

*We will find a product
or make a new one*

Product Catalogue 2024



Authorized Distributor | INDONESIA
PT. ANEXCO MITRA ABADI

Tel : 0254 375966 | Fax : 0254 375961

Email : marketing@anexco.co.id

www.anexco.co.id



COMMITMENT TO POWER QUALITY AND INNOVATION



At Hannibal we specializes in delivering comprehensive power supply solutions tailored specifically for industrial locations. We provide not only the essential power infrastructure but also robust regulation and control systems to ensure uninterrupted and reliable power delivery.





At Hannibal Power & Technology, we are more than just a company; we are the driving force behind your industrial power aspirations. With a legacy dating back to 1968 in Hannibal City, Missouri State, we have been unwavering in our commitment to support our partners in every industrial endeavor, especially when it comes to custom-designed projects.



ABOUT US

At Hannibal Power & Technology, we are more than just a company; we are the driving force behind your industrial power aspirations. With a legacy dating back to 1968 in Hannibal City, Missouri State, we have been unwavering in our commitment to support our partners in every industrial endeavor, especially when it comes to custom-designed projects.



MISSION

Our mission is twofold: to create exceptional devices using the highest quality materials and cutting-edge methods, and to provide unending support to our valued customers. We firmly stand by our products, rooted in our unwavering belief in our technology and materials.

Research and Development

Our dedication to progress is evident through our Research and Development department, the heartbeat of our innovation. We actively seek out the brightest minds from various universities, nurturing young engineers' dreams. Hannibal is not merely a business; it is a thriving university and research laboratory.

Thanks to our R&D dream team, we boast an extensive array of products spanning different industries. Whether it's Industrial DC and AC UPS systems with battery backup, Static Frequency Converters, Static Transfer Switches, or other cutting-edge devices, rest assured, we have the perfect solution for you.



Customer Support

But our commitment doesn't end at selling products. We take pride in offering round-the-clock, 365-day support through our dedicated Technical Service team. Our feedback loop with the R&D department ensures that your devices operate seamlessly. Your success is our success. Rest assured, we have the perfect solution for you.

Industrial Products



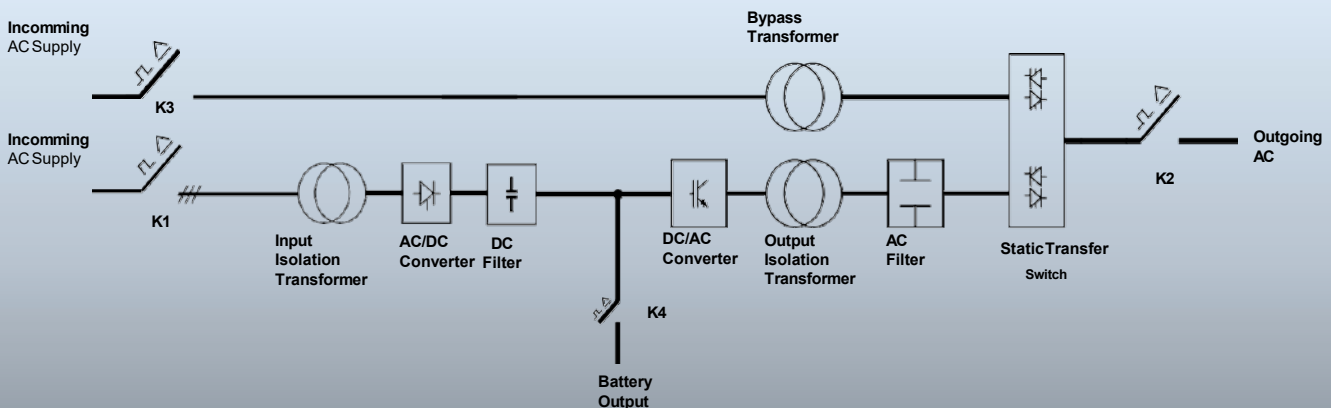
Industrial UPS

PL SERIES

The PL Series UPS system ensures seamless power supply for critical loads, such as computers and medical equipment, by efficiently converting AC to DC and back.

With its reliable transition between power sources, it serves as a crucial asset for various industries, enhancing power quality and ensuring uninterrupted operation.

The PL Series Uninterruptible Power Supply (UPS) system is meticulously designed to safeguard critical loads, such as computers, medical equipment, and industrial systems, by seamlessly connecting them to a three-phase mains power supply.



General Specification

- Optional frequency settings for both input and output: 50Hz, 60Hz, and 400Hz
- Features Input/Output Galvanic Isolation Transformer and Bypass Galvanic Isolation Transformer
- Exceptional performance on non-linear loads such as computers and switching power supplies
- Utilizes Intelligent Power Module or IGBT technology for utmost reliability
- Employs DSP (Digital Signal Processor) control and Space-vector control technology
- Achieves low output distortion factor and high efficiency
- Includes an audible alarm for critical notifications
- User-friendly control panel for ease of operation and monitoring.

Features

- Redundant parallel operation for enhanced reliability
- Provides potential-free output voltage
- Features a fully redundant control architecture
- Achieves a very fast dynamic response time
- Proven output short circuit protection
- Offers a wide range of ratings with standard IP protection up to 56
- Maintains low voltage ripple to extend battery lifespan
- Includes intelligent battery charge and monitoring control
- Equipped with readiness and availability for Lithium Ion Battery charging options.

Adds On

- Dual-source input capability
- 12 pulse rectifier with a 10% Input Total Harmonic Distortion current
- Achieves <5% Input Total Harmonic Distortion current with a harmonic filter
- Adjustable voltage settings to suit various countries' requirements
- Option for input neutral removal at the site
- Incorporates Input and Bypass Isolation (Scott) for added safety
- Features a Bypass Voltage Regulator (Servo/Static)
- Fusible Surge Suppression for both AC and DC
- Redundant fans for increased reliability
- Multiple cable entry points (Top/side/bottom/rear) for versatile installation
- Offers Ingress Protection rating of up to IP66 for durability
- Supports communication via RS485, TCP, SNMP, and GSM
- Automatic battery tests to ensure reliability
- User-friendly Touch Panel featuring a Mimic Diagram
- Capable of parallel operation with up to 2 units
- Provides DC Load supply for versatile power distribution.
- Customizable cabinet color selection from RAL codes

TECHNICAL SPECIFICATIONS

POWER (KVA)

Input Voltage (VAC)	Single Phase Input: 110VAC / 127VAC / 208VAC / 220VAC / 230VAC / 240VAC Three Phase Input: 3*190VAC / 3*220VAC / 3*360VAC / 3*380VAC / 3*400VAC / 3*415VAC (Phase to Phase)
Input Voltage Tolerance	+15 % / -10 %
Maximum Input Voltage	± 20 %
Nominal Frequency	50Hz - 60Hz
Frequency Tolerance	± 10%
Rectifier Topology	6 or 12 pulse Thyristor Controlled
Isolation Transformer	Standard (except 400Vdc Rectifiers)

OutPuT

Voltage	Single Phase Output: 110VAC / 127VAC / 208VAC / 220VAC / 230VAC / 240VAC Three Phase Output: 3*190VAC / 3*220VAC / 3*360VAC / 3*380VAC / 3*400VAC / 3*415VAC (Phase to Phase)
Power (kVA)	0 to 400kVA
Voltage Stability	± 1%
Rectification Time	Max 25ms. After Boost Charge
Frequency	50Hz - 1000Hz (on-demand)
Frequency Tolerance	+ 2% (schynchronized) adjustable, 0.01 (free run)
Efficiency (Operation from DC)	85% to 92%
Total Harmonic Distortion	< 3% @ linear load, < 5% @ non-linear load
Power Factor	0.8
Crest Factor	3 : 1
Overload	100% - 125% @load 10mins./ 125% - 150% @load 1 min. / >150% load: by-pass
Short-Circuit Protection	Electronic Short Circuit Protection
Technology	Space Vector Control

DIGITAL DISPLAYS

LCD Display	Output Voltage/ Output Current / Input Voltage/ DC Bus Voltage/ Inverter Frequency / Load Percentage / Load is/isn't powering up
Alarm Notifications (LCD)	Overload / No/Low Input / IGBT Fault / Over Temperature
Led Display	Input OK / Operation / Common Alarm
Communication	RS232(Standard), Dry Contacts (Standard), RS485(Optional), TCP(Optional), SNMP(Optional), GSM(Optional)

SYSTEM PROPERTIES

System Design Life	20 years
Protection Class	IP20(Standard) to IP54(Optional), (consult to Hannibal for IP54 to IP65)
Storage Temperature	(-20°C) to (+70°C)
Operating Temperature	(-10°C) to (+50°C)
Cooling	Fan Forced Cooling(Standard), Natural Cooling(Optional)
Altitude	000m (-1% Power for every 100m after 1000m) Max. 4000m
Relative Humidity	0 - 95% (Non-condensing)
Noise (1m away)	<55db (Single Phase), <65dB (ThreePhase)
Color	RAL7035, RAL7032 (Standard), others (Optional)
Cable Entry	Front Bottom (Topentry optional)

STANDARDS

Standards	IEC 62040-1, IEC 62040-2 , IEC 62040-3 ISO9001, ISO14001, ISO27001, CE UL(Optional)
-----------	---

NOTE: All specifications subject to change without notice. Consult Hannibal's Technical Support Department for special applications. All names used above are registered trademarks of their respective owners.



Industrial UPS

PLM SERIES

10-500KVA



PLM Online UPS, featuring advanced DSP technology, adapts to diverse electrical environments while maintaining peak performance. The 3-Level topology enhances efficiency, reliability, and functionality, surpassing analog counterparts.

With increased precision in signal processing, the UPS achieves higher Mean Time Between Failures (MTBF). Equipped with a built-in inverter isolation transformer, it ensures safe and uninterrupted power for local networks, communication systems, medical devices, engineering instruments, and industrial automation.

