

# Electro – GenConnect™

## Concept

**Simple installation/connection** - All installation is outside of the building, simply pull the existing electric meter, plug in meter socket extender package, mount generator control, and connect the generator.

**Flexibility and User-Friendly** - The generator stand-by power is applied to the complete distribution panel. Major loads will have to be turned off (water heater, dryer, etc.) but the homeowner has complete flexibility of operating any circuits within the home. Electro-GenConnect does not require pre-selection or pre-naming of the stand-by circuits.

**Option** - Built in **HOMEGUARD** whole house surge protection module.

- Remote AMP meter



US Patent No. 6,074,246 applies.



### Install Sequence



**ELECTRO INDUSTRIES, INC.**  
2150 West River Street, PO Box 538, Monticello, MN 55362  
763.295.4138 • 800.922.4138 • fax 763.295.4434  
sales@electromn.com • www.electromn.com

### **Flexible and User-Friendly**

- Does not require pre-naming circuits
- Generator powers complete distribution panel
- Outage return, automatically transfer to utility

### **Automatic Transfer Model**

- Automatically determines outage
- Starts the generator
- Know when to return to the utility
- Generator maintenance
- Records errors and problems

### **Reacts only to true outage**

- Select 0.2 to 3 minutes to define outage
- Filters out reclosure interrupts

### **Continuous system voltage monitor**

- Both LINE and generator
- All functions, leg to neutral

### **Generator over/under voltage protection**

- Fused, 50 or 100 Amp CB
- Continuous monitor (L1), 104 to 136 volt

### **Product Listed**

- ARL Label
- Tested to UL1008, NEC, etc.

### **Safe and Utility-Friendly**

Designed with utility safety as the highest priority, redundant components and circuits.

1. Each leg to neutral, not across L1 and L2
2. "Neutral" transfer position is verified
3. "Outage" is **both** leg below 70 volts
4. "Stand-by power" is **both** legs below 50v
5. Four control contacts in series
6. Hardware control path, external to micro
7. Hardware path **and** micro controls Gen relay
8. Dual current/voltage Gen relays
9. Redundant watch-dog micro, also interlocks relay
10. Micro powered from Gen battery, not effected by outage

### **Monitors Lights**

- Green – Utility power
- Red – Gen power
- Pulsing (either) – time out mode
- Off – both utility and Gen power off
- Alternate Red/Green – test mode or minor failures
- Alternate Red/Green Continuous – generator failure

### **Test Routine – User Access**

1. Utility live and generator live
2. Manual switch, hold for test
3. Status and failure code monitor light
4. Logic control verifies "neutral" transfer position
5. Approximate 1 second LOAD voltage dip
6. Logic circuit verifies all components and safety
7. Can be part of "30-day" automatic generator maintenance

# Meter Socket Adapter

*Utility LINE to LOAD Disconnect – 200A  
Standby Generator Capacity – 12 kW, peak/10 kW Continuous*

## Application

- Retrofit
- Any ring style meter enclosure
- Ringless meter enclosure, 6 5/8" hole

**Models: LG-050A210**

**LG-050M210**

**LG-050M213**

**LG-050M215**

Extender – 2 ½ inch

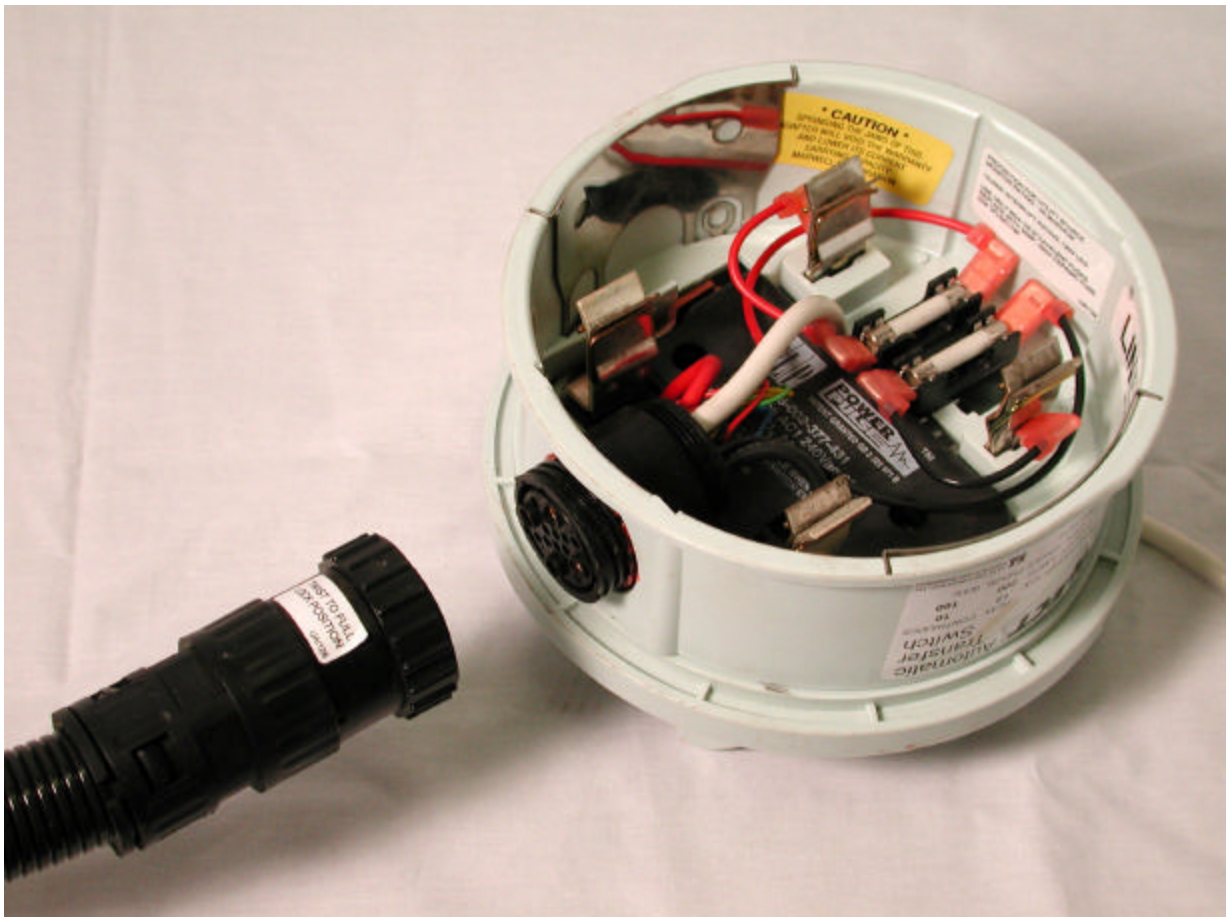
Held in place by ringless cover

Single utility meter seal

Extender, similar to most whole house suppression units

Requires cable with connector

Separate control box, electrically coupled with cable at extender



# Meter Adapter, External Mount

*Utility LINE to LOAD Disconnect – 200A  
Standby Generator Capacity – 12 kW, peak/10 kW Continuous*

## Application

- Retrofit
- Any ringless meter enclosure

**Models: LG-050A23E  
LG-050M23E**

Extender - 4 ½ inch

Installed after enclosure cover is in place

Three “cam” type turnout locking bars

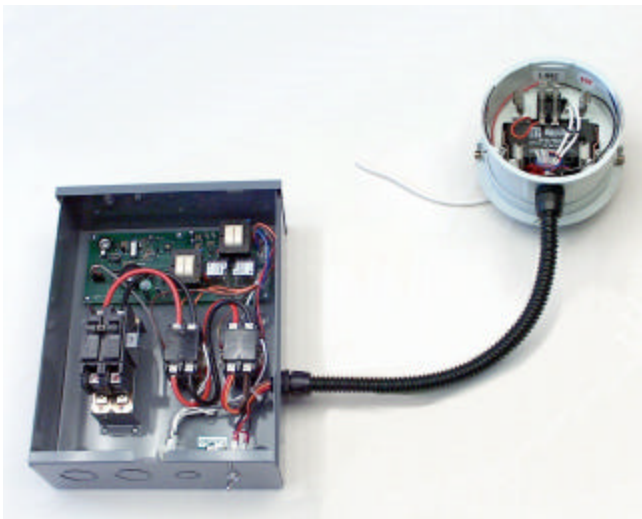
Held in place only these three internal slide bars

Requires three additional utility meter seal

No connector at extender

Cable is permanent at the control box and at the extender  
(basically one-piece product)

Separate control box via permanent wired “hose” cable



# Meter Adapter, but Hard-Wired

*Utility LINE to LOAD Disconnect – 200A*

*Standby Generator Capacity – 12 kW, peaks/10 kW Continuous LG-050A23W*

*– 25 kW, peaks/20 kW Continuous LG-100A23W, LG-100M23W*

## Application

- Retrofit, existing
- Hard wired within meter enclosure
- External cable to extender is not desirable

Extender – 3 ½ inch

Held in place by ringless cover

Control cable and Generator power wires are pigtails for permanent wiring

Pigtail wires extend out the back of plug-in meter adapter

Control box is field nipped to the existing meter enclosure

The extender pigtails are fed through the inside of the meter enclosure, through the attaching nipple conduit, and field terminated in the control box.

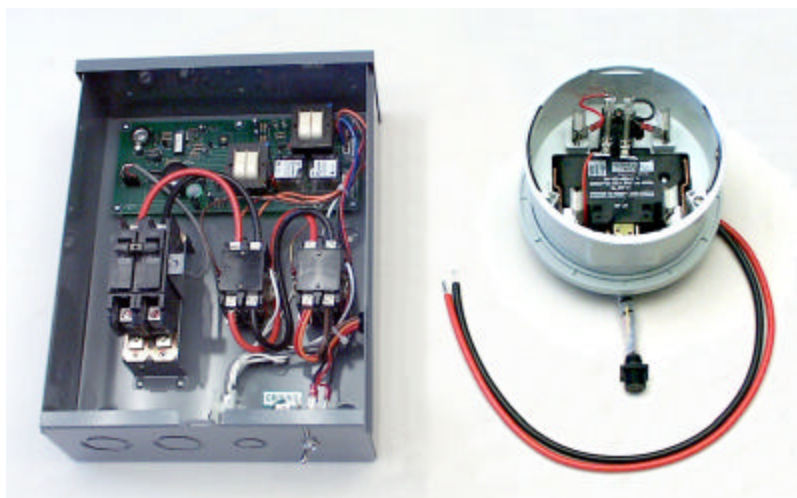
Requires larger retrofit meter socket enclosure, at least 10x14

- Plug-in extender pigtail wires must have service loop for installing and removing plug-in extender, the service loop wires must be safely “jammed into” existing meter enclosure.

Welding cable type flexible conductors are provided

Unknown UL or ARL comment/implications with this field wiring concept

Two piece product – extender and control box



# Meter Socket Enclosure Package

*Utility **LINE** to **LOAD** Disconnect – 200A*

*Standby Generator Capacity – 12 kW, peaks/10 kW Continuous      LG-050A2U0, LG-050M2U0  
– 25 kW, peaks/20 kW Continuous      LG-100A2U0, LG-100M2U0*

## Application

- New installation, this takes the place of standard general service meter enclosure
- Change out of existing meter enclosure

Single enclosure product – 29Wx14Hx5

Same functions, basic wiring, components, as meter adapter models

Standard NEMA 3R meter enclosure construction

Two meter sealable covers

Physical separation between utility responsibility and customer

Option – By pass meter block (HQ4 or equivalent block)



# Basic Gen-set Transfer Package

*Utility LINE to LOAD Disconnect – 200A*  
*Standby Generator Capacity – 12 kW, peaks/10 kW Continuous*      *LG-050A2V0*  
*– 25 kW, peaks/20 kW Continuous*      *LG-100A2V0*

## Application

- Any hardwire, in the building or customer side of the meter, second distribution panel arrangement

Single enclosure product – 13 ½Wx30Hx7

Same features, components, wiring and basic layout as LG-\*\*\*A2U0, except **no** meter socket block and arrange as a vertical enclosure, can be installed between 16 inch studs.

Enclosure design is NEMA 3R style, could be outside installed with proper conduit weather type adapters (Meyers Hub).

If installed between studs, will extend possibly ½ inch and suggest wood frame finish around enclosure.

Hard wired in/out as a 200A utility LINE disconnect

- Top compartment disconnect
- Allows meter seal type arrangement for service entrance safety

