

## **Generator Paralleling Control Panels**





ACM-Series
Industrial Control Panels
Solutions Brochure





## **Local Generator Monitoring & Control**



Figure 7: Generator Monitoring & Control Panel with Analog Metering, Protective Relays, & SCADA HMI



Figure 8: Generator Monitoring & Control Interior

## **Application Configurations**

- Single Generator Power Distribution & Protection
  - o Pyrometer with Thermocouples selector switch
- Automatic Paralleling of Multiple Generators
  - Inhibits closing of multiple generators to a dead bus simultaneously
    - First Up First On Logic connects first available Generator that builds up voltage and frequency to a dead bus
  - o Manual Paralleling Controls
    - Synch Check Relay
    - Synch Lights
  - Sustained Utility-Generator Paralleling Operation
  - o Facility Load Shed
- Complete Generator Protection
- Complete Generator & Bus Metering
- Start/Stop Interface
- Direct Sensing Up to 690V (No Switchgear PTs Required)
- SCADA-ready Modbus Comm. Port for Monitoring & Control



Figure 9: Generator Monitoring & Automatic Paralleling Control Panel with Analog & Digital Controls



## **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.apt-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.