



**ELMEASURE**<sup>®</sup>  
Possibilities...Infinite

# ATS

## LOW VOLTAGE AUTOMATIC TRANSFER SWITCH



“Seamless switching between sources for uninterrupted supply & power outage protection”



High speed  
load transfer > 30 Sec



2 Position closed / Open  
transition  
with Neutral Overlapping



High-end utilization  
category: AC33A/33B



Bypass mode  
operation

# ATS-WN3 Series Power Transfer Switch

## Overview

The ATS-WN3 Series Power Transfer Switch is available in the conventional, three-position transfer configuration and closed or delayed transition modes of operation. Additionally, switched or overlapping neutral options provide for reliable operation of ground fault protection systems and reduction of voltage transients from unbalanced load switching.

ATS-WN3 Automatic Transfer Switches are the standard of the industry. High speed transfer of loads between alternate sources of power, regardless of ampacity size, is achieved by a reliable, field proven solenoid operating mechanism. When combined with a programmable microprocessor controller with LCD display, they offer the most advanced method of transferring all types of loads, such as, motors, electronic drives, UPS's and microprocessor based systems. Automatic transfer switches are available open or enclosed, in ampacity sizes from 16 through 6300 amperes with the largest selection of optional accessories offered anywhere.

Product Type: Open Transition Transfer Switch, Closed-Transition Transfer Switch, Delayed-Transition Transfer Switch, Bypass-Isolation Transfer Switch.



ATS-WN3-630A-4P Series Opened Transition Transfer Switches



ATS-WN3CT-1000A-4P Series Closed Transition Transfer Switches

## Features

Transfer Model : ATSE ; Class : PC

Utilization Category : AC-33A / AC-33B

IECEE & CCC certified to GB/T 14048.11-2008 & EN/IEC 6094-7-6-1:2005+A1:2014 Automatic Transfer Switching Equipment.

Rated up to 690/400 VAC, sizes from 63 through 6300 amperes.

Optimal Design of 800 through 6300 amperes Driven by Dual-driving mechanism.

Delayed Transition ATS-WN3 Series Automatic Transfer Switch has 3 positions, conventional two-position transfer configuration, plus closed and delayed transition modes of operation. All configurations available with either automatic or non-automatic control.

The transfer switch shall be electrically operated and mechanically held. The switch shall be mechanical & electrical interlocked.

Fast Contact time 30-100msec.

High withstand and close-on with reliable field-proven solenoid operating mechanism ensures maximum performance.

The switch can positively locked and unaffected by momentary outages, so that contact pressure is maintained at a constant value and contact temperature rise is minimized for maximum reliability and operating life.

Where neutral conductors must be switched as shown on the plans, the ATS shall be provided with fully rated overlapping neutral transfer contacts. The neutrals of the normal and emergency power sources shall be connected together only during the transfer and retransfer operation and remain connected together until power source contacts close on the source to which the transfer is being made. The overlapping neutral contacts shall not overlap for a period greater than 100 milliseconds. Neutral switching contacts which do not overlap are not acceptable.

Arc quenching grids, enclosed arc chambers, and wide contact air gap.

Segmented silver tungsten alloy contacts with separate arcing contacts on all sizes.

Delayed-Transition Transfer Switch.

Overlapping neutral conductor (options).

