



Whatever your application, standard or customized Cat® switchgear provides the most reliable power generation and electrical distribution system capabilities to protect your facility from outages and provide the power you need... whenever you need it.

With years of experience and a wide breadth of products (Generator Sets, Automatic Transfer Switches, Uninterruptible Power Supplies and Paralleling Switchgear), comfortably rely on your local Cat Dealer for your Emergency/Standby System and Service. Your Cat Dealer is your single-source supplier of integrated generators, switchgear products, and local support and service.



SECONDS CAN COST MILLIONS

Cat® Switchgear

LEDE6070-02 (February 2012)

© 2012 Caterpillar All Rights Reserved Printed in U.S.A. CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow" and the POWER EDGE trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.





A CATERPILLAR EXCLUSIVE

**The market's most reliable technology...
from the industry's most reliable company: Caterpillar.**

When it comes to your electrical system, a slight disturbance or outage can be catastrophic to your business. It is critical that your electrical system remains up and running 24/7. Cat® Generator Paralleling Switchgear is part of an integrated solution for optimal power generation and electrical distribution system performance.

Cat generator sets coupled with Cat switchgear provide peace of mind and reliability right at your fingertips. Our systems control technology is innovative, reliable and cost-effective for power generation systems in both low-and medium-voltage emergency applications.

Cat switchgear uses an advanced, industry-leading, microprocessor-based generator set control. Simple to use, it provides an unparalleled level of control and security. With Cat switchgear, you can be certain your generator sets will be online when you need them to be and operating within specified parameters at all times.



Cat® Switchgear offers both standard-configurable and custom product solutions:

- EGP (Emergency Generator Paralleling) – Used for both legislated and optional standby applications; it is commonly used in conjunction with Cat Automatic Transfer Switches for hospital or other applications.
- XLM (Emergency Transfer and Load Management) – Used for mission-critical applications; emergency transfer and load management control of multiple engine generator sets with multiple utility sources; automatic transfer to emergency upon utility failure; automatic start, synchronize, parallel and load share on a common bus for emergency operation.
- Custom – If our configurable switchgear offerings do not fit your needs, we offer fully customized solutions.
- All Cat switchgear offerings help mitigate potential outages by providing you with access to real-time controls and information.
- Downtime can cost money and under severe situations, even cost lives. There should be no compromise regarding your standby power generation or electrical distribution system. Cat switchgear has state-of-the-art features with capabilities you can depend on.





Cat switchgear has been designed to integrate with Caterpillar on-package, microprocessor-based engine control. Now you can get greater efficiency, reliability and dependability all in one package, exclusively from your Cat® Dealer.

All products are available in two versions: PL 3000 or PL 2000. Each product family is equipped with features and capabilities suitable for your power generation and electrical distribution system's needs. Primary operations are only one screen away, making it possible for the operator to easily observe an overview of the system, generator metering, engine data, generator controls, settings, and annunciations. You choose the feature set that is right for your application.



PL 3000

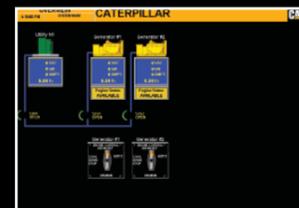
The PL 3000 is the most feature-rich Cat switchgear product offering. The superior graphics and operator interface, along with the ability to perform historical data trending and unlimited alarm/event logging make it the most sophisticated and versatile product offering.

PL 3000 Features:

- 19-inch color display TFT, with Surface Acoustic Wave Touchscreen operator interface
- Full functional modes of operation
- True distributed processing
- Redundancy features and options
- Optional connectivity features
- Redundant touchscreen available
- Historical trending capability
- Extensive alarm and event logging
- Optional Ethernet/Modbus full-feature remote

Operator Interface:

- Generator Set Control
- Metering
- Enhanced capabilities for ATS operations and historical trending
- Load Shed Control
- Generator Demand Priority Control
- System Control
- Annunciator Screens
- Engine Monitoring



PL 2000

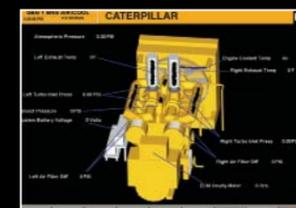
PL 2000 is the standard Cat switchgear product offering with a wide range of capabilities for demanding applications. It surpasses the switchgear industry offerings in all aspects. Cost-effective without sacrificing dependability, the PL 2000 is state-of-the-art and performs all the same power monitoring, generator control and switchgear operations as the PL 3000 except historical trending capabilities.

PL 2000 Features:

- 12-inch color operator interface TFT, resistive touchscreen
- Full functional modes of operation
- True distributed processing
- Redundancy features and options
- Optional connectivity features
- Redundant touchscreen available
- Ethernet/Modbus full-feature remote ready
- Limited alarm and event logging available

Operator Interface:

- Generator Set Control
- Metering
- System Control
- Load Shed Control
- Generator Demand Priority Control
- Annunciator Screens
- Engine Monitoring



CUSTOMIZED SOLUTIONS

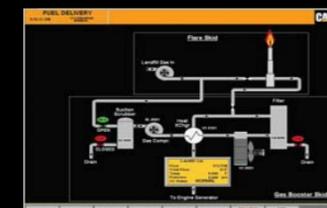
Cat Generator Paralleling Switchgear has the power and flexibility to handle even the most unique or demanding configurations and project requirements.

Custom Features:

- Multiple utility connections
- Multiple tie breakers
- Unique application specific sequence of operations
- Special switchgear layout requirements

Operators Interface:

- Custom screens
- Site specific overviews
- Balance of plant supervisory control and data acquisition (SCADA)





**TECHNOLOGY AND SUPPORT
YOU CAN RELY ON**

Advanced Communications Capabilities

Cat switchgear is equipped with exceptional remote communications technologies, enabling you to control and monitor your electrical power generation system from anywhere at anytime. Whether at home, in the office or on the road, you can access controls and information on a real-time basis and respond immediately...even control multiple facilities from a single centralized site.

High-Speed Integrated Control System

Control architecture includes a redundant high-speed, industrially hardened network for system control. This essential feature ensures proper system performance under any condition.

Best-in-Class Footprint

Integrated solutions with standardized components provide for less wiring, a smaller footprint, longer mean time between failures and shorter mean time to repair.

Advanced Power Generation Protection

Cat switchgear products perform generator-protective functions internally within the control system. With Cat switchgear, you can monitor, process, compare, display and transmit data with a high degree of precision and control – and that control translates into high reliability and functionality.

Cat power systems protect your power every second of everyday. It is crucial to keep a power generation or electrical distribution system operating in applications that rely heavily on emergency/standby systems.

- Hospitals/medical centers
- Electrical, water and gas utilities
- Government institutions
- Data centers
- Critical industrial/chemical processes
- Retail shopping facilities
- Commercial office space
- Residential facilities and/or private complexes

Additional advantages include:

- Less installation wiring
 - Smaller footprint provides better utilization of available space
 - Detailed engine and electrical reports
 - Low cost redundancy
 - Enhanced performance
 - UL, NFPA, CSA and IEEE compliant
-

Fault Tolerance

Distributed processing and redundancy provide maximum efficiency and reliability. All Cat switchgear systems are designed with four levels of fault tolerance which means no single point of failure exists:

- 1) True distributed-control processors for each power source ensure the system continues to operate even if a single controller fails.
- 2) Master control functions are executed by redundant pairs of controllers. Failure of a single master controller will not interrupt system performance.
- 3) If the touchscreen fails, an "Instant Auto" switch is provided to place all digital controls in the Auto position, protecting your facility from power outages.
- 4) Finally, hard wired manual controls are provided in case all of the automation features fail.

Touchscreen Interface

The PL 2000 and PL 3000 color touchscreen displays are the key to the system's powerful and simple operator interface. The screen gives the operator an instantaneous, easily understandable view of the entire system status. This feature is unique to Caterpillar and not found in conventional, hardware-based switchgear.

To access system controls, simply touch the corresponding portion of the screen. The entire generator set can be monitored from one touchscreen. The easy-to-use touchscreen interface makes it possible to view, monitor and perform multiple functions including:

- Engine metering
- Protective relay settings
- Annunciators
- Adjust load shed controls and generator demand priority
- Synchronize and parallel
- Set modes of operations
- Voltage and frequency adjustment

Display

Easy to read information presented in a graphical format that emulates traditional meters and gauges, allowing operators to quickly and easily understand system status.

**FEATURES DESIGNED
FOR EASY OPERATION**





**YOUR CAT DEALER HAS THE
TOOLS TO MAKE SURE YOU
NEVER LOSE POWER.**

System Life Extension Services Available

- Customer Support Agreement (CSA)
- Cat Extended Service Coverage (ESC Policy)
- Systems Expertise by Highly Skilled Technicians
- Site Specific Replacement Parts
- Switchgear Upgrades & Retrofits
- Training Services
- Site Operation Simulators