprint makes effective use of existing allocated space
- Allows for new installations or the expansion of existing switchgear capability, without expensive, time-consuming design, eliminating system downtime

# Reliable and Compatible

- Backed by a two-year warranty
- Simple meter option ordering ensures compatibility with GE's EPM meter family
- Comprehensive factory testing of both meter and enclosure together
- NEMA 1 tested and UL/CUL certified

# Application Example

#### Challenge

Due to expansion in an existing manufacturing plant, a plant manager wants to gain more visibility of energy usage and state of power quality for specific areas of the plant to baseline measurements. However, the plant's low voltage switchgear panels are at capacity.

#### Solution

By connecting GE's EPM 7000 meter using GE's Multilin Meter Enclosure, the manufacturing client can reduce costs by over 200% compared with installing a required expansion switchgear section separately. Furthermore, there is a space savings advantage with the Multilin Meter Enclosure, as it has a smaller physical footprint, which allows for mounting in already designated spaces.



## Meter Enclosure Assembly

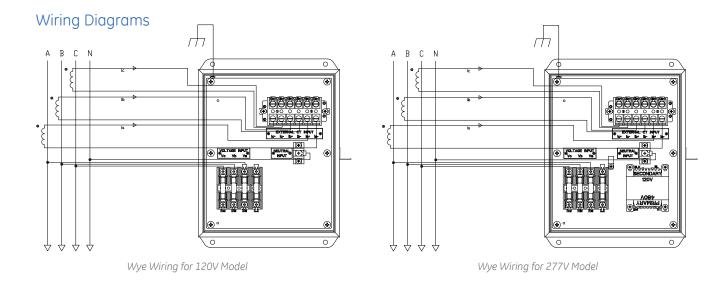
The installation of the GE's Multilin Meter Enclosure is simple, safe and eliminates downtime through simple mounting and wiring. The enclosure is UL/CUL certified and NEMA 1 rated, making it ideal for indoor environments. It is provided in two voltage configurations (120-240V and 277V) to ensure compatibility with customer installations. The standard equipment includes voltage fuses, a short block for current transformers, and a control power transformer for 277V power systems that are pre-wired and configured, to ensure quality and long-term reliability.

Lockable Hinge

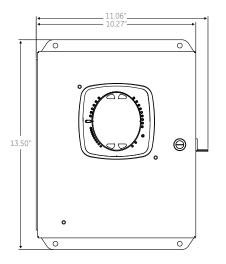
Door Gasket Current Input Shorting Block

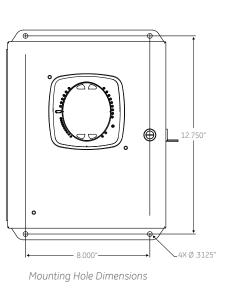


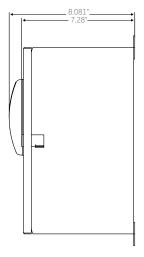
Control Power Transformer – for 277 Volt Install



# **Dimensional Drawings**







Enclosure Side Dimensions

#### Enclosure Front Dimensions

# **Technical Specifications**

| MPL |  |
|-----|--|
|     |  |

Type 1 Enclosure, UL/CUL Listed, File Number: E358101

| FICATIONS |
|-----------|
|           |
|           |
|           |

ENVIRONMENTAL Storage: Operating: Humidity: Enclosure Rating: NEMA 1 - (indoor use)

-20°C to 70°C -10°C to 50°C up to 95% RH, non-condensing

MECHANICAL PARAMETERS

Dimensions: 8.08" x 11.06" x 13.50" (LxWxH)/ 205.23 mm x 280.92 mm x 342.9 mm (LxWxH) Weight: 25 lb/11.4 kg

# Ordering Codes

### EPM 2200 with Multilin Meter Enclosure

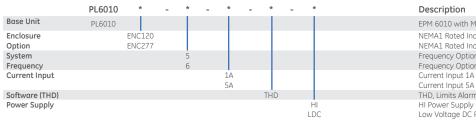
| PL2200           | *      | *  | * | Description  |
|------------------|--------|----|---|--|
| Enclosure ENC120 |        |    |   | NEMA1 Rated - Indoor, Single Meter Enclosure, 120V             |
|                  | ENC277 |    |   | NEMA1 Rated - Indoor, Single Meter Enclosure, 277V             |
| Metering Options |        | A1 |   | Volts and Amps Meter   |
|                  |        | B1 |   | Volts, Amps, Power and Frequency                               |
|                  |        | C1 |   | Volts, Amps, Power, Frequency and Energy Counters              |
|                  |        | BN |   | BACnet Volts, Amps, Power, Frequency and Energy Counters meter |
| Communications   |        |    | Х | None   |
|                  |        |    | S | RS485 + Pulse  |
|                  |        |    | В | BACnet MS/TP Serial and Modbus TCP/IP Ethernet                 |

## EPM 6000 with Multilin Meter Enclosure

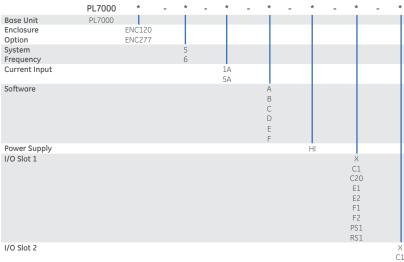
|                               | PL6000 | *                | - * | - | *        | - | *        | - | *  | -  | *      | Description  |
|-------------------------------|--------|------------------|-----|---|----------|---|----------|---|----|----|--------|--|
| Base type                     | PL6000 |                  |     |   |          |   |          |   |    |    |        | EPM 6000 with Multilin Meter Enclosure   |
| Enclosure Option              |        | ENC120<br>ENC277 |     |   |          |   |          |   |    |    |        | NEMA1 Rated Indoor, Single Meter Enclosure, 120V<br>NEMA1 Rated Indoor, Single Meter Enclosure, 277V |
| System Frequency              |        |                  | 5   |   |          |   |          |   |    |    |        | Frequency Option 50 Hz<br>Frequency Option 60 Hz   |
| Current Input                 |        |                  |     |   | 1A<br>5A |   |          |   |    |    |        | Current Input 1A<br>Current Input 5A   |
| THD                           |        |                  |     |   |          |   | 0<br>THD |   |    |    |        | No THD Option<br>THD, Limits Alarms & One KYZ Pulse Output   |
| Substitute LV<br>Power Supply |        |                  |     |   |          |   |          |   | LD | IC |        | No LDC Option<br>Low Voltage DC Power Supply to substitute Standard AC/DC Power Supply               |
| Ethernet Option               |        |                  |     |   |          |   |          |   |    |    | S<br>E | Standard Serial Option<br>Ethernet Option  |

# Ordering Codes

## EPM 6010 with Multilin Meter Enclosure



## EPM 7000 with Multilin Meter Enclosure



#### Description

|    | EPM 7000 with Multilin Meter Enclosure  |
|----|---|
|    | NEMA1 Rated Indoor, Single Meter Enclosure, 120V                                |
|    | NEMA1 Rated Indoor, Single Meter Enclosure, 277V                                |
|    | Frequency Option 50 Hz  |
|    | Frequency Option 60 Hz  |
|    | Current Input 1 A   |
|    | Current Input 5 A   |
|    | Multimeter Function only  |
|    | Data Logging 2 MB Memory  |
|    | Power Quality Harmonics, 2 MB Memory  |
|    | Limits and Control, 2 MB  |
|    | 64 Samples/cycle Waveform Recording, 3 MB Memory                                |
|    | 512 Samples/cycle Waveform Recording, 4 MB Memory                               |
|    | Hi Power Supply Option  |
|    | None  |
|    | Four Channel Bi-directional 0-1 mA Outputs                                      |
|    | Four Channel Bi-directional 4-20 mA Outputs                                     |
|    | 100 BaseT Ethernet  |
|    | 100BaseT Ethernet with IEC 61850 Protocol                                       |
|    | Fiber Optic Serial Port-ST Terminated<br>Fiber Optic Serial Port-Versatile Link |
|    | Floer Optic Serial Port-versatile Link<br>Four Pulse Outputs/Four Status Inputs |
|    | Two Relay status Outputs/Two Status Inputs                                      |
| X  |   |
| C. |   |
| C2 |   |
| F  |   |
| E2 |   |
| F1 |   |
| Fa |   |
|    |   |

F2 Four Pulse Outputs/Four Status Inputs

PS1 RS1 Two Relay status Outputs/Two Status Inputs

## GΕ 650 Markland St. Markham, ON Canada L6C 0M1

Toll Free (NA Only): 1-800-547-8629 Tel: 905-927-7070 Fax: 905-927-5098

## GEGridSolutions.com

GE, the GE monogram, and Multilin are trademarks of the General Electric Company. GE reserves the right to make changes to specifications of products described at any time without notice and without obligation to notify any person of such changes. Copyright 2016, General Electric Company. All Rights Reserved. GEA-12771C(E)