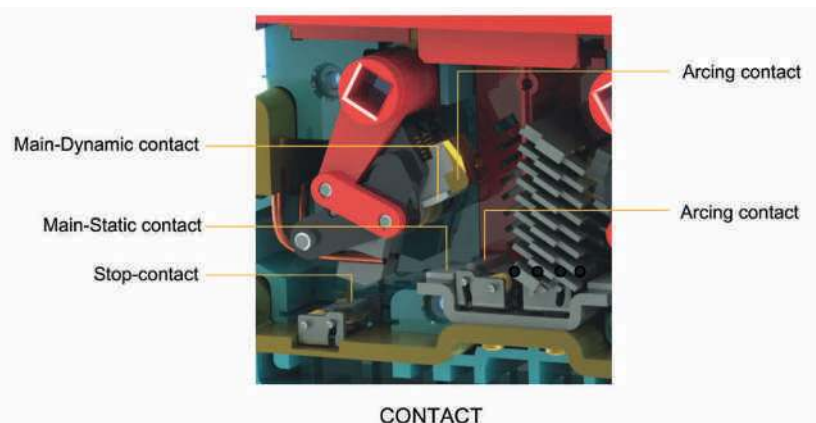
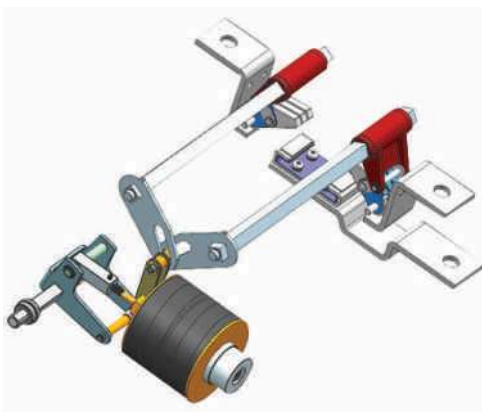
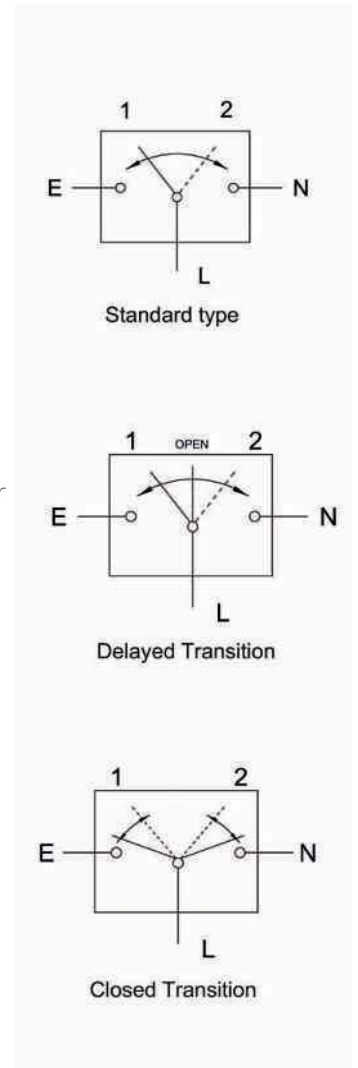
Closed Transition Transfer Switches, Source momentarily parallel time of less than 100 milliseconds, Closed transition operation (no power interruption) during transfer (manual mode) and retransfer when sources are within specified parameters.

Switch position indicators and true source acceptability lights.

Standard ground conductor connections.

Four auxiliary contacts, two contacts closed when switch is in normal position and two contacts closed when switch is in emergency position.

Local/remote serial communications capability for interfacing with ATS-WN3 communication products.





# ATS-WN3 B Series Automatic Transfer Bypass-Isolation Switch

## Features

Transfer Model : ATSE ; Class : PC

Utilization Category : AC-33A / AC-33B

IECEE & CCC GB/T 14048.11-2008 & EN/IEC 6094-7-6-1:2005+A1:2014 Automatic Transfer Switching Equipment. CE certified to EN/IEC 60947-6-1:2005. Tested & complied.

Rated up to 690/400 VAC, sizes from 63 through 6300 amperes.

Available in bypass-isolation configuration. The bypass and isolation features allow power transfer switches to be inspected, tested, and maintained without any interruption of power to the load.

Allows bypass-isolation without load interruption.

Bypass switch and transfer switch have identical electrical ratings.

Bypass contacts carry current only during bypass mode.

Transfer switch is draw out design for ease of maintenance.

Bypass and isolation handles are permanently mounted. The bypass switch has dead front quick-make, quick-break operation for transferring of loads between live sources.

Bypass switch is fully rated for use as a manual 3-position transfer switch.

Bypass and isolation functions are simple, requiring a total of two operating handles.

Mechanical indicators show bypass and transfer switch positions.

Delayed Transition ATS-WN3 B Series Automatic Transfer Switch has 3 positions, conventional two-position transfer configuration, plus closed and delayed transition modes of operation. All configurations available with either automatic or non-automatic control.

The transfer switch shall be electrically operated and mechanically held. The switch shall be mechanical & electrical interlocked.

Front replaceable main and arcing contacts.

High withstand and close-on.

Reliable and field-proven solenoid operating mechanism ensures maximum performance.

The switch can positively locked and unaffected by momentary outages, so that contact pressure is maintained at a constant value and contact temperature rise is minimized for maximum reliability and operating life.

Where neutral conductors must be switched as shown on the plans, the ATS shall be provided with fully rated overlapping neutral transfer contacts. The neutrals of the normal and emergency power sources shall be connected together only during the transfer and retransfer operation and remain connected together until power source contacts close on the source to which the transfer is being made. The overlapping neutral contacts shall not overlap for a period greater than 100 milli seconds. Neutral switching contacts which do not overlap are not acceptable.

Arc quenching grids, enclosed arc chambers, and wide contact air gap.

Segmented silver tungsten alloy contacts with separate arcing contacts on all sizes.

Delayed-Transition Transfer Switch.

Overlapping neutral conductor (options).

Closed Transition Transfer Switches, Source momentarily parallel time of less than 100 milliseconds, Closed transition operation (no power interruption) during transfer and retransfer when sources are within specified parameters.

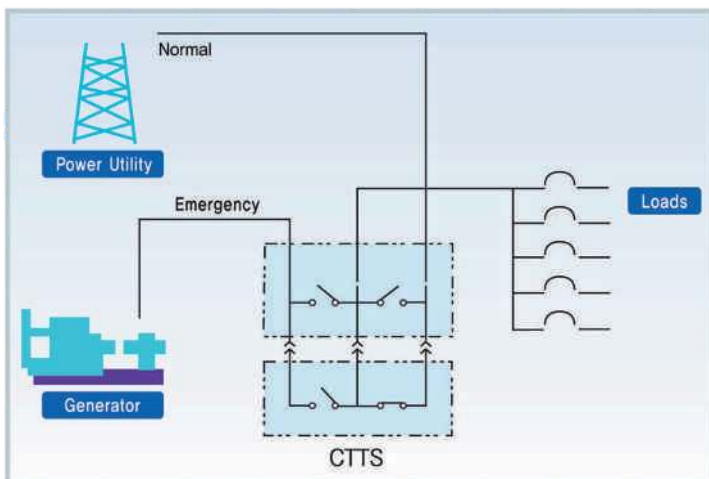
Switch position indicators and true source acceptability lights.

Standard ground conductor connections.

Four auxiliary contacts, two contacts closed when switch is in normal position and two contacts closed when switch is in emergency position.

Components accessible for inspection and maintenance without removal of the switch or the power conductors.

Local/remote serial communications capability for interfacing with ATS-WN3 B communication products.



# ATS-W2H Series Power Transfer Switch

## Overview

ATS-W2H series switches are built for standard applications requiring the dependability and ease of operation found in a power contactor switch.

## Features

Transfer Model : ATSE : Class : PC

Utilization Category : AC-33A / AC-33B

IECEE & CCC GB/T 14048.11-2008 & EN/IEC 6094-7-6-1:2005+A1:2014 Automatic Transfer Switching Equipment.

Rated up to 400 VAC, sizes from 63 through 250 Amperes.

Transition ATS-W2H Series Automatic Transfer Switch has 2 positions, conventional two-position transfer configuration, and delayed transition modes of operation. All configurations available with either automatic or non-automatic control.

Mechanical interlocked contactor mechanism.

Electrically operated, mechanically held.

Designed for emergency and standby applications.

Available in standard or delayed transition mode.

Timer and voltage / frequency settings adjustable without disconnection from the power section.

LED indicators for ease of viewing and long life.

Processor and digital circuitry isolated from line voltage.

Input is opto isolated for high electrical immunity to transients and noise.

Communications network interface.

Four auxiliary contacts, two contacts closed when switch is in normal position and two contacts closed when switch is in emergency position.

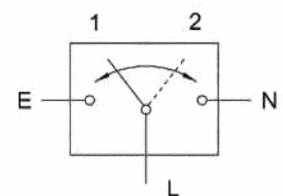
Local/remote serial communications capability for interfacing with ATS-W2H communication products.

Opened transition transfer switches.

Overlapping neutral conductor (options).



ATS-W2H 250A Series Power Transfer Switch  
250A, 4P



Standard type



# ATS-WS1 High Speed Dual Power Transfer Switches

## Overview

ATS-WS1 High Speed Dual-Power Series switches are PC-level two stage transfer switches design to meet stringent transfer time requirements. With a transfer time of only 3-8msec, the series are appropriate for use the active and standby power share the same voltage and phases.

## Features

Transfer Model : ATSE : Class : PC

Utilization Category : AC-33A / AC-33B

IECEE & CCC GB/T 14048.11-2008 & EN/IEC 6094-7-6-1:2005+A1:2014 Automatic Transfer Switching Equipment.

Rated up to 400 VAC, sizes from 63 through 500 amperes.

ATS-WS1 Series Automatic Transfer Switch has 2 positions, conventional two-position transfer configuration, and delayed transition modes of operation. All configurations available with either automatic or non-automatic control.

Mechanical interlocked contactor mechanism.

Electrically operated, mechanically held.

Designed for emergency and standby applications.

Available in standard break before make (opened transition transfer).

Timer and voltage / frequency settings adjustable without disconnection from the power section.

Processor and digital circuitry isolated from line voltage.

Input is opto isolated for high electrical immunity to transients and noise.

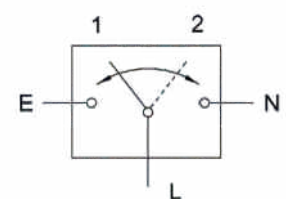
Communications network interface.

Four auxiliary contacts, two contacts closed when switch is in normal position and two contacts closed when switch is in emergency position.

Local/remote serial communications capability for interfacing with ATS-WS1 communication products.

Opened transition transfer switches.

Overlapping neutral conductor (options).



Standard type



### Dimension for ATS-W2H Opened transition

ATS Type		WIDTH	HEIGHT	DEPTH
20A, 32A, 40A, 63A, 80A, 100A, 125A	2P	146	188.5	114
	3P	167	188.5	114
	4P	188	188.5	114
160A, 200A, 250A	3P	207	188.5	114
	4P	242	188.5	114

### ATS-WS1 Opened Transition

ATS Type		WIDTH	HEIGHT	DEPTH
20A, 32A, 40A, 63A	2P	200	171	133
	3P	222	193	133
	4P	244	282.5	133
80A, 100A, 125A	2P	216	187	133
	3P	246	217	133
	4P	276	247	133
160A, 200A, 250A	2P	227	197	133
	3P	262	232	133
	4P	287	267	133
300A, 400A	2P	232	216.5	133
	3P	277.5	262	133
	4P	323	307.5	133
500A	2P	27.5	265.5	150
	3P	335.5	325.5	150
	4P	395.5	385.5	150

### ATS-WS1 Opened Transition

ATS Type		WIDTH	HEIGHT	DEPTH
20A, 32A, 40A, 63A	3P	224	196	133
	4P	246	196	133
80A, 100A, 125A	3P	248	200	133
	4P	278	200	133
160A, 200A, 250A	3P	263	200	133
	4P	298	255	133
300A, 400A	3P	350	255	133
	4P	410	304	133
500A-630A	3P	345	304	133
	4P	405	395	133
800A	3P	405	395	133
	4P	470	395	133
1000A	3P	450	395	150
	4P	530	395	150
1250A	3P	450	395	150
	4P	530	395	150
1600A	3P	510	395	150
	4P	610	395	150
2000A	3P	730	508	150
	4P	730	508	150
2600A-3200A	3P	890	508	150
	4P	890	508	150
4000A-5000A	3P	1058	508	150
	4P	1058	508	150
6300A	3P	1170	585	150
	4P	1170	585	150



### ATS WN3CT Closed Transition Non-Bypass

ATS Type		WIDTH	HEIGHT	DEPTH
63A-100A, 125A, 160A, 200A, 250A, 260A, 300A, 400A	3P	425	260	159.3
	4P	425	260	159.3
500A-630A	3P	550	320	179.8
	4P	550	320	179.8
800A	3P	585	394	230
	4P	585	394	230
1000A-1250A	3P	644	394	275
	4P	644	394	275
1600A	3P	724	394	285
	4P	724	394	285
2000A	3P	946	502	295
	4P	946	502	295
2600-3200A	3P	1130	485	315
	4P	1130	485	315
4000-5000A	3P	1200	560	304
	4P	1200	560	304
6300A	3P	1300	600	350
	4P	1300	600	350

### Dimension for ATS WN3-CT Closed Transition with Bypass

ATS Type		WIDTH	HEIGHT	DEPTH
63A-100A, 125A, 160A, 200A, 250A, 260A, 300A, 400A, 500A	3P	550	753	591
	4P			
630A, 800A, 1000A, 1250A	3P	710	765	725
	4P			
1600A-2000A	3P	790	765	740
	4P			
2600A	3P	950	765	760
	4P			
3200A, 4000A, 5000A	3P	1150	765	815
	4P			
6300A	3P	1200	800	850
	4P			

### Dimension for ATS-WN3B Opened Transition with Bypass

ATS Type		WIDTH	HEIGHT	DEPTH
63A-100A, 125A, 160A, 200A, 250A, 260A, 300A, 400A, 500A	3P	550	753	591
	4P			
630A-800A	3P	710	765	725
	4P			
1000A-1250A	3P	770	765	725
	4P			
1600A-2000A	3P	860	765	740
	4P			
2600A	3P	1010	765	760
	4P			
3200A, 4000A, 5000A	3P	1180	765	815
	4P			
6300A	3P	1210	800	850
	4P			

Note: The ATS dimension is without enclosure.



# Microprocessor ATS Controller

Real-Time Measurement and Monitoring.

Microprocessor based ATS controller is ideal for complex on-site power systems that support ultra-critical applications such as data centers, large hospitals, financial centers and other operations where the stakes are high.

ATS controller collects real-time single or three-phase power information from engine-generators, utility, paralleling switchgear and automatic transfer switches. With Power Technologies CLOUD real time measurement, monitoring and control it help to have remote monitoring and assets controls.

The ATS Controller is used with all sizes of Power Transfer Switches from 20 through 6300 amperes. It represents the most advanced digital controller in the industry and includes, as standard, all of the voltage, frequency, control, timing and diagnostic functions required for most emergency and standby power applications.

Capable of detecting two-way three-phase voltage, frequency and load current and controlling ATS applicable for two and three sectional power ATS switch.

This type of system can be applied to A utility power/B utility power, A utility power/B generation, A generation/B utility power, A generation/B generation.

LCD display in English and convenient man-machine interface, designed with buttons, easy to learn, and easy to use.

Accurately capture and display parameters such as two-way three-phase voltage, frequency, and load current.

With overvoltage, undervoltage, open phase, inverse phase sequence and under frequency protection.

Provided with ATS current overload protection (with current transformer).

Designed with auto/manual switching; In manual mode, a user can force ATS switch A power in ON state for power supply, B power in ON state for power supply, or disconnect and place in the OFF position: all parameters can be programmed on-site.

Combined key command is used to prevent operation of non-specialist.

Provided with auto ON & reset and auto ON & no reset features.

Applicable for one breaking position, two breaking positions and nonbreaking position switch.

I/O pluggable terminal block is used for ease to reliable connection.

Provided with RS-485 isolated communication interface as standard communication protocol, and characterized by remote controlling, remote signaling and remote metering, capable of remote controlling of state/stop of generator sets and ON/OFF of any power set of ATS.

Designed with modular structure, flame retardant ABS casing, and pluggable terminal block, for embedded installation method, allowing a compact structure and ease for installation and maintenance.



## ATS-WST 9 ATS Control System

The ATS-WST 9 microprocessor automatic transfer control system controls all operational functions of the ATS. Each ATS-WST 9 is programmed at the factory to control customer specified options as well as standard switch features.

Setup, alarm acknowledgement, and review of actual data are easily accomplished using the controller's soft keys and display. The intuitive, interactive menu guides the user through controller setup and the entering of configuration data, including communications and timing set points, adjustable control parameters (interlocks, alarms, and security) and event logging.

Real-time metering of voltage (phase-to-phase and phase-to-neutral) and frequency of both sources is standard, and metering of current and power is available. Real-time metering of voltage (phase-to-phase and phase-to-neutral) and frequency of both sources is standard, and metering of current, power is available and historical trending. All metering can be accessed through the menu.

The controller senses Source 1 (usually the electric utility source) and Source 2 (usually the engine generator source) voltages and, by means of easy-to-see LEDs, indicates switch position and source availability. Through the menu, the user can also review operational data such as active time delays, transfer inhibits, metered values, fault and alarm reports, event records, and configuration settings. The controller also automatically displays the status of monitored conditions in color coded banners at the top of the screen including faults and alarms, inhibits, and informational messages.

- System type can set as: S1 (Mains) & S2 (Mains), S1 (Mains) & S2 (Generator), S1 (Generator) & S2 (Mains), S1 (Generator) & S2 (Generator).
- 132x64 LCD with backlight, multilingual interface (including English, Chinese or other languages), push-button operation.
- Collect and display 2-way 3-phase Voltage, Frequency and Phase.
- Collect and display Active Power, Reactive Power, Apparent Power, Power Factor and Current.
- S1/S2 separated over current warning/ trip alarm.
- NEL (Non-essential Load) trip function.
- Display continuous power supply time and S1/S2 total power supply time.
- Automatic/Manual mode. In manual mode, can force the switch to close or open.
- Sync Transfer function; in addition, Voltage Difference.
- Frequency Difference and Phase Difference can be displayed.
- Over/under voltage, loss of phase, reverse phase sequence, over/under frequency protection.
- Phase Sequence Transfer function.
- Automatic/Manual mode. In manual mode, can force the switch to close or open.
- All parameters can be set on site. Passwords authentication ensures authorized staff operation only.
- The genset can be Manual Test on site to achieve start/stop operation.
- ATS Controller has function of automatic Re-closing.
- Closing output signal can be set as on intervals or as continuous output.
- Applicable for PC Three-stage, PC Two-stage, CB and CC switch.
- Applicable for 2 isolated neutral line.
- Real-time clock (RTC); Event log Function (Event log can record 99 items circularly).
- Scheduled Run & Scheduled Not Run (can be set as start genset once a day/week/month whether with load or not).
- Can control two generators to work as Cycle Run mode, Master Run mode and Balance Run mode.
- Widely power supply range DC(8~35)V allows the controller can bear 80V instantaneous current.
- Large terminal space allows the controller can bear maximum 625V input voltage.
- With RS485 isolated communication interface. With "remote controlling, remote measuring, remote communication, remote regulating" function by the ModBus communication protocol.
- Can remote start/stop the genset and remote control the ATS to close or open.
- Suitable for various AC systems (3 phase 4-wires, 3-phase 3-wires, single-phase 2-wire, and 2-phase 3-wire).
- Modular design, flame retardant plastic casing pluggable terminal, built-in mounting, compact structure with easy installation.
- Protection Level : IP55 Gasket.



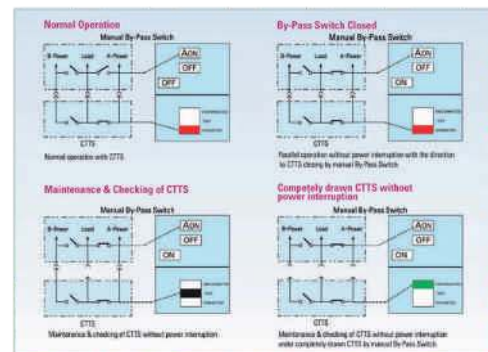
# ATS-WST-8B Series Dual Power Bypass Microprocessor controller.

## ATS-WST-8B Control System

ATS-WST-8B is an intelligent dual power bypass switch module which integrates programmable function with automatic measurement, LCD display and digital communication. It is with qualities of digitalization, intelligence, and network. Measurement and control automation are realized for reducing human operation mistakes, so it is the ideal device for dual power bypass switch.

ATS-WST-8B is composed of micro-processor, which is the core in the controller, and can precisely detect 2-way 3-phase power, making correct judgment for abnormal power statuses (over voltage, under voltage, loss of phase, over frequency, under frequency) and outputting free voltage control signals. After overall consideration about its bypass switch application, it can be used directly on single and dual bypass switches, and manual or remote-control switches. It is with compact structure, advanced circuit, simple wiring, and high reliability, and can be widely used in electrics, telecommunications, petroleum, coal, metallurgy, railway, municipal administration, intelligent building fields, electric installations, service power supply and debug system.

- System type can set as: S1 Mains S2 Mains, S1 Mains 2 Gen, S1 Gen S2 Mains, S1 Gen S2 Gen.
- 4.3 inch's solid color 240x128 pixel LCD display with white backlit, multilingual interface (including English, Simplified Chinese and other languages), push-button operation.
- Collect and display voltage, frequency and phase sequence of 2-way 3-phase.
- Collect and display active power, reactive power, apparent power, power factor and current of load.
- Display position of main switch (working, testing, insulated) and position of bypass switch (working, testing, insulated), Independent S1/S2 over current warning or trip alarm functions.
- NEL (Non-essential Load) trip function.
- Display S1/S2 total kW energy, total kvar energy.
- Display S1/S2 accumulated close times of main switch and bypass switch.
- Display continuous power supply time at present and last time, and S1/S2 total power supply time.
- Can realize synchronous switchover function, and display voltage difference, frequency difference and phase difference of 2 circuits.
- For energy-accumulated ATS, it shall close when switch PF (close is prepared well) signal is active.
- Over/under voltage, over/under frequency, over current, loss of phase, inverse phase sequence protection functions.
- Automatic/Manual mode switchover; In manual mode, close or open can be controlled manually.
- All parameters can be set on site. Password validation is applied to prevent wrong operations for non-professionals.
- The genset can be tested manually on site to achieve start/stop operation.
- Real-time clock (RTC), event log function which can record 200 items circularly.
- Black box record function, which can record 5 events circularly, 60 data of 50s before each event record and 10s after each event record.
- Scheduled routing start & scheduled not start function for the genset, which can be set as start once a day/week/month and running with load or not.
- Can control two generators to work in the mode of circular running, master running and balanced running.
- Wide DC power supply range, which allows the controller to bear instantaneous 80V DC current input.
- Large terminal space allows the controller to bear maximum 625VAC voltage input.
- Dual isolated RS485 communication interface having the functions of "remote control, remote measuring, remote communication, remote regulating" by the ModBus-RTU communication protocol, which can remotely start/stop the genset and control the breaker to close or open.
- Suitable for multiples of AC systems (3-phase 4-wire, 3-phase 3-wire, single-phase 2-wire and 2-phase 3-wire).
- Modular design, flame retardant ABS plastic casing, pluggable terminals, built-in mounting compact structure and easy installation.





## Registered Office

### BENGALURU

PLOT NO.: 47-P, HARDWARE PARK, KIADB,  
HUVINAYAKANAHALLI, JALA HOBLI, YELAHANKA TALUK,  
BENGALURU - 562 149. KARNATAKA INDIA

## Manufacturing Units

### UNIT I

PLOT NO.: 47-P, HARDWARE PARK, KIADB,  
HUVINAYAKANAHALLI, JALA HOBLI, YELAHANKA TALUK,  
BENGALURU - 562 149. KARNATAKA, INDIA

### UNIT II

GOWTHAM GARDEN NO. 4, VEERAPANDI  
COIMBATORE - 641 019. TAMIL NADU, INDIA

### UNIT III

#764, 4TH PHASE, 707, YELAHANKA NEW TOWN,  
BENGALURU - 560 064. KARNATAKA, INDIA

Service Hotline:

✉ [support@elmeasure.com](mailto:support@elmeasure.com)

☎ +91 639-1010-320

Monday to Friday 8:00 am. to 5:00 pm. IST

## Sale Offices

### BENGALURU

#57, EBENEZER ENCLAVE, NORRIS ROAD, NEAR  
NANJAPPA CIRCLE LANGFORD TOWN,  
BENGALURU - 560 025. KARNATAKA, INDIA

### COIMBATORE

# 150, RAJ ILLAM, NVM LAYOUT NEW SIDDHAPUDHUR  
COIMBATORE - 641 019. TAMIL NADU, INDIA

### CHENNAI

# 945, GROUND FLOOR, MIG, FIRST MAIN ROAD, TNHB  
COLONY, VELACHERY,  
CHENNAI - 600 042. TAMIL NADU, INDIA

### SECUNDERABAD

# 51, 1ST FLOOR, CHANDRAGIRI COLONY, NEAR RTA,  
THRIMUGHERRY,  
SECUNDERABAD - 500 015. TELANGANA, INDIA

### MUMBAI

# 101, MILLENIUM PLAZA BEHIND SAKINAKA  
TELEPHONE EXCHANGE, ANDHERI - KURLA ROAD  
SAKINAKA, ANDHERI (EAST)  
MUMBAI - 400 072. MAHARASTRA, INDIA

### DELHI

# G-10, G-11, GROUND FLOOR, BAISOYA COMPLEX,  
NAYABANS, SECTOR-15,  
NOIDA - 201301. INDIA.