



ADVANCED POWER  
TECHNOLOGIES

# Caterpillar Communications Integrator Panel



## CCI-Series Industrial Control Panels Solutions Brochure

[www.apr-power.com](http://www.apr-power.com)  
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**SAFE SMART SERVICEABLE SWITCHGEAR &  
ENGINEERED POWER SYSTEM SOLUTIONS**



ALN: 513 Rev. 02

# Standard Features



Figure 1: One Generator Communication Conversion



Figure 2: Carbon Steel NEMA 1 Enclosure (Door Closed)

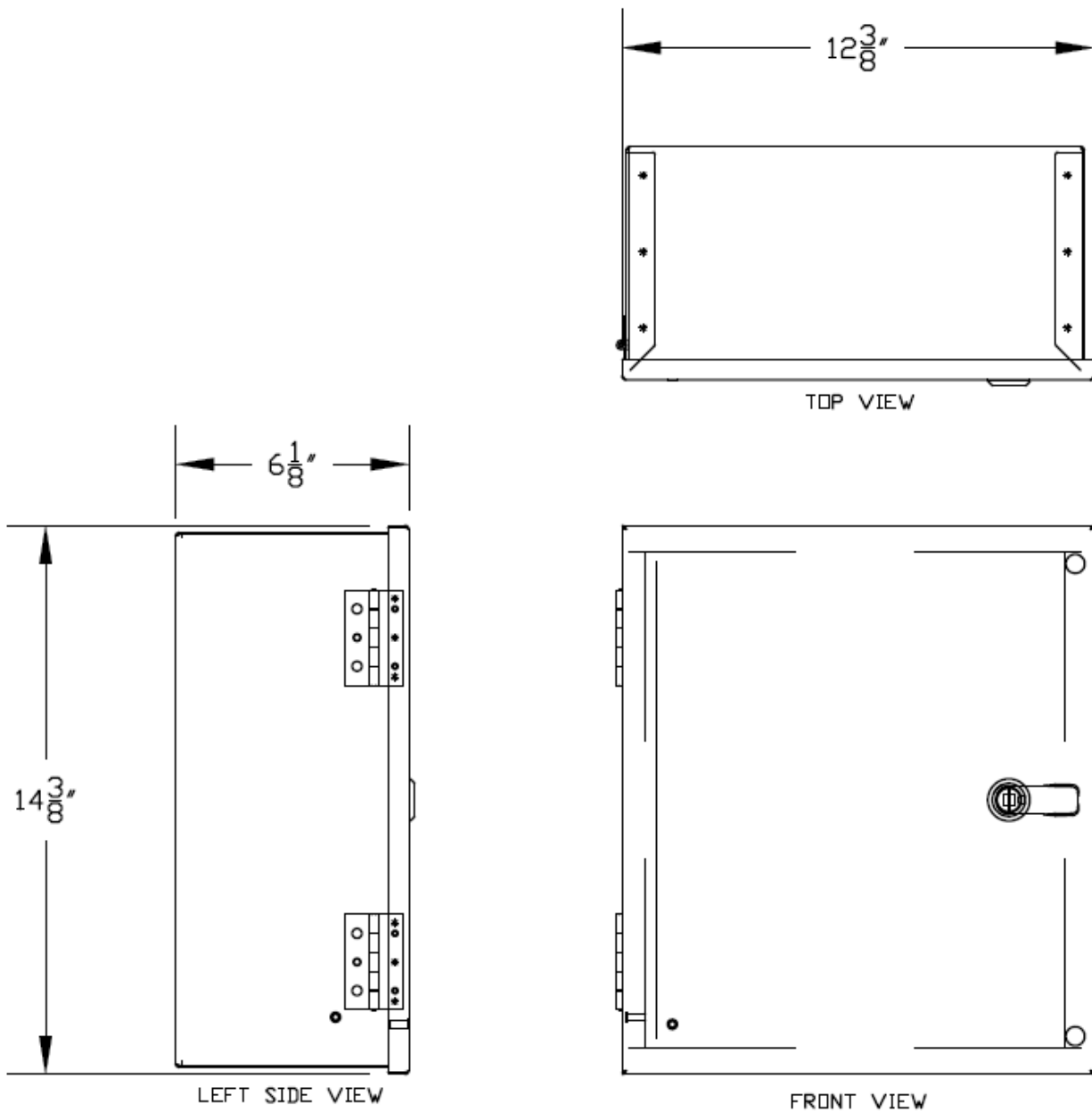


Figure 3: Two Generator Communication Conversion

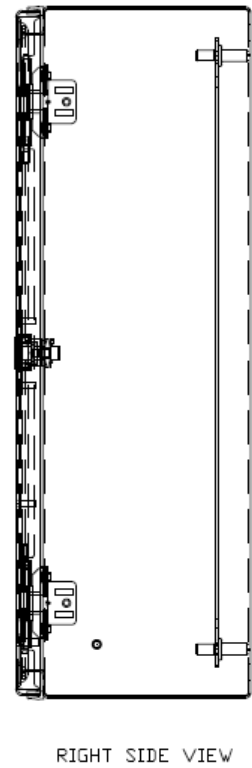
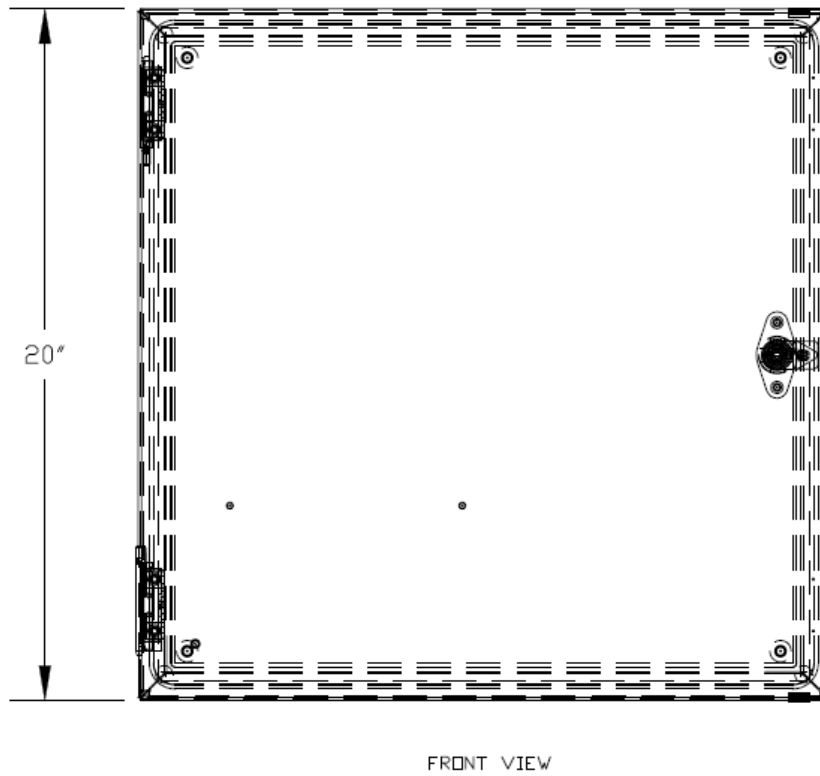
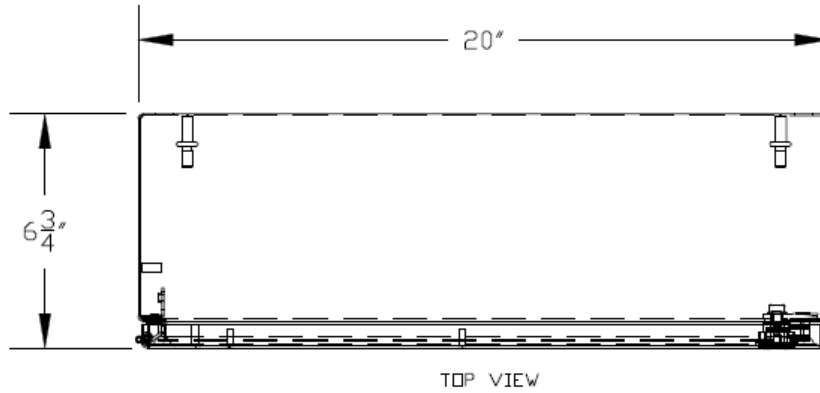
## Single or Multiple Unit Communications Made Easy

- ⊙ Genuine CAT Components from CAT Communications Experts
- ⊙ Integrates Caterpillar PL1000E and Converts CAT datalink or CAN J1939 to RS-485 Modbus RTU or Modbus TCP/IP Ethernet
- ⊙ Modbus RTU or Modbus TCP/IP Protocol Allows for Easy Integration Into Customers SCADA, DSC Or Other Computerized Monitoring Systems
- ⊙ Multiple Caterpillar ECMs can be monitored simultaneously:
  - One (1) EUI Engine & One (1) EMCPII/EMCPII+
  - Two (2) EMCPII/EMCPII+, etc.
- ⊙ Panel options: NEMA 1, NEMA 3R, or NEMA 4X (Stainless Steel) Wall-Mounted Panel
- ⊙ Optional 24VDC Inputs and Outputs are Readable and Writable via Modbus Port
- ⊙ Easy Install - No Special Tools/Connectors Required
- ⊙ Standard Termination Points for Field Connections:
  - 24VDC Control Power from engine batteries
  - CAT Data Link/ CAN J1939
  - RS-485 or RS-232 or Ethernet Connection
- ⊙ Optional Additional 24VDC Inputs for Monitoring Additional Field Devices such as Fuel, Oil & Coolant Levels, Spill Switches, Circuit Breaker Positions, etc.
- ⊙ Optional Additional 24VDC Digital Outputs for Controlling Louvers, Circuit Breakers, Start/Stop, etc.
- ⊙ Factory Preconfigured Register List for Plug and Play Operation with Custom Register Mapping Available
- ⊙ Optional Features:
  - Ethernet Switch
  - RJ45 Connection
  - Contact APT for Additional Features

# Single PL1000E Panel



# Dual PL1000E Panels



# About Advanced Power Technologies



Advanced Power Technologies (APT) is on the cutting edge of the latest engineered power system smart technologies, as it relates to microgrid & storage management, renewable & conventional energy source deployment, demand peak shaving, and facility back-up and co-generation power systems. Located in the central United States and headquartered in Lafayette, Indiana with solutions development engineers around the country, APT provides domestic and international products and services to industry leading companies from around the world. APT engineers have decades of power system experience from working with some of the largest companies in industry. Over the last two decades, we have produced successful solutions for hundreds of large-scale electric power projects involving utility/generator paralleling, transfer, peak shaving, and distribution. We pride ourselves in providing electrical power systems that are engineered and custom built, utilizing state-of-the-art technologies to fit our customer's exact needs. The core of our business is low & medium voltage engineered power systems for a wide range of indoor & outdoor applications, such as:

- ⊙ Utility(ies) and Generator(s) Paralleling/Transfer/Peak Shaving/Distribution Switchgear
- ⊙ Microgrids, Microgrid Master Control Panels, SCADA systems
- ⊙ Containerized Battery Energy Storage Systems (BESS)
- ⊙ Photovoltaic (PV) Solar Power Collection/Distribution & Renewable Energy Storage Systems
- ⊙ Low & High Resistance Grounding Systems, Grounding Systems for Photovoltaic Effective Grounding
- ⊙ High Efficiency Combined Heat and Power Switchgear & Control Systems (CHP, Co-generation)
- ⊙ Outdoor Walk-In Electrical Houses (E-Houses) & Skid-Mounted Switchgear
- ⊙ Motor Control Centers & Motor Control Switchgear
- ⊙ Automatic & Manual Load Transfer Switchgear
- ⊙ Bypass/Isolation & Power Distribution Circuit Breaker Switchboards
- ⊙ Generator/Loadbank Quick Connection Switchgear, Switchboards, & Tap Boxes
- ⊙ Industrial Control Panels

Please see our product webpages on [www.appt-power.com](http://www.appt-power.com) for product brochures and relevant information. Actual products may look different from images shown on the website and in brochures, based on actual specifications.

APT cares and understands that each power system is different. We will evaluate various solutions in order to develop the best solution for a site. APT focuses on our ability to a combine several traditional pieces of equipment/functionality into as little of a footprint possible. This saves on space, the cost of equipment, cost of installation, and accomplishes the most optimal/state-of-the-art design your facilities. APT's desires to foster and grow a culture of continued open communication with each customer. Let APT be your source to provide fully engineered power system equipment solutions for the full customer facility on time, on or under budget, and in the smallest footprint possible. We are always available to assist customers and engineers representing customers in the development of complex power solutions for all facility types.