

Pick Your Powersm *enpower* UPC Utility Power Control

Highlights

- Embedded PLC software module, IEC 1131-3 Programming Language (Ladder Logic)
- Communication through LONWORKS® and Modbus® (RS-232/485)
- UL recognized component
- Embedded software modules include master synchronizer, true RMS real power sensor, automatic transfer switch and import/export control, kW load-sharing control with softloading and unloading, base-load control, VAR/PF control, protective relays and PLC — all in one box!
- Includes complete power metering and monitoring functions
- Utility-grade device
- Remote operation using a variety of communications methods and our Virtual Power Plant™ software
- Remote real and reactive power reference settings
- Programmable, separately isolated switch inputs and relay outputs
- Setup and configuration with standard PC (no hand-held programmer required)

Complete Power Metering & Monitoring Functions

- True RMS real power sensor
- Remote power quality monitoring
- Remote energy/electrical metering
- Remote data logging

Customizable Design for Multiple Applications

- Peak shaving/sharing
- Distributed generation
- Softloading closed-transition transfer
- Import/export
- Energy management
- Cogeneration
- Genset testing under load
- Real-time pricing
- Interruptible rates



The *enpower*TM-GPC with the PTC-enabled configuration provides safe, reliable transfer of power between a single generator and the utility grid.

Master Control for Multiple Generator Applications

The *enpower*TM-GPC (Generator Power Control) with the PTC-enabled (Power Transfer Control) configuration provides safe, reliable transfer of power between a single generator and the utility grid. Standard options include a wide variety of traditional control modules and open-communication protocols integrated into a single unit.

The *enpower*-GPC with the kWS-enabled (kilowatt sharing) configuration provides safe, reliable paralleling of multiple generators. Combined with our *enpower*-UPC, the kWS-enabled GPC is ideal for synchronizing and paralleling multiple generators to the utility grid.

These integrated solutions provide easier and faster installation, increased reliability and the latest cutting-edge technology. Combined with our 2-year standard warranty and 24-hour technical support, the *enpower*-GPC is the complete solution for all power control needs.

Intuitive Graphical User Interface

- Includes *entelligent*[®]-NST (Network Service Tool) setup and configuration tool for LONWORKS[®] based hardware
- Store parameters for easy transfer between units
- 32-bit application, Windows[®] 95 and NT[®] 4.0 compatible
- Runs on standard desktop or laptop PC eliminating the need for a hand-held programmer
- Basic monitoring functions built in
- Simple “drag-and-drop” interface
- Reads and displays LONMARK[®] object names
- Utilizes simple user-created forms
- Industry standard ODBC-compliant database
- High-speed OLE automation server
- Reads and displays values and documentation for monitored data points



Protective Relaying Functions

- Sync check (25)
- Auto-synchronizer (25A) with voltage matching, two modes available:
 1. Frequency and phase matching
 2. Slip frequency
- Over/under voltage for generator and utility tie (27/59)
- Over/under frequency for generator and utility tie (81 O/U)
- Directional power (32)
- Directional reactive power (32VAR)
- Reverse-phase/phase-balance current (46)
- Phase sequence voltage (47)
- Voltage-restrained overcurrent (51VR)

Specifications

Environmental:

Humidity: 95% at 38° C
Temperature: -25°C to 70° C

Power Requirements:

18 to 75 Vdc (<10W)
85 to 265 Vac (<25W)

Single Phase Potential Input:

60 to 150 Vac; 50/60 Hz; delta, open delta or wye configurations

3-Phase Potential Inputs:

60 to 150 Vac; 50/60 Hz; delta, open delta or wye configurations

Single Phase Current Input:

0 to 5 amps; 50/60 Hz

3-Phase Current Inputs:

0 to 5 amps; 50/60 Hz

Digital Inputs:

20 to 40 Vac/Vdc; 85 to 150 Vac/Vdc

Digital Outputs:

1 to 120 Vac/Vdc; 0.15 amps max

Frequency and Voltage Bias Outputs:

+/- 3 Vdc and 4-20 mA

Designed to meet or exceed ANSI/IEEE C37.90-1989, IEEE Standards for Relays and Relay Systems associated with Electrical Power Apparatus (5000 Volt Surge Withstand)

Designed to comply with:

IEC 1000-4-2 Electrostatic Discharge
IEC 1000-4-3 Radiated Immunity
IEC 1000-4-4 Fast Transient
IEC 1000-4-5 Surge Withstand
IEC 1000-4-6 Conducted Immunity
ANSI/IEEE C37.90.1 Surge Withstand/Fast Transient
ANSI/IEEE C37.90.1 Radiated Immunity

Designed for LONMARK[®] Compatibility

Recognized to U.S. and Canadian requirements under the Component Recognition Program of Underwriters Laboratories Inc.