Authorized Distributor | INDONESIA

PT. ANEXCO MITRA ABADI

Tel : 0254 375966 | Fax : 0254 375961

Email : marketing@anexco.co.id

www.anexco.co.id

General Specification

- ◆ Inverter isolation transformer
- ◆ 3 DSP-controlled modular structure
- ◆ Separate main control board advantage for rectifier and inverter
- ◆ 3-Level technology and fully digital structure
- ◆ Less electronic components and SMD technology
- ◆ Low input current total harmonic distortion (THD)
- ◆ High input power factor
- ◆ High efficiency up to 94%
- ◆ Selectable input/output voltage/frequency range
- ◆ Static and maintenance by-pass switch

Features

- ◆ High charge current capacity
- ◆ Eco Mode operation (optional)
- ◆ Split by-pass input (dual input)
- ◆ Advanced TFT front panel (40-500kVA)
- ◆ Cold start function
- ◆ Compliant with IEC EN62040 directive
- ◆ Conforms to CE, TSE, and GOST standards
- ◆ ISO9001, ISO14001 compliant production
- ◆ Advanced control at the input
- ◆ 3-level battery protection
- ◆ Temperature-compensated charge system
- ◆ Output current limitation
- ◆ Output DC leakage protection
- ◆ Output short circuit and overload protection
- ◆ External REPO input
- ◆ 512 events memory (46.000 alarms)
- ◆ Clock and calendar (battery supported)
- ◆ Automatic battery test, remaining battery time indicator
- ◆ 2 RS232 serial ports and 4 programmable dry contact outputs
- ◆ Optional 12 dry contact outputs
- ◆ Optional SNMP, MODBUS, and Remote Monitoring Panel
- ◆ Viewing device operating parameters
- ◆ Advanced remote control features
- ◆ User and central service password-protected security

TECHNICAL SPECIFICATIONS

POWER (KVA)			
Input Voltage (VAC)	Single Phase Input: 110VAC / 127VAC / 208VAC / 220VAC / 230VAC / 240VAC Three Phase Input: 3*190VAC / 3*220VAC / 3*360VAC / 3*380VAC / 3*400VAC / 3*415VAC (Phase to Phase)		
Input Voltage Tolerance	+15 % / -10 %		
Power factor	≥ 0.99		
Nominal Frequency	50Hz - 60Hz		
Frequency Tolerance	± 10%		
Rectifier Topology	IGBT Controlled		
Protection	Fuses, Voltage & Frequency tolerance, Input power limit, Phase sequence indicator		
OutPut			
Voltage	Single Phase Output: 110VAC / 127VAC / 208VAC / 220VAC / 230VAC / 240VAC Three Phase Output: 3*190VAC / 3*220VAC / 3*360VAC / 3*380VAC / 3*400VAC / 3*415VAC (Phase to Phase)		
Power (kVA)	10 to 500kVA		
Voltage Stability	± 1%		
Rectification Time	Max 25ms. After Boost Charge		
Frequency	50Hz - 1000Hz (on-demand)		
Frequency Tolerance	+ 2% (schyncronized) adjustable, 0.01 (free run)		
Efficiency	Upto 96%		
Total Harmonic Distortion	< 3% @	linear load, < 5% @	non-linear load
Power Factor	0.9		
Crest Factor	3 : 1		
Overload	100% - 125% @ load 10mins. / 125% - 150% @ load 1 min. / >150% load: by-pass		
Short-Circuit Protection	Electronic Short Circuit Protection		
Inputs	EPO input, Interactive battery panel input, Gensetinput		
DIGITAL DISPLAYS			
Indicators	P-N voltage, P-P voltage, Current, Power, Crest Factor, Frequency, PF, ServiceTime		
Alarm Notifications (LCD)	Overload / No/Low Input / IGBT Fault / Over Temperature		
Led Display	Input OK / Operation / Common Alarm		
Communication	RS232(Standard), Dry Contacts (Standard), RS485(Optional), TCP(Optional), SNMP(Optional), GSM(Optional)		
SYSTEM PROPERTIES			
System Design Life	20 years		
Protection Class	IP20(Standard) to IP54(Optional), (consult to Hannibal for IP54 to IP65)		
Storage Temperature	(-20°C) to (+70°C)		
Operating Temperature	(-10°C) to (+50°C)		
Cooling	Fan Forced Cooling		
Altitude	1000m (-1% Power for every 100m after 1000m) Max. 4000m		
Relative Humidity	0 - 95% (Non-condensing)		
Noise (1m away)	<55db (Single Phase), <65dB (Three Phase)		
Adaptors	SNMP, RS485, Remote monitoring panel, MODBUS (RS485 or TCP/IP), TCP/IP, GSM/GPRS Modem, Comport multiplexer		
Cable Entry	Front Bottom (Top entry optional)		
STANDARDS			
Standards	CE,IEC/EN 62040-1, 62040-2, 62040-3		

NOTE: All specifications subject to change without notice. Consult Hannibal's Technical Support Department for special applications. All names used above are registered trademarks of their respective owners.

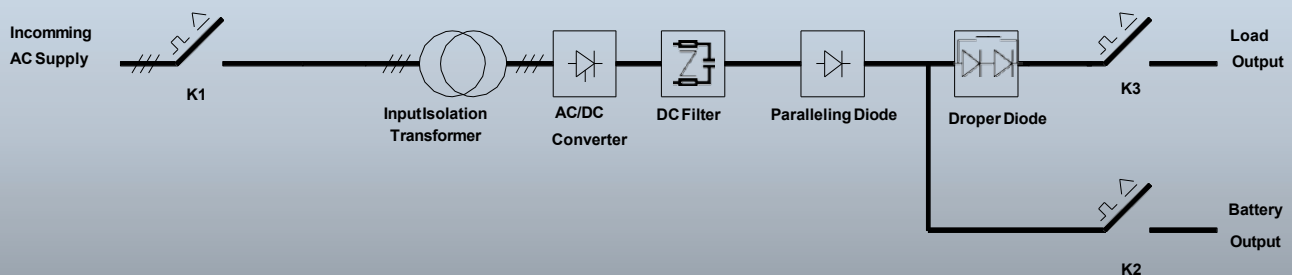


INDUSTRIAL RECTIFIER

SD SERIES



The SD Series Rectifier/DC Power Supply represents a technologically advanced solution tailored for precise operations. Designed to efficiently convert both 1 phase and 3 phase AC voltage into a stable, regulated DC power supply, this equipment is ideally suited for a diverse range of applications, including industrial, telecom, and military sectors. Its pivotal role lies in delivering dependable DC power while seamlessly integrating with battery groups, enabling continuous charging and serving as an uninterrupted power source.



General Specification

- ◆ Input isolation transformer
- ◆ Fast control with DSP controller
- ◆ Utilizes Thyristor/IGBT technology
- ◆ Offers Float boost and equalize charge functions
- ◆ Features both Auto and manual charge modes
- ◆ Maintains voltage ripple at <1% (<4% on 1 phase)
- ◆ Adjustable alarm dry contacts for customization
- ◆ Supports ModBus Protocol via RS232 and RS485
- ◆ Operation available even during mains failure
- ◆ Adjustable current limiting for enhanced control
- ◆ Automatic start and fault recovery capabilities
- ◆ Smart fault diagnosing for efficient troubleshooting
- ◆ Modular board structure for flexibility and scalability

Features

- ◆ Output with integrated earth fault detection
- ◆ Predefined standard system configurations
- ◆ Inbuilt protection mechanisms
- ◆ Digital processing and configuration of all parameters
- ◆ Monitoring of all parameters through the front panel display
- ◆ Incorporates intelligent battery management system
- ◆ Offers manual or automatic high-rate charging
- ◆ Includes alarm and event logger with date and time-stamped event log memory
- ◆ Provides extensive communication options for seamless connectivity

Adds On

- ◆ 12 pulse rectifier (10% Input Total Harmonic Distortion current)
- ◆ Achieves <5% Input Total Harmonic Distortion current with harmonic filter
- ◆ Adjustable voltage settings to accommodate various countries' requirements
- ◆ Option to remove input neutral at the site
- ◆ Redundant fans for enhanced reliability
- ◆ Utilizes Natural Cooling in combination with a Smart Fan System
- ◆ Choose cabinet color from a selection of RAL codes
- ◆ Multiple cable entry points (Top/side/bottom/rear) for flexibility
- ◆ Supports communication via RS485, TCP, SNMP, and GSM
- ◆ Conducts Automatic Battery Tests to ensure reliability
- ◆ Features a Touch Panel with a Mimic Diagram for intuitive control
- ◆ Capable of parallel operation with up to 2 units

TECHNICAL SPECIFICATIONS

MODEL	1 PHASE INPUT
INPUT	
Nominal Voltage	110VAC / 127VAC / 208VAC / 220VAC / 230VAC / 240VAC
Nominal frequency	50 or 60 Hz
Transformer	Galvanically isolated
ITHD	<45-50% standard
Input Protection	Thermic Magnetic Overcurrent protection MCB, Overvoltage protection
OUTPUT	
Floating Output Voltage	12 VDC / 24 VDC / 48 VDC / 110 VDC / 220 VDC
Output Voltage Adjustment	70% to 130% of Nominal Output Voltage
Output Current Adjustment	0 -100% of Nominal Output Current
Battery Charging Current	0 -100% of Nominal Output Current
Boost Charger Voltage	100% to 120% of Floating Output Current
Boost Voltage(V/C)	2,4 lead acid Battery 1,60 NiCd Battery
Float Voltage(V/C)	2,24 lead acid Battery 1,40 NiCd Battery
Nominal Output Current	0 to 100A
Max Output Current	110 % of nominal output current
Filtering	LC Filter
GENERAL PROPERTIES	
Boost Timer	0-600 hours adjustable
Cooling	Fan Forced Cooling(Standard), Natural Cooling(Optional)
Isolation Voltage	1500 or 3000VAC input/chassis and output/chassis
Efficiency at full load	>80%
Protection level	IP20(Standard) to IP54(Optional), (consult to Hannibal for IP54 to IP65)
Cable Entry	Front Bottom
Access to Batteries	Batteries and rectifier in the same cabinet with front access(Optional)
Circuit Breakers	Thermic-magnetic circuit breakers for input, Battery, and Load (up to 100A)
Reset Button	Used for re-operation in case of failure of the system.
Measurements	Load Voltage/Current; Battery Voltage/Current; Utility Voltage; Line Voltage; Frequency; Power Factor
ENVIRONMENT	
Acoustic Noise	45 - 55 dB (according to Power Rating)
Storage Temperature	(-20 °C) – (+70 °C)
Operating Temperature	(-5°C) - (+50°C)
Relative Humidity	0 - 95% Non-condensing
Max Installation Height	1000m (-1% Power for every 100m after 1000m) Max. 4000m
Color	RAL7035, RAL7032 (Standard), others (Optional)
Communication & PARALLELING	
Communication	RS232(Standard), Dry Contacts (Standard), RS485(Optional), TCP(Optional), SNMP(Optional), GSM(Optional)
Paralleling	Parallel Redundant (No need for extra kit for paralleling)
STANDARDS	
Standards	IEC61204-1, IEC62040-2, IEC60335, ISO9001, ISO14001- ISO27001-CE

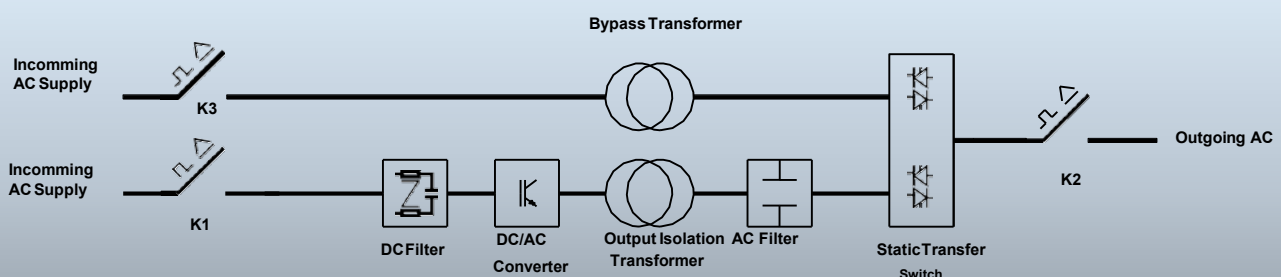
TECHNICAL SPECIFICATIONS

MODEL	3 PHASE INPUT
INPUT	
Nominal Voltage	3*190VAC / 3*220VAC / 3*360VAC / 3*380VAC / 3*400VAC / 3*415VAC (Phase to Phase)
Nominal frequency	50 or 60 Hz
Transformer	Galvanically isolated
ITHD	<30-35% standard, <10% on 12pulse (Optional)
Input Protection	Thermic Magnetic Overcurrent protection MCB, Overvoltage protection
OUTPUT	
Floating Output Voltage	12 VDC / 24 VDC / 48 VDC / 110 VDC / 125VDC / 220 VDC
Output Voltage Adjustment	70% to 130% of Nominal Output Voltage
Output Current Adjustment	0-100% of Nominal Output Current
Battery Charger Current	0-100% of Nominal Output Current
Boost Charger Voltage	100% to 120% of Floating Output Current
Boost Voltage(VAC)	2,4 Lead Acid Battery 1,50 NiCd Battery
Float Voltage(VAC)	2,24 Lead Acid Battery 1,40 NiCd Battery
Nominal Output Current	0 to 10000A (According to request)
Max Output Current	110% of nominal output current
Filtering	LC Filter
GENERAL PROPERTIES	
Bost Timer	0-99.9 hours adjustable
Cooling	Fan Forced Cooling(Standard), Natural Cooling(Optional)
Isolation Voltage	1500 or 3000VAC input/chassis and output/chassis
Efficiency at full load	85% to 93% (According to Capacity)
Protection level	IP20(Standard) to IP54(Optional), (consult to Hannibal for IP54 to IP65)
Cable Entry	Front Bottom
Access to Batteries	Batteries and rectifier in the same cabinet with front access (optional)
Circuit Breakers	Thermic-magnetic circuit breakers for input, Battery, and Load (up to 100A)
Reset Button	Used for re-operation in case of failure of the system.
ENVIRONMENTAL	
Acoustic Noise	45 - 65 dB (according to Power Rating)
Storage Temperature	(-20 °C) – (+70 °C)
Operating Temperature	(-5°C) - (+50°C)
Relative Humidity	0 - 95% Non-condensing
Max Installation Height	1000m (-1% Power for every 100m after 1000m) Max. 4000m
Color	RAL7035, RAL7032 (Standard), others (Optional)
Communication & PARALLELING	
Communication	RS232(Standard), Dry Contacts (Standard), RS485(Optional), TCP(Optional), SNMP(Optional), GSM(Optional)
Paralleling	Parallel Redundant (No need for extra kit for paralleling)
STANDARDS	
Standards	IEC61204-1, IEC62040-2, IEC60335, ISO9001, ISO14001- ISO27001-CE

Industrial Inverter



The Inverta Series Three-Phase Output (DC to AC) Inverter represents the pinnacle of advanced technology, expertly designed to convert DC voltage into precise and pure sinusoidal AC power. This high-tech equipment finds its vital applications in industrial, telecom, and military sectors. It serves as both an inverter and a frequency converter when coupled with a rectifier, offering versatile performance. With an integrated input isolation transformer, it ensures complete electrical separation between DC input and AC output, prioritizing operational safety.



General Specification

- Output isolation transformer
- Swift control enabled by DSP controller
- Utilizes IGBT/IPM Technology
- Incorporates Bypass Voltage sampling
- Maintains voltage stability at <1%
- Adjustable alarm dry contacts for customization
- Supports ModBus Protocol via RS232 and RS485
- Seamless uninterrupted bypass switching
- Automatic start and fault recovery capabilities
- Available in single-phase models with capacities of up to 200kVA
- Smart fault diagnosing for efficient troubleshooting
- Modular board structure for flexibility and scalability

Features

- Output equipped with integrated earth fault detection
- Standard system configurations for convenience
- Comprehensive built-in protection features
- Digital processing and adjustable parameter settings
- Real-time monitoring of all parameters via the front panel display
- Event logger with date and time-stamped event log memory, including alarm information
- Extensive communication options for seamless connectivity
- Compatibility with Lead Acid (vented/sealed) and NiCd (vented/gas recombination) batteries, offering flexibility for various power storage needs.

Adds On

- Versatile voltage settings to accommodate different countries' requirements
- Option for input neutral removal at the site
- Incorporates Fusible Surge Suppression for both AC and DC
- Redundant fans for enhanced reliability
- Utilizes Natural Cooling in combination with a Smart Fan System
- Cabinet color customization with a selection of RAL codes
- Multiple cable entry points (Top/side/bottom/rear) for flexible installation
- Boasts Ingress Protection rating of up to IP66 for added durability
- Supports communication via RS485, TCP, SNMP, and GSM
- Features a Touch Panel with a Mimic Diagram for intuitive control
- Capable of parallel operation with up to 2 units
- Equipped with Static Bypass line for uninterrupted power supply
- Manual Bypass option for added flexibility and control.

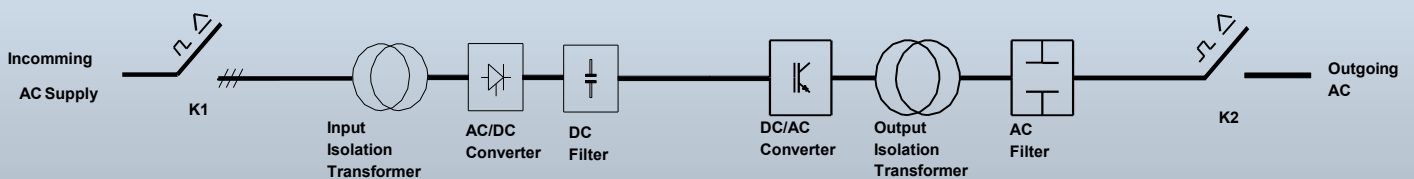
TECHNICAL SPECIFICATIONS

Model	Industrial Static Inverter (DC/AC) w. Output Isolation Transformer		
Conversion Topology	Insulated Gate Bipolar Transistor (IGBT Based)		
Control	DSP Controller		
INVERTER TYPE	RACK TYPE (1 PHASE)	TOWER TYPE (1 PHASE)	TOWER TYPE (3 PHASE)
INPUT			
Input Voltage (DC)	24 to 220VDC \pm 20%	24 to 220VDC \pm 20%	24 to 650VDC \pm 20%
Alternative Voltage (AC)	110 to 600VAC & 50/60 to 400Hz		
OUTPUT			
Output Power	1 to 3kVA	1 to 200kVA	10 to 500kVA
Output Voltage	110 to 600VAC & 50/60 to 400Hz		
Voltage Tolerance	\pm 1% (Static), \pm 5% (Dynamic 100% load change 50ms)		
Frequency	50/60 to 400Hz \pm 1(sync), \pm 0,5(not sync)		
Efficiency	82 to 90% (depending on DC Bus)		
Power Factor	0,8		
Waveform	Pure Sinus Wave		
Switch to Bypass	<4ms		
Switch to Inverter	0ms (Re-transfer delay adjustable)		
Crest Factor	3:1		
Overload (INV)	125% for 10mins / 150% for 1min / 200% for 1sec (adjustable)		
Overload (BYP)	110% continuous / 150% for 1min / 1000% for 50ms (adjustable)		
THDu	<2% (linear), <5% (non linear)		
Crest Factor	3:1		
PHYSICAL CHARACTERISTICS			
Ingress Protection	Standard: IP20, (OPT: 21 to 66)		
Cooling System	Forced Ventilation (OPT: Natural cooling, Water cooling, Smart Fans)		
Cable Entry	Standard: Bottom (OPT: Top, Rear, Side)		
Cabinet Color	Standard: RAL7032,7035 (OPT: Others)		
ENVIRONMENT			
Operating Temperature	0 to 50°C		
Storage Temperature	-25 to 70°C		
Relative Humidity	up to 90% (non-condensing)		
Operating Altitude	1000m from MSL (1% derate each 100m after 1000m)		
Acoustic Noise	50 to 73 dBA (depending on rating)		
COMMUNICATIONS			
Standard Comm.	RS232, Dry Contact x4 to x16 (OPT: RS485, TCP and IEC61850)		
Parallel Operation	Up to 2		
HMI	LED/LCD Panel (OPT: HMI Touch Panel, Mimic Panel)		
PROTECTIONS			
Hardware Protections	Overvoltage, Overload, Short Circuit, SCR Rapid Protection		
Software Protections	Current Limiting, Overtemperature, Undervoltage, AC Synchronization		
Dry Contact Operation	Settable dry contact relays (NO/NC)		
STANDARDS			
IEC 62040-1/2:2008	UPS – Part 1-2 General and Safety Requirements / Electromagnetic compatibility		

Frequency Converter



The Hannibal Power and Technology FC Series frequency converters excel in the art of converting alternating current (AC) electrical power from one frequency to another, providing a valuable solution for industrial applications, particularly those associated with induction motors. In order to achieve heightened efficiency, superior manageability, and energy conservation within these industrial contexts, the adoption of controllable frequency converter systems becomes imperative.



General Specification

- Optional frequency settings for both input and output: 50Hz, 60Hz, and 400Hz
- Features Input/Output Galvanic Isolation
- Demonstrates excellent performance on non-linear loads such as computers and switching power supplies
- Utilizes Intelligent Power Module or IGBT technology for full reliability
- Employs DSP (Digital Signal Processor) control and Space-vector control technology
- Achieves low output distortion factor and high efficiency
- Includes an audible alarm for critical notifications
- Equipped with a user-friendly control panel for ease of operation.

Features

- Redundant parallel operation for enhanced reliability
- Provides potential-free output voltage
- Utilizes a full redundant control architecture
- Achieves a very fast dynamic response time
- Proven output short circuit protection
- Features a 500 Real-Time Event Log with detailed parameters
- Equipped with a user-friendly multilingual 320x240 Graphic Display providing operation information
- Enables monitoring and shutdown of software.

Adds On

- 12 pulse rectifier with 10% Input Total Harmonic Distortion current
- Adjustable voltage settings to accommodate different countries' requirements
- Fusible Surge Suppression for both AC and DC
- Redundant Fans for enhanced reliability
- Utilizes Natural Cooling in conjunction with a Smart Fan System
- Offers a choice of cabinet color from RAL codes
- Multiple Cable Entry options (Top/side/bottom/rear)
- Ingress Protection rating of up to IP66 for robust durability
- Supports communication via RS485, TCP, SNMP, and GSM
- Includes a Touch Panel with a Mimic Diagram for user-friendly control
- Capable of parallel operation with up to 2 units
- Provides DC Load supply for versatile power distribution.

TECHNICAL SPECIFICATIONS

INPUT	
Voltage	(190VAC to 460VAC \pm 15% available)
Frequency	50, 60 and (other input Hz available)
Phase Rotation	Any (Automatic Phase Lock)
Inrush Current	10 x I _{nom}

OUTPUT	
Power (kVA)	1kVA to 600kVA (Between ranges available)
Frequency	50, 60 and 400Hz \pm 10% Standard (other input Hz available)
Voltage	(190VAC to 460VAC \pm 15% available)
Voltage Regulation	<1% Maximum
Voltage Recovery	<50ms @ unbalanced load
Voltage Stability	<1% @ balanced load / <3% @ unbalanced load
THDu	<2%
Effeciency	0,8 inductive %100 load 92%
Overload Capacity	60 minutes @ 110% load 10 minutes @ 130% load 1 minutes @ 150% load
Isolation Values	1500, 2000 or 3000VAC input&output/chassis

PHYSICAL CHARACTERISTICS	
Protection Degree	Standard: IP20, (IP21 to IP54 available)
Cooling System	Forced Ventilation (Natural cooling, Smart Fans available)
Cable Entry	Standard: Bottom (Top, Rear, Side available)
Cabinet Color	Standard: RAL7032,7035 (Others available)
Ship Assembly	Anti-vibration fasteners are available.
Power Stage	IGBT is used as the power stage element.It has IGBT short circuit protection.The power electronics work according to the PWM principle.There are 12 pulse rectifiers at the converter input.
Dehumidifier Heater	It works with 115Vac 60 Hz voltage.It will be activated automatically when the converter is de-energized, and it will be deactivated when the converteris energized.
Fans	thermostat controlled
Cable Input and Output	Brass nozzle according to DIN 89280-1
Converter Cabinet	According to TS EN 10025-2 standard, it is painted with 65 micron thick powder paint in RAL 7038 color with 2 mm thickness in S235JR quality.

ENVIRONMENT	
Operating Temperature	-10 to 45C°
Ship movment Tem.	Before and after ship movment : \pm 7,5C° Roll motion: \pm 30C° incline motion: \pm 15C° Trim: \pm 5C°
Relative Humidity	0 - 95% (non-condensing)
Operating Altitude	1000m from MSL (1% derate each 100m after 1000m)
Acoustic Noise	<65dB (depend on capacity)
Isolation Resistance	200M Ω

TECHNICAL SPECIFICATIONS

COMMUNICATIONS

Standard Comm.	RS232, Dry Contact x4 to x16 (OPT: RS485, TCP and IEC61850)
Paralel Operation	2 Units
HMI	Standard: LED/LCD Panel (HMI Touch Panel, Mimic Panel available)
LCD Front Panel	<ul style="list-style-type: none"> Operation button (as push button on the panel) Stop button (as push button on the panel) Converter enabled indicator (on LCD panel) Local/remote control indicator Emergency stop button with transparent cover Changing the set values (lower, upper, limit values, alarm levels) related to the converter (current, voltage),Monitoring of fault and alarm messages

PROTECTIONS

Protections	Overload, Short Circuit, Over Voltage, Under Voltage, Over Temperature
Optional Protections	Synchronization Protection, Fan Failure, AC Earth Fault

STANDARDS

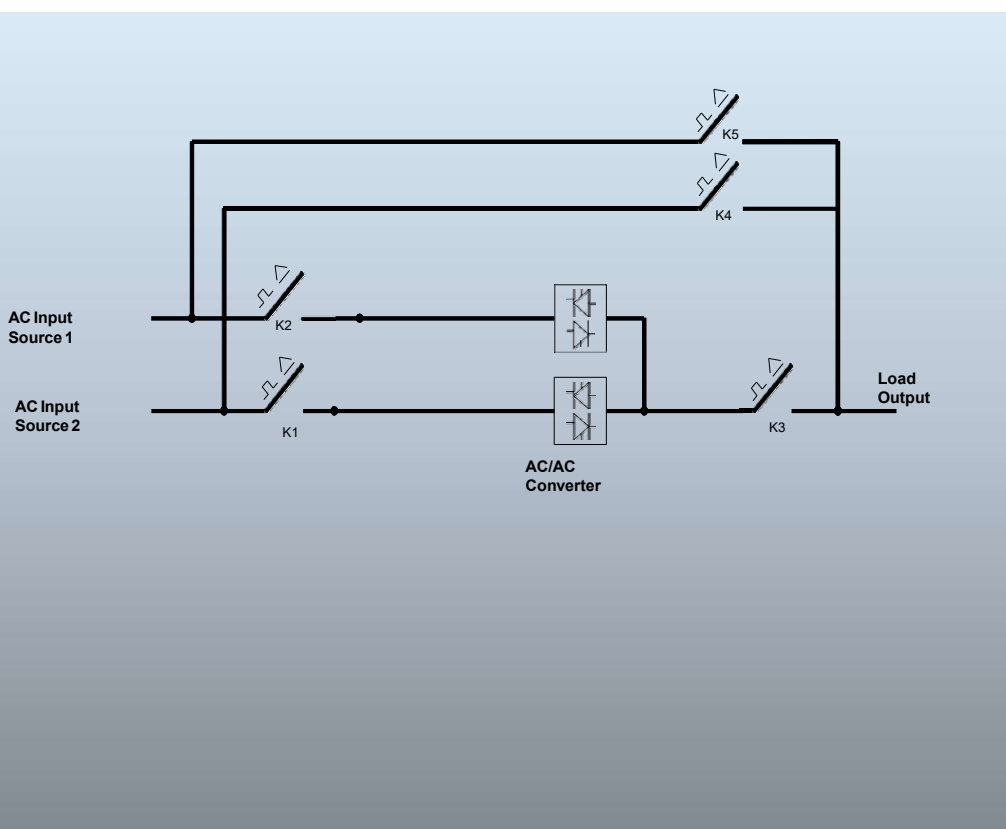
IEC 62040	Uninterruptible power systems (UPS) – Part 1&2&3
Working Class	VDE 0530 S1
Output Voltage and Frequency Tolerance: Short Circuit	MIL-STD-1399 Tip III
Strength	According to VDE 0160
Short Circuit Resistance	According to VDE 0160
Shielding and Grounding:	MIL-STD-1310-G
Transformer Insulation :	MIL-T-17221B
Dielectric Strength :	MIL-T-17221B
Electronic Printed Circuit	IPC-A-600
Vibration Resistance :	MIL-STD-167-1
Shock Resistance :	MIL-STD-901D



Static Transfer Switch



A Static Transfer Switch (STS) is a sophisticated three-phase, six-pole semiconductor power switch designed to seamlessly switch between two synchronous AC power sources without any disruption to the output power, ensuring a transfer time of less than 1/4 cycle. Unlike traditional systems, the STS operates entirely without mechanical components such as fans and relays, utilizing thyristors to efficiently manage power transfers.



General Specifications

- Utilizes Microprocessor-Based Control
- Employs a Thyristor-Based Static Transfer Switch
- Compatible with both Synchronous and Asynchronous Transfer
- Offers the option to enable or disable Asynchronous Transfer
- Achieves Synchronous Transfer in less than 5 milliseconds (equivalent to $\frac{1}{4}$ cycle at 50 Hz)
- Accomplishes Asynchronous Transfer in less than 11 milliseconds
- Customization.
- Incorporates Thermal Fuse Protection for Source Inputs
- Provides Overvoltage Protection for Source Inputs
- Ensures protection for the Maintenance Bypass Switch
- Features 8 Dry Contacts for added functionality
- Equipped with a 2x16 LCD Front Panel for easy monitoring
- Allows the selection of Source Priority via the Front Panel for use

Features

- Bypass line for seamless power transfer during emergencies
- Fusible Surge Suppression for protecting sensitive equipment from power surges
- Redundant Fans for ensuring continuous cooling operation
- Natural Cooling + Smart Fan System for efficient temperature management
- Cabinet color customizable from RAL codes for aesthetic integration
- Cable Entry options available for Top/side/bottom/rear installation flexibility
- Ingress Protection up to IP66 for superior resistance to dust and water
- Touch Panel with Mimic Diagram for intuitive and user-friendly control
- Auxiliary Trip Contact for enhanced safety measures
- Adjustable Earth Fault Protection for customizable protection settings
- Phase Voltage/Sequence protection for comprehensive power safeguarding
- 500 Real-Time Event Log with Detailed Parameters for comprehensive event tracking
- User Friendly Multilingual 320x240 Graphic Display providing operation information in multiple languages
- Monitoring and Shutdown Software for effective system management and control
- RS232 Serial and RS485 Ports for versatile and reliable communication
- Modbus RTU (Optional) for compatibility with industrial automation systems
- 2 Communication Slots for expanded communication capabilities
- Remote Emergency Power Off (Optional) for remote power control during emergencies
- Remote Display Panel (Optional) for convenient remote monitoring
- Dry Contact (Optional) for external device integration and control
- SNMP (Optional) for efficient network management and monitoring

1 PHASE Technical Specification

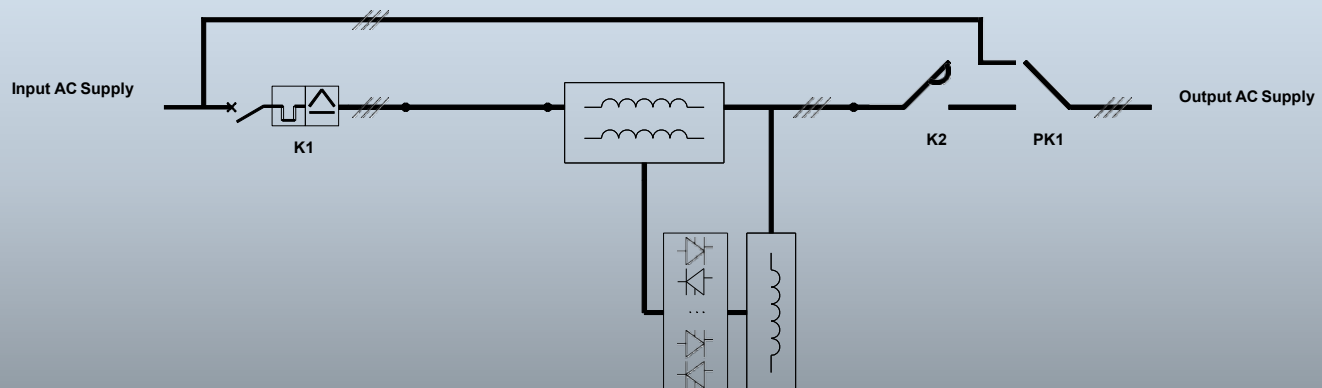
MODEL	STS1016	STS1032	STS1050	STS1063	STS1100	STS1150
CURRENT (Nominal)	16A	32A	50A	63A	100A	150A
Voltage (Ph-Ph)	110/127/208/220/230/240/265VAC 1Ph + N + PE					
Voltage Range	± 20% (Transfer when out of range)					
Frequency	50/60Hz					
Frequency Range	45-65Hz (Transfer when out of range, adjustable)					
Efficiency	>99%					
Transfer Type	Break before make					
Transfer Options	Automatic / Manual / Remote					
Transfer Time	<4ms (Sync) & ~10ms (Unsync)					
Switching Topology	1 Pole (w/o neutral breaking) or 2 Pole (w neutral Breaking)					
Crest Factor	3:1					
Overload	100-110% continuous / 100-125% 10mins / 125%-150% 1min / 150-200% 10sec / >200% 250msec					
Protections	Overload, Short circuit, Over Temperature, Backfeed, SCR Fault Alarm, Unsync protection, Bypass protection (Interlock)					
Communication	RS232, Dry Contact (Standard) - RS485, TCP/IP (Optional), SNMP (Optional)					
ENVIRONMENTAL and MECHANICA						
Cooling	Natural Cooling					
Operational Temperature	0°C - 50°C					
Storage Temperature	-10°C - 70°C					
Relative Humidity	<90% (non-condensing)					
Ingress Protection	IP20, IP21 (Standard), up to IP66 (Optional)					
Standards	EN62310-1, EN62310-2, EN62310-3					
Net Weight (kg)	3	6	6	8	Advise to Hannibal	
Dimensions (mm)	19', 1U		19', 2U		500*450*1000mm	
Alternative Dimension	19', 2U / WM			19', 5U / WM		Advise

3 PHASE Technical Specification

MODEL	STS350	STS363	STS3100	STS3150	STS3200	STS300	STS3400	STS3600	STS3800
CURRENT (Nominal)	50A	63A	100A	150A	200A	300A	400A	600A	800A
Voltage (Ph-Ph)	200/227/380/400/415/440/460/600VAC 3Ph + N + PE								
Voltage Range	± 15% (Transfer when out of range)								
Frequency	50/60Hz								
Frequency Range	45-65Hz (Transfer when out of range, adjustable)								
Efficiency	>99%								
Transfer Type	Break before make								
Transfer Options	Automatic / Manual / Remote								
Transfer Time	<4ms (Sync) & ~10ms (Unsync)								
Switching Topology	3 Pole (w/o neutral breaking) or 4 Pole (w neutral Breaking)								
Crest Factor	3:1								
Overload	100-110% continuous / 100-125% 10mins / 125%-150% 1min / 150-200% 10sec / >200% 250msec								
Protections	Overload, Short circuit, Over Temperature, Backfeed, SCR Fault Alarm, Unsync protection, Bypass protection (Interlock)								
Communication	RS232, Dry Contact (Standard) - RS485, TCP/IP (Optional), SNMP (Optional)								
ENVIRONMENTAL and MECHANICAL									
Cooling	Fan Forced (Dual Redundant), Natural Cooling (Optional)								
Operational Temperature	0°C - 50°C (Temperature measurement)								
Storage Temperature	-10°C - 70°C								
Relative Humidity	<90% (non-condensing)								
Ingress Protection	IP20, IP21 (Standard), up to IP66 (Optional)								
Standards	EN62310-1, EN62310-2, EN62310-3								
Net Weight (kg)	Advise to Hannibal								
Dimensions (mm)	500*450*1000mm		600*600*1300mm		750*700*1600mm		1000/800*800*2100mm		
Alternative Dimension	19', 5U / WM		WM		Advise to Hannibal				

Static Voltage Regulator

Microprocessor-controlled Static Voltage Stabilizer Hannibal Static Voltage Stabilizer regulates grid fluctuations in the best way possible. With adequate regulation speed (1000 V/sec.) and full protection, by compensating the difference between phases as well as voltage fluctuations, it ensures the connected systems operate reliably. Since the output voltage tolerance is $\pm 1\%$, the electronic stabilizer is an ideal solution to secure the electronic load. In cases of the network voltage changes momentarily and frequently, an Electronic Stabilizer could be the solution



General Specifications

- ◆ Microprocessor Controlled
- ◆ Achieves Output Voltage Correction with $\pm 1\%$ Accuracy
- ◆ High Efficiency exceeding 96%
- ◆ Offers Over Current, High Temperature, High-Low Voltage, and Short Circuit Protection
- ◆ Can handle 1 minute at 100%-125% load and 10 seconds at 125%+ load
- ◆ User-friendly panel displays Input Voltage, Output Voltage-Current, % Load, and Transformer Temperature Values
- ◆ Advanced Alarm Menu for comprehensive monitoring
- ◆ Manual Bypass functionality
- ◆ Designed with Chassis Technology resistant to Dust, Moisture, and Vibration
- ◆ Features a Fan Cooling System
- ◆ Compact Production using Quality Materials
- ◆ Minimizes the Risk of Failure
- ◆ CE Certified for compliance with safety standard

Adds On

- ◆ Includes a bypass line for uninterrupted power during maintenance.
- ◆ Offers fusible surge suppression for voltage surge protection.
- ◆ Redundant fans and smart cooling ensure consistent performance.
- ◆ Customizable cabinet colors from RAL codes for aesthetic flexibility.
- ◆ Multiple cable entry points for easy installation and maintenance.
- ◆ Provides robust IP66 protection against dust and water.
- ◆ User-friendly touch panel with mimic diagram for easy control.
- ◆ Enhanced safety with auxiliary trip contact and adjustable fault protection.
- ◆ Real-time event log for comprehensive system monitoring.
- ◆ Clear 320x240 graphic display for essential operation information.
- ◆ Monitoring software for continuous oversight and control.
- ◆ Equipped with RS232, RS485, and optional Modbus RTU support.
- ◆ Optional SNMP for remote monitoring and management.

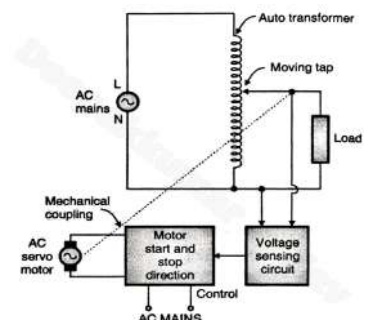
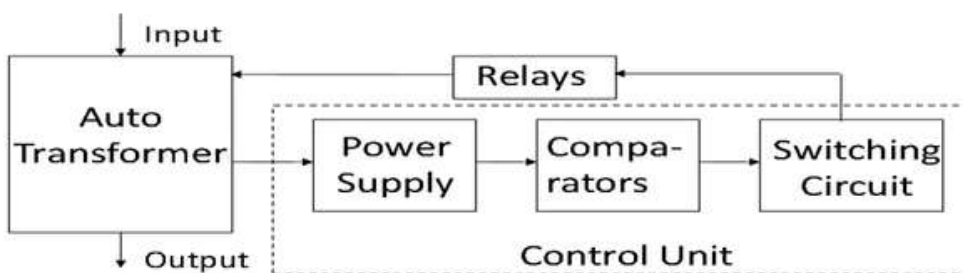
Servo Voltage Regulator

Hannibal Servo Voltage Regulators are sophisticated systems comprising key components such as the Toroidal Variac, Booster Transformer, Servo Motor, and a state-of-the-art Microprocessor control circuit. The integral microprocessor-based electronic card serves the crucial function of monitoring the mains voltage and orchestrating precise adjustments through the servomotor to ensure a stable output voltage, consistently maintaining it at either 220 VAC or 380VAC.



Advantages of Servo Type AC Voltage Stabilizer :

- Smooth stepless variation in the output voltage.
- Good voltage regulation.
- Output voltage waveform is undistorted (sinusoidal output).



General Specifications

- ◆ Microprocessor Controlled
- ◆ Achieves Output Voltage Correction with $\pm 1\%$ Accuracy
- ◆ High Efficiency exceeding 96%
- ◆ Offers Over Current, High Temperature, High-Low Voltage, and Short Circuit Protection
- ◆ Can handle 1 minute at 100%-125% load and 10 seconds at 125%+ load
- ◆ User-friendly panel displays Input Voltage, Output Voltage-Current, % Load, and Transformer Temperature Values
- ◆ Advanced Alarm Menu for comprehensive monitoring
- ◆ Manual Bypass functionality
- ◆ Designed with Chassis Technology resistant to Dust, Moisture, and Vibration
- ◆ Features a Fan Cooling System
- ◆ Compact Production using Quality Materials
- ◆ Minimizes the Risk of Failure
- ◆ CE Certified for compliance with safety standard

Adds On

- ◆ Includes a bypass line for uninterrupted power during maintenance.
- ◆ Offers fusible surge suppression for voltage surge protection.
- ◆ Redundant fans and smart cooling ensure consistent performance.
- ◆ Customizable cabinet colors from RAL codes for aesthetic flexibility.
- ◆ Multiple cable entry points for easy installation and maintenance.
- ◆ Provides robust IP66 protection against dust and water.
- ◆ User-friendly touch panel with mimic diagram for easy control.
- ◆ Enhanced safety with auxiliary trip contact and adjustable fault protection.
- ◆ Real-time event log for comprehensive system monitoring.
- ◆ Clear 320x240 graphic display for essential operation information.
- ◆ Monitoring software for continuous oversight and control.
- ◆ Equipped with RS232, RS485, and optional Modbus RTU support.
- ◆ Optional SNMP for remote monitoring and management.

TECHNICAL SPECIFICATIONS Single Phase 1-150KVA

MODEL	1101	1102	1103	1105	1107	1110	1115	1120	1125	1130	1140	1150
POWER (kVA)	1	2	3.5	5	7.5	10	15	20	25	30	40	50
INPUT												
Input VAC Reg. Range	160-260 VAC / 110 – 240 VAC											
Input VAC Op. Range	90- 285VAC											
Operation Frequency	50-60 ±5% Hz											
Line Input Protection	Over Current, Low and High Voltage protection											
OUTPUT												
Output Voltage	220/230/240 VAC RMS±1%											
Overload	10 sec. %200 Load / 2min. 150% Load											
Correction Speed	90 Volt/ sec.											
Full Load Efficiency	Approx.>98%											
Upturn Period	~ 90 Volt/ sec. (160 VAC- 260VAC)											
Output Protection	Protects Load by opening the circuit when overburden, short circuit occurs											
Operation Topology	Servo Motor Microprocessor Controlled, Full automatic											
GENERAL & ENVIRONMENTAL												
Cooling	Smart Fan System											
Front Panel Display	AC Power Analyzer (1 Phase)											
Mechanical By-Pass	Manually Controlled Line (Selectable CB) / Autobypass (Optional)											
Protection Level	IP20 / IP22- IP66(OPT.)											
Working Temperature	-10°C/50°C											
Storage Temperature	-25°C/+60°C											
Relative Humidity	Max< 95%, (Non Condensing)											
Working Altitude	< 2000 m											
Acoustic Noise	< 50 dB											

TECHNICAL SPECIFICATIONS 3 Phase 1-150KVA

MODEL	3003	3006	3010	3015	3020	3030	3045	3060	3075	3100	3120.	3150.
Power (kVA)	3	6	10.5	15	22.5	30	45	60	75	100	120	150

INPUT

Input VAC Reg. Range	275-450 VAC (190- 415 VAC OPT.)
Input VAC Op. Range	155 – 490 VAC
Operation Frequency	50-60 ±5% Hz
Line Input Protection	Over Current, Low and High Voltage protection

OUTPUT

Output Voltage	380/400/415 VAC (RMS±1%)
Overloading	10 sec. %200 Load / 2min. 150% Load
Correction Speed	90 Volt/ sec.
Full Load Efficiency	Approx.>98%
Upturn Period	~ 90 Volt/ sec. (275 VAC- 450VAC)
Output Protection	Protects Load by opening the circuit when overburden, short circuit occurs
Operation Topology	Servo Motor Microprocessor Controlled, Full automatic

GENERAL & ENVIRONMENTAL

Cooling	Smart Fan System
Front Panel Display	AC Power Analyzer (3 Phase)
Mechanical By-Pass	Manually Controlled Line (Selectable CB) / Autobypass (Optional)
Protection Level	IP 20
Working Temperature	-10°C/50°C
Storage Temperature	-25°C/+60°C
Relative Humidity	Max < 95%, (Non Condensing)
Working Altitude	< 2000 m
Acoustic Noise	< 50 dB

TECHNICAL SPECIFICATIONS 3 Phase 200-3000KVA

MODEL	330200	330250	330300	330400	330500	330600	330800	331000	331250	331500	332000	332500	333000
POWER (kVA)	200	250	300	400	500	600	800	1000	1250	1500	2000	2500	3000
INPUT													
Inp VAC Reg. Range	275-450 VAC (190- 415 VAC OPT.)												
Operation Frequency	50-60 ±5% Hz												
Line Input Protection	Over Current, Low and High Voltage protection												
OUTPUT													
Output Voltage	380/400/415 VAC (RMS±1%)												
Overload	10 sec. %200 Load / 2min. 150%Load												
Correction Speed	90 Volt/ sec.												
Full Load Efficiency	Approx.>98%												
Upturn Period	~ 90 Volt/ sec. (275 VAC- 450VAC)												
Output Protection	Protects Load by opening the circuit when overburden, short circuit occurs												
Operation Topology	Servo Motor Microprocessor Controlled, Full automatic												
GENERAL & ENVIRONMENTAL													
Cooling	Smart Fan System												
Front Panel Display	AC Power Analyzer (3 Phase)												
Mechanical By-Pass	Manually Controlled Line (Selectable CB) / Autobypass (Optional)												
Protection Level	IP20												
Working Temperature	-10°C/50°C												
Storage Temperature	-25°C/+60°C												
Relative Humidity	Max < 95%, (Non Condensing)												
Working Altitude	< 2000 m												
Acoustic Noise	< 50 dB												



**Commercial
Products**

Rack Type Inverter

The Hannibal Rack Type inverter is a specialized solution widely recognized for its outstanding dependability, economical nature, and advanced safety features, particularly in power supply contexts. Employing state-of-the-art full electrical isolation inverter technology, this system stands out in its ability to efficiently convert direct current (DC) into top-notch, pure sinusoidal alternating current (AC). Specifically engineered for easy rack-mounting inside cabinets, it guarantees a simple and hassle-free setup process.



- ◆ Reliable power conversion without compromise
- ◆ Cost-effective high-quality conversion
- ◆ Equipped with advanced safety measures
- ◆ Full Electrical Isolation Inverter Technology
- ◆ Swift and efficient DC to AC conversion
- ◆ Rack-mount installation for space-saving setup
- ◆ User-friendly operation for all users

Authorized Distributor | INDONESIA
PT. ANEXCO MITRA ABADI
Tel : 0254 375966 | Fax : 0254 375961
Email : marketing@anexco.co.id
www.anexco.co.id

General Specification

- ◆ Fast control facilitated by a DSP controller for efficient and responsive operation.
- ◆ Utilization of IGBT/IPM Technology for advanced power management and control.
- ◆ Bypass Voltage sampling feature for precise and accurate monitoring of bypass voltage levels.
- ◆ Ensures exceptional Voltage Stability of less than 1% for reliable and consistent power supply.
- ◆ Alarm adjustable dry contacts for customizable alarm configurations based on specific requirements.
- ◆ Integration of ModBus Protocol through RS232 and RS485, enabling seamless communication and data exchange with compatible systems.
- ◆ Seamless and uninterrupted bypass switching for smooth transition between power sources without disruption.

Features

- ◆ Output with integrated earth fault detection for enhanced safety and protection.
- ◆ Standard system configurations ensuring consistent performance and compatibility.
- ◆ Built-in protection mechanisms to safeguard against potential risks and operational issues.
- ◆ Digital processing and configuration of all parameters for precise and efficient operation.
- ◆ Monitoring of all parameters via the front panel display for easy access and real-time oversight.
- ◆ Extensive communication options facilitating seamless integration with various communication systems.
- ◆ Compatibility with Lead Acid (vented/sealed) and NiCd (vented/gas recombination) batteries, ensuring versatility and adaptability to different power storage needs.

GENERAL SPECIFICATIONS

- Fast control with DSP controller
- IGBT/IPM Technology
- Bypass Voltage sampling
- <1% Voltage Stability
- Alarm adjustable dry contacts
- ModBus Protocol - RS232, RS485
- Uninterrupted bypass switching

FEATURES

- Output with built-in earth fault detection
- Standard system configurations
- Built-in protection
- Digital processing and setting of all parameters
- Monitoring of all parameters via the front panel display
- Large communication facility options
- Compatible with Lead Acid (vented /sealed) and NiCd (vented/gas recombination) batteries

TECHNICAL SPECIFICATIONS

Technical Specifications (VA)	1K	2K	3K	4K	5K	6K	8K	10K
DC INPUT								
Input Voltage (VDC)	See the chart below							
Input Current (A)	See the chart below							
Input Range of Voltage (VDC)	See the chart below							
AC BYPASS								
Bypass Volt (VAC)	260V - 180V (±10V)							
Input Current (A)	5	10	15	20	25	30	40	50
Transfer Time (ms)	20 ms							
AC OUTPUT								
Rated Capacity (VA)	1000	2000	3000	4000	5000	6000	8000	10000
Output Power (W)	800	1600	2100	2800	3500	4200	5600	7000
Voltage and Frequency	110 V / 50 Hz, 220Vac / 50Hz, 600 - 230V 50 / 60 Hz							
Voltage Precision (V)	± 1.5%							
Frequency Precision (V)	50 ± 0.1%, 60Hz +0.1%							
Output wave	Pure Sine Wave							
Wave Distortion (THD) (Resistant Load)	≤ 3 % (Linear Load)							
Dynamic Reaction Time (Load 0 <----> 100%)	8 % (load 0 <----> 100%)							
Power Factor (PF)	0.89 / 0.7							
Overload	Load Current>150%, Shutdown in 20ms							
Inversion Efficiency (80% Resistant Load)	≥ 70 - 85							
Transfer Time (ms)	≤ 5 ms							
ENVIRONMENT								
Isolation (IN/OUT)	1500 VAC, 1min							
Noise (1m)	≤ 45 dB							
Temperature	-10°C to +50°C							
Humidity	0 ~ 90%, Non-condensing							
Sea Level (m)	≤ 3000							
SHOW								
LCD	Input and Output Voltage, Frequency, Output Current, Temperature							
Inverter Status	Power Normal, Inverter Normal, Battery Voltage, Output Overload							
Protection Function	Input Low / High Voltage, Output Overload / Shortage, Reversed Input Connecting Protection							

Rated Input Voltage (VDC)	12 V	I in	24 V	I in	48 V	I in	110 V	I in	220 V	I in
Dc Input Voltage	10 - 16		20 - 32		40 - 60		90 - 160		180 - 300	
Dimension (W*H*D)	19" 2 RU W482*H88*D 390mm		19" 2 RU W482*H88*D 390mm		19" 2 RU W482*H88 D39mm		19" 2 RU W482*H88*D 390mm		19" 2 RU W482*H88*D 390mm	
Rated Input Current (A)	1 kVA	92	1 kVA	45	1 kVA	23	1 kVA	10	1 kVA	6
	--	--	2 kVA	88	2 kVA	47	2 kVA	20	2 kVA	10
	--	--	2.5 kVA	115	3 kVA	70	3 kVA	29	3 kVA	15
	--	--	--	--	4 kVA	91	4 kVA	39	4 kVA	19
	--	--	--	--	5 kVA	112	5 kVA	49	5 kVA	24
	--	--	--	--	6 kVA	140	6 kVA	59	6 kVA	28
Rated Input Current (A)	--	--	--	--	8 kVA	185	6 kVA	79	6 kVA	28
	--	--	--	--	10 kVA	224	10 kVA	98	10 kVA	48



Rack Type UPS

SL SERIES

The Rack Online UPS serves as an ideal solution for small data centers, equipped with an integrated battery for uninterrupted power supply. The SLR series incorporates advanced 3-level technology, ensuring compatibility with intricate and demanding loads. This UPS effectively shields sensitive devices from the primary power supply, simultaneously charging batteries from the main power source and delivering clean energy through a range of filters. Consequently, it effectively filters out potential network disturbances, guaranteeing that sensitive devices receive consistent and uninterrupted clean power.



- Built-in battery for uninterrupted power during outages
- 3-Level technology for stable performance with complex loads
- Effective isolation for shielding sensitive devices
- Battery charging from mains for continuous power availability
- Clean energy supply filters out fluctuations for stable power
- Network disturbance filtering for protection against disruptions
- Uninterrupted power supply minimizes data loss/hardware damage.

General Specifications

- Optional frequency settings for both input and output: 50Hz, 60Hz, and 400Hz
- Demonstrates excellent performance on non-linear loads, particularly for computers and switching power supplies
- Ensures full reliability through Intelligent Power Module or IGBT technology
- Features a user-friendly control panel for ease of operation.
- Employs DSP (Digital Signal Processor) control and Space-vector control technology
- Achieves a low output distortion factor while maintaining high efficiency
- Includes an audible alarm for immediate notifications

Features

- Redundant parallel operation for enhanced reliability
- Provides potential-free output voltage
- Utilizes a full redundant control architecture
- Proven output short circuit protection
- Maintains low voltage ripple to extend battery lifespan
- Includes intelligent battery charge and monitoring control
- Ready and available options for charging Lithium Ion Batteries.

GENERAL SPECIFICATIONS

- Input and Output 50Hz, 60Hz, 400Hz frequency optional.
- On Non-linear loads (computer and switching power supplies) excellent performance
- Intelligent Power Module or IGBT technology full reliability.
- DSP (Digital Signal Processor) control. Space-vector control technology
- Low Output distortion factor. High efficiency.
- Audible alarm
- User-friendly control panel

FEATURES

- Redundant parallel operation
- Potential free output voltage
- Full redundant control architecture
- Output short circuit proof
- Low voltage ripple to prolong battery lifetime
- Intelligent battery charge and monitoring control
- Lithium Ion Battery charging options ready and available

SLR11(1-3KVA)

TECHNICAL SPECIFICATIONS (220/230/240V)

MODEL	SLR1101S	SLR1101L	SLR1102S	SLR1102L	SLR1103S	SLR1103L	
Capacity	1kVA / 900W		2kVA / 1,8kW		3kVA / 2,7kW		
Phase	Single Phase in, Single Phase out						
Input Voltage Range	110VAC - 288VAC 100% load@ > 176VAC; 80% load@ > 154 VAC 70% load@ > 132VAC; 50% load@ > 110 VAC						
Input PF	≥0.97						
Input Frequency	40 Hz ~ 70 Hz						
Output PF	0.9						
Output Voltage	220V / 230V / 240V						
Voltage Regulation	± 1 %						
THDu	≤2% THD, Linear Load ≤ 5.5% THD, Non-Linear			≤2% THD, Linear Load ≤ 5% THD, Non-Linear			
Battery	Model	12VDC / 7Ah	External	12VDC / 7Ah	External	12VDC / 7Ah	External
	Quantity	3	3	6	6	8	8
	Max-Charging Current	1A	5A	1A	5A	1A	5A
	Voltage	36VDC		72VDC		96VDC	
Efficiency	87%		91%		90%		
Noise (1 meter away)	<43dB@<70% Load <47dB@>70% Load			<45dB@<70% Load, <50dB@>70% Load			
Overload Capability (Inverter mode)	105%~130%:to bypass after 1 min; 150%: to bypass after 30sec						
Overload Capability (Battery mode)	105%~130%:shutdown after 10Sec; 150%: shutdown after 5sec						
Crest Ratio	3:1						
Display	LED+LCD						
Options	Surge Protection, Rail Kit, Foot Brackets						
Interface	Standard: RS232 Optional: SNMP, USB, Dry Contacts, Parallel Kit, ECO Kit						
W*D*H (mm)	145*353*222		190*374*336		190*426*336		
Package Weight (kg)	11,5	7	25	8	31	9,5	

SLR11(6-10 KVA)

TECHNICAL SPECIFICATIONS (220/230/240V)

MODEL	SLR1106XS	SLR1106XL	SLR1110XS	SLR1110XL	
Capacity	6kVA / 6kW		10kVA / 10kW		
Phase	Single Phase in, Single Phase out				
Input Voltage Range	110VAC - 288VAC				
	100% load @ >176VAC; 90% load @ >160VAC 80% load @ >140VAC; 60% load @ >110VAC				
Input PF	≥0.99				
Input Frequency	40 Hz ~70 Hz				
Output PF	1				
Output Voltage	220V / 230V / 240V				
Voltage Regulation	± 1 %				
THDu	≤2%THD, full linear load; ≤5%THD, non-linear load				
Battery	Model	12VDC / 7Ah	External	12VDC / 9Ah	External
	Quantity	16 to 20 pcs.	16 to 24 pcs.	16 to 20 pcs.	16 to 24 pcs.
	Max-Charging Current	1A	5A	1A	5A
	Voltage	192 default (Adjustable)			
Efficiency	Normal Mode: max 95%; Battery Mode: max 93%				
Noise (1 meter away)	<52dB @ <60% Load <56dB @ >60% Load		<56dB@ <60% Load; <58dB@ >60% Load		
Overload Capability (Inverter mode)	110%: for 10 min ; 125%:for 1min ; 150%:for 30 sec (shut down the bypass after 1 min)				
Overload Capability (Battery mode)	110%: Shutdown after 1mins; 130%: Shutdown after 10s; >130%: Shutdown after 200ms				
Crest Ratio	3:1				
Display	LED+LCD				
Options	Surge Protection, Manual Bypass, Rail Kit, Foot Brackets				
Interface	Standard: RS232 Optional: SNMP, USB,Dry Contacts, Parallel Kit, ECO Kit				
W*D*H (mm)	438*660*172	438*550*86	438*660*172	438*550*86	
Package Weight (kg)	59	17,5	67	20,5	

SLR33(20-25 KVA)

TECHNICAL SPECIFICATIONS (220/230/240V)

MODEL	SLR33020	SLR33025
Capacity	20kVA / 20kW	25kVA / 25kW
Phase	3P+N+PE (3/1 and 1/1 Optional)	
Input Voltage Rate	380VAC / 400VAC / 415VAC (line-line)	
Input Voltage Range	304VAC-478VAC (line-line), full load; 228VAC-304VAC (line-line) derate from 75% to 100% load	
Input Frequency - Range	50 / 60Hz - 40 / 70Hz	
Input PF	>0.99	
Input THDi	<3% (100% Linear load)	
Bypass Voltage - Range	380VAC / 400VAC / 415VAC (line-line), -40% ~ +25% (Settable)	
Bypass Frequency	50 / 60Hz, ±1Hz, ±3Hz, ±5Hz (Settable)	
Bypass Overload	Long time @ 110% load; 5 mins @ 125% load; 1 min @ >150% load	
Output Voltage	380VAC / 400VAC / 415VAC (line-line) ±1%	
Output Frequency	50 / 60Hz	
Output PF	1	
Output THDu	<1% Linear Load; <6% Non-Linear Load (IEC/EN62040-3)	
Inverter Overload	1 hour @ 110% load; 10mins @ 125% load; 1 min @ 150% load, 200ms @ >150% load	
Battery Number	±240VDC (±20 batteries)(40 in total)	
Charging Accuracy	1%	
Charging Capacity	Up to 20% of Output Power	
Battery Cold Start	Yes	
Efficiency	>96% @ AC Mode, >95,5% @ Battery Mode	
Display	LED + LCD + Touch Screen	
Interface	RS232, RS485, Programmable Dry Contact	
Option	SNMP Card, Parallel Operation, Surge Protection	
Storage / Operation Temperature	-40 - 70°C / 0 - 45°C	
Relative Humidity	0 – 95% Non-Condensing	
Noise (1 meter)	65dB @ 100% load, 62dB @ 45% load	
W*D*H (mm)	485*885*130mm	
Package Weight (kg)	25kg	

StandAlone Ups

PLMT SERIES with internal battery 10-40KVA

Introducing a high-density, true double-conversion online power protection solution, meticulously crafted to meet the unique demands of both Information Technology (IT) and Operational Technology (OT) applications. This adaptable system demonstrates remarkable proficiency in accommodating loads spanning from 10 to 40 kilovolt-amperes (kVA), all within a streamlined and space-saving tower form factor.



- Tailored IT and OT support for diverse equipment
- Expanded load capacity handling 10 to 40 kVA loads
- True double-conversion online technology for consistent power
- Space-efficient tower form factor without performance compromise
- Enhanced power efficiency for optimized operation
- Comprehensive protection measures against fluctuations and outages
- User-friendly management interface for simplified monitoring.

General Specifications

- Optional frequency settings for both input and output: 50Hz and 60Hz, with frequency options available.
- Demonstrates excellent performance on non-linear loads, particularly for computers and switching power supplies.
- Ensures full reliability through Intelligent Power Module or IGBT technology.
- Employs DSP (Digital Signal Processor) control and Space-vector control technology.
- Achieves a low output distortion factor while maintaining high efficiency.
- Includes an audible alarm for immediate notifications.
- Features a user-friendly control panel for ease of operation.

Features

- Redundant parallel operation for enhanced reliability
- Provides potential-free output voltage
- Utilizes a full redundant control architecture
- Achieves an exceptionally fast dynamic response time
- Proven output short circuit protection
- Offers a wide range of ratings with standard IP protection up to 56
- Maintains low voltage ripple to extend battery lifespan
- Includes intelligent battery charge and monitoring control
- Ready and available options for charging Lithium Ion Batteries.

Adds On

- Dual-source input capability
- Achieves <3% Input Total Harmonic Distortion current with a harmonic filter
- Adjustable voltage settings to suit different countries' requirements
- Option for input neutral removal at the site
- Fusible Surge Suppression for both AC and DC
- Redundant fans for added reliability
- Capable of parallel operation with up to 4 units
- Customizable cabinet color selection from RAL codes
- Multiple cable entry points (Top/side/bottom/rear) for versatile installation
- Offers Ingress Protection rating of up to IP66 for robust durability
- Supports communication via RS485, TCP, SNMP, and GSM
- Equipped with a user-friendly Touch Panel featuring a Mimic Diagram

MODEL	10 kVA	15 kVA	20 kVA	30 kVA	40 kVA
CAPACITY (kVA/kW)	10	15	20	30	40
INPUT					
Nominal voltage	380/400/415Vac, (3Ph+N+PE)				
Input voltage range	305~478Vac (Full Load); 208~478Vac (50% Load)				
Frequency	40Hz-70Hz				
Power factor	≥0.99				
THDi	≤3% (100% nonlinear load)				
Bypass voltage range	220Vac Max.voltage: +25%(optional +10%,+15%,+20%) 230Vac Max.voltage: +20%(optional +10%,+15%) 240Vac Max.voltage: +15%(optional +10%)				
Bypass Synchronization	Min. voltage: -45% (optional -20%,-30%)				
Generator Input	±1%/±2%/±4%/±5%/±10% optional (default:±10%)				
Generator Input	Support				
OUTPUT					
Power factor	0.9/1.0				
Nominal AC Voltage	380/400/415Vac, (3Ph+N+PE)				
Voltage Regulation	±1%				
Transient Voltage Response	±5% (linear load)				
Frequency	1.Line Mode: synchronize with input; when input frequency > ±10% (±1%/±2%/±4%/±5% optional), output (50/60±0.1%)Hz. 2.Battery Mode:(50/60±0.1%)Hz				
Crest factor	3:1				
Harmonic distortion (THDv)	< 2% (linear load), <5% (non linear load)				
Overload Capacity	AC Mode	Load≤110%: last 60min change to bypass, ≤125%: last 10min, change to bypass, ≤150%: last 1min change to bypass, >150% change to bypass immediately			
	Battery Mode	Load≤110%: last 10min, ≤125%: last 1min, ≤150%: last 5S, > 150% shut down UPS immediately			
Efficiency	Normal Mode	Up to 93.5%		Up to 94.5%	
Transfer Time	Utility to Battery : 0ms; Utility to bypass: 0ms				
BATTERY					
Battery voltage	Standard unit	±120Vdc (20pcs 12V9AH); (2x20pcs 12V9AH optional)	±120Vdc (2x20pcs 12V9AH)	±120Vdc (3x20pcs 12V9AH)	±180Vdc (2x30pcs 12V9AH)
Battery voltage	Long run unit	10-30kVA: ±96/108/120Vdc; battery quantity (16~20 pcs, 16 pcs define, Standard unit and 20 pcs no power derating; 18 pcs output power factor 0.8/0.9; 16 pcs output power factor 0.7/0.8;)			
Charge Current(A) (charge current can be set according to battery capacity installed)	Standard unit: 1.35A (2.7A optional); Long run unit: Max. current 14A (limited by input current)	Standard unit: 2.7A; Long run unit: Max. current 16A (limited by input current)	Standard unit: 2.7A; Long run unit: Max. current 18A (limited by input current)	Standard unit: 4.05A; Long run unit: Max. current 20A (limited by input current)	Standard unit: 2.7A; Long run unit: Max. current 20A (limited by input current)
SYSTEM FEATURE					
Alarms	overload, utility abnormal, UPS fault, battery low, etc.				
Protection	short circuit, overload, over temperature, battery low, fan fault alarm, EPO (optional)				
Communication Interface	USB, RS232,RS485, Parallel port, Dry contact, Intelligent slot, SNMP card (optional), Relay card (optional),Battery temperature sensor(optional)				
ENVIRONMENTAL					
Operating Temperature	0°C~40°C				
Storage Temperature	-25°C~55°C(no battery)				
Humidity	0~95% non condensing				
Acoustical Noise (from 1M distance)	<55dB	<55dB	<58dB	<61dB	<64dB
Altitude	< 1500m.When>1500m,lower the rated power for use				
DIMENSIONS & WEIGHT					
W×D×H (mm)	Standard unit : 250×900×868 Long run unit : 250×580×655				
Weight (kg)	129/35	186/39	187/40	236/43	239/46
STANDARDS					
Safety certifications	IEC/EN62040-1,IEC/EN60950-1				
EMC	CE, IEC/EN62040-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8				



StandAlone Ups

PLMTT SERIES

10-500KVA

The Hannibal High-Density, True Double-Conversion Online Power Protection System is specifically designed to meet the crucial power requirements of both IT (Information Technology) and OT (Operational Technology) applications. It stands out in its ability to protect delicate loads spanning from 10 to 500kVA, all while maintaining a space-efficient tower form factor.



- Versatile application suitability for diverse equipment
- High-density design in a space-efficient tower form
- True double-conversion online technology for continuous protection
- Scalable load capacity from 10 to 500kVA
- Enhanced protection against power fluctuations and outages
- Efficient cooling mechanism for reliable performance
- User-friendly interface for easy monitoring and management.

General Specification

- Optional frequency settings for both input and output: 50Hz, 60Hz, with frequency options available.
- Demonstrates excellent performance on non-linear loads, particularly for computers and switching power supplies.
- Ensures full reliability through Intelligent Power Module or IGBT technology.
- Employs DSP (Digital Signal Processor) control and Space-vector control technology.
- Maintains low output distortion.
- Equipped with an audible alarm for immediate notifications.

Features

- Redundant parallel operation for enhanced reliability
- Provides potential-free output voltage
- Utilizes a full redundant control architecture
- Achieves an exceptionally fast dynamic response time
- Proven output short-circuit protection
- Offers a wide range of ratings with standard IP protection up to 56
- Maintains low voltage ripple to extend battery lifespan
- Includes intelligent battery charge and monitoring control
- Ready and available options for charging Lithium Ion Batteries.

Adds On

- Two source inputs for enhanced flexibility and reliability.
- Maintains input