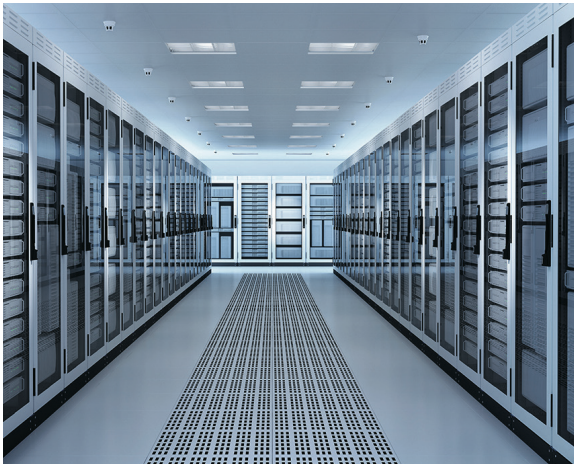


Solutions for Mission Critical Facilities



PIONEER
POWER SOLUTIONS

Automatic Transfer Switches

Pioneer's new ATS line is highly suitable for applications on both critical and non-critical loads.

The new product is available in 3 models covering a range of 400-2000A at 65 or 100kAIC (600V) in 3 or 4 pole configurations. Boasting integral overcurrent protection and optional draw out functionality making the switch ideally suited for UL Service Entrance applications thus eliminating the need for additional circuit protection. Draw-out construction also allows quick replacement of the switch with little or no downtime, for ease of maintenance. The source device not feeding the load can easily be removed for inspection, maintenance and testing.

The on-board electronic trip units provides performance curve shaping to facilitate proper system coordination. Optional arc flash maintenance trip units can be provided to meet the requirements of NEC 240.87 (2014) for Arc Energy Reduction. These trip units are designed to reduce the potential hazard from an arc flash during maintenance. Completely enclosed contacts provide additional safety when working with the switch.

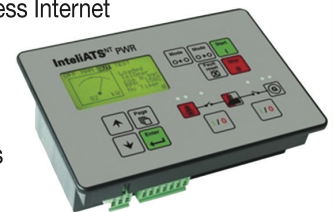


2000A Drawout ATS

voltage & current RMS measurement, test run scheduler, 3 phase power measurement, detailed RTC event & performance log (119 records), Web Supervisor support and 7 binary inputs & outputs. The IntelliATS PWR controller also supports a wide variety of communication options for connection to the existing Building Management or SCADA system.

- Remote Communication Interface (RS232 including modem support, RS485 or USB)
- Modbus RTU/TCP Interface
- Internet connection with Ethernet
- GSM modem/wire less Internet
- Remote Display
- Active SMS/E-Mails

Pioneer offers low and medium voltage transfer switches using the same state of the art microprocessor controller.



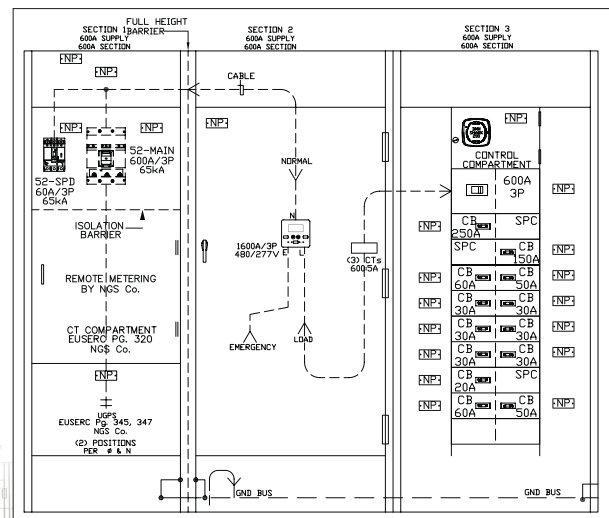
Non-Proprietary ATS Controller

Our transfer switches can also be provided in various configurations:

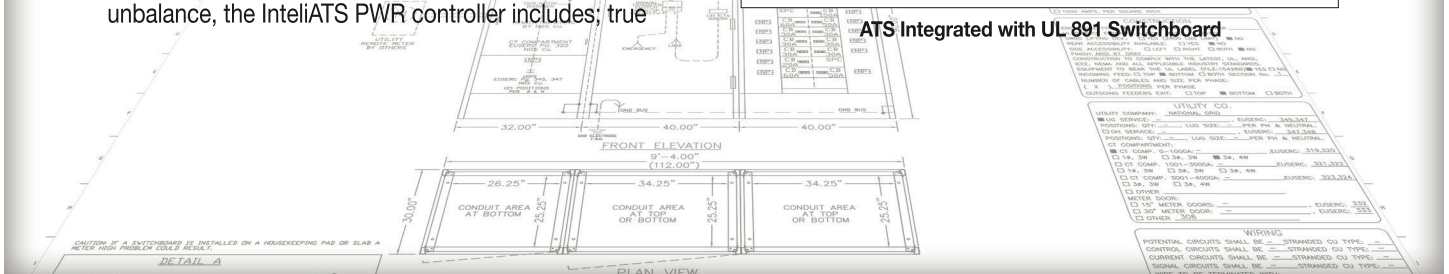
- Manual, open, delayed, closed, and soft loading (active synchronization) transition.
- Service Entrance Manual Transfer Switch in NEMA 3R with Cam-Lok™ Connectors for roll-up generator standby applications.
- Can be integrated (in-house) with metering & distribution switchboard sections, providing a compact space savings arrangement, minimizing contractor installation time and expense.

A Non-Proprietary Controller is the Heart of our System

Pioneer's state of the art non-proprietary, easy to interface, controller with graphic display satisfies a broad range of application requirements, from simple to complex. In addition to normal source monitoring (1 or 3 phases) for under voltage, over voltage, under frequency, over frequency and voltage unbalance, the IntelliATS PWR controller includes; true



ATS Integrated with UL 891 Switchboard



LV & MV Paralleling Switchgear

Pioneer offers synchronizing equipment in both low and medium voltage configurations.

Pioneer offers competitive synchronizing solutions with intuitive controls for all types of power generation applications:

- Single & Multi-Generator Stand-by Systems
- Prime Power/Distributed Generation/MicroGrid Systems
- CHP/Co-Gen Systems
- Peak Shaving/Base Load/Import & Export

Pioneer paralleling switchgear has been installed in markets such as retail, data center, health care, oil exploration, law enforcement, water treatment, medical industry, financial, telecommunications & media, transportation and government within the United States and Puerto Rico.

Pioneer can provide systems utilizing a variety of operating modes to meet a wide range of single or multiple generator applications. Single generator applications can operate in open or closed transition modes. Multiple generator applications can be in an isolated bus or utility paralleled modes. Utility paralleling and soft loading equipment enable on-site customers and utility power companies to parallel generators with the utility power grid for peakshaving and demand/load side management of electrical power.

Pioneer offers synchronizing equipment in both low and medium voltage configurations.

Low Voltage Paralleling Switchgear

- Low Voltage Switchgear: UL 1558 & 891, ANSI, NEMA & CSA
- Optional Service Entrance rated and labeled
- Front or Rear Accessible
- Power Circuit Breakers: Up to 6000A
- 65 to 200 kA Interrupting Capacity
- Up to 10,000 A Bus
- NEMA 1 or NEMA 3R (Non Walk-in & Walk-in)



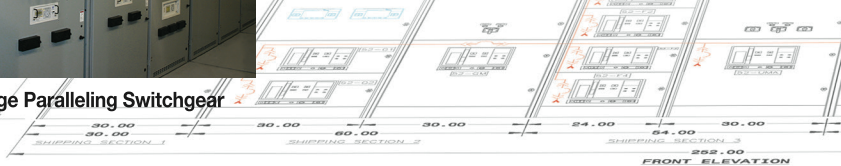
Low Voltage Paralleling Switchgear



Medium Voltage Paralleling Switchgear

Medium Voltage Paralleling Switchgear

- Metal Clad Switchgear; 5, 15, 27 and 38 KV
- Ampacity up to 4000A
- Up to 1000MVA
- Metal Clad Switchgear: ANSI, IEEE, NEMA, UL, CSA
- NEMA 1 or NEMA 3R (Non Walk-in & Walk-in)




PSSI BREAKER NAME	LOAD DESIGNATION	MFR & TYPE	MODEL	INTERRUPTING	FRAME	TRIP SETTING	VOLTAGE	CIRCUIT
52-1	436-1	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	1B
52-2	436-2	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	2B
52-3	436-3	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	3B
52-4	436-4	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	4B
52-5	436-5	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	5B
52-6	436-6	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	6B
52-7	436-7	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	7B
52-8	436-8	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	8B
52-9	436-9	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	9B
52-10	436-10	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	10B
52-11	436-11	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	11B
52-12	436-12	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	12B
52-13	436-13	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	13B
52-14	436-14	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	14B
52-15	436-15	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	15B
52-16	436-16	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	16B
52-17	436-17	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	17B
52-18	436-18	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	18B
52-19	436-19	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	19B
52-20	436-20	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	20B
52-21	436-21	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	21B
52-22	436-22	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	22B
52-23	436-23	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	23B
52-24	436-24	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	24B
52-25	436-25	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	25B
52-26	436-26	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	26B
52-27	436-27	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	27B
52-28	436-28	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	28B
52-29	436-29	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	29B
52-30	436-30	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	30B
52-31	436-31	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	31B
52-32	436-32	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	32B
52-33	436-33	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	33B
52-34	436-34	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	34B
52-35	436-35	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	35B
52-36	436-36	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	36B
52-37	436-37	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	37B
52-38	436-38	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	38B
52-39	436-39	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	39B
52-40	436-40	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	40B
52-41	436-41	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	41B
52-42	436-42	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	42B
52-43	436-43	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	43B
52-44	436-44	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	44B
52-45	436-45	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	45B
52-46	436-46	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	46B
52-47	436-47	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	47B
52-48	436-48	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	48B
52-49	436-49	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	49B
52-50	436-50	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	50B
52-51	436-51	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	51B
52-52	436-52	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	52B
52-53	436-53	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	53B
52-54	436-54	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	54B
52-55	436-55	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	55B
52-56	436-56	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	56B
52-57	436-57	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	57B
52-58	436-58	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	58B
52-59	436-59	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	59B
52-60	436-60	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	60B
52-61	436-61	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	61B
52-62	436-62	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	62B
52-63	436-63	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	63B
52-64	436-64	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	64B
52-65	436-65	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	65B
52-66	436-66	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	66B
52-67	436-67	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	67B
52-68	436-68	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	68B
52-69	436-69	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	69B
52-70	436-70	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	70B
52-71	436-71	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	71B
52-72	436-72	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	72B
52-73	436-73	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	73B
52-74	436-74	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	74B
52-75	436-75	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	75B
52-76	436-76	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	76B
52-77	436-77	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	77B
52-78	436-78	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	78B
52-79	436-79	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	79B
52-80	436-80	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	80B
52-81	436-81	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	81B
52-82	436-82	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	82B
52-83	436-83	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	83B
52-84	436-84	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	84B
52-85	436-85	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	85B
52-86	436-86	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	86B
52-87	436-87	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	87B
52-88	436-88	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	88B
52-89	436-89	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	89B
52-90	436-90	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	90B
52-91	436-91	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	91B
52-92	436-92	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	92B
52-93	436-93	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	93B
52-94	436-94	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	94B
52-95	436-95	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	95B
52-96	436-96	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	96B
52-97	436-97	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	97B
52-98	436-98	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	98B
52-99	436-99	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	99B
52-100	436-100	SQUARE D NW	NW50SH	100k	3000AF	3000AT	480	100B

LV & MV Paralleling Switchgear

All of Pioneer's switchgear models are custom designed and manufactured to customer's specifications and requirements with the capability to support all major manufacturers' gen-sets. Our design and manufacturing processes meet or exceed industry standards. A major advantage we have over our competition is the flexible use of major component brands; for instance, we can utilize power products manufactured by Eaton, GE, Square D or Siemens; PLC's by GE, Sq D or A-B and protective relays by Schweitzer, Multilin or others.

Utilizing technology with a long-term proven track record, our switchgear offers sophisticated but simple interactive paralleling controls including non-proprietary communication protocols (ie RS485, Modbus, ASI, CAN, TCP/IP

Ethernet) and a wealth of Master Control features.

- Isolated, Base Load and Import/Export modes of operation
 - Proportional real and reactive (kW & kVAR) load sharing
 - System Status Annunciator, NFPA- 110, 20 points
 - Large Color PC Based Industrial Operator Interface (HMI) Touchscreen (Min. 15 inch)
 - Ethernet Hub (network) and modem connection
 - System One-line/ Status
 - System Control/ Settings
 - Utility / Generator Metering
 - Engine/ Generator Data
 - Alarm / Event Logging
 - Trending
 - On-Line Help
 - Timer / Clock / Factory Password Settings
- 

- Optional redundant PLC's (Processors & I/O)
- Optional Web-Enabled Remote Monitoring
- 24VDC Station Battery & Charger with Best Battery Selection is standard
- Controls designed, built and labeled UL 891 and UL 508A

Factory testing includes both static and dynamic testing of the switchgear lineups. Each control and power section is affixed with the appropriate UL label before the product is shipped from our factory. Start-up/Commissioning service is always included. A 24/7/365 toll free emergency service phone number is provided to all of our customers. Pioneer has extensive experience with controls upgrades and retrofits.



Master Control with Redundant PLC's



Front of Master Control Section



All of **Pioneer's** switchgear models are designed and manufactured to custom specifications and requirements.

[illegible]

A Few Of Our Projects

Data Centers



Water/Waste Treatment Plants



CHP/Distributed Generation/ Peak Shaving Projects



Other Commercial Projects



Pioneer Power Solutions, Inc. is an industry leader in the design and manufacture of electrical equipment.

Pioneer Power Solutions, Inc. is an industry leader in the design and manufacture of electrical equipment for customers in the North American utility, industrial, commercial, OEM and critical power markets. Our product portfolio includes a wide range of liquid-filled and dry-type (power, distribution and specialty) electrical transformers including magnetic products used in the control and conditioning of electrical current for critical processes.



Mall of America Gen-Set

- Through our business units, we pride ourselves in a 95+ year tradition of meeting the highest standards for design technology, product quality, durability and on-time delivery in a demanding and rapidly changing marketplace.
- While we manufacture many types of transmission and distribution equipment for general purpose applications, our strength lies in built-to-order equipment designed for the special applications of our customers who look to Pioneer for engineered solutions.

Recently, we increased our capabilities to include specialized forms of switchgear and controls that protect facilities against power outages and can manage the generation and distribution of electricity in concert with the power grid.



Utility Substation

Pioneer is a Nasdaq-listed company headquartered in Fort Lee, New Jersey. Our business operations encompass approximately 400 employees at eight manufacturing, centralized distribution, engineering, sales and marketing locations in U.S., Canada and Mexico.



Data Center

We manufacture a full line of standard and custom-engineered liquid-filled and dry-type transformers, and manufactured-to-order switchgear, all available in a wide range of sizes, voltages, phases, frequencies and ratings in accordance with ANSI, CSA and UL standards.



Solar



**Petro-chem/
Industrial**



**Commercial
Construction**

Our Critical Power business provides paralleling switchgear, automatic transfer switches plus generator remote monitoring systems for the emergency standby power systems and distributed generation (microgrid) applications.



PIONEER
POWER SOLUTIONS

Pioneer Power Solutions, Inc.

www.pioneerpowersolutions.com

E-mail: info@pioneerpowersolutions.com



PIONEER
CRITICAL POWER INC.



A proud member of the
**Electrical Generating
Systems Association (EGSA)**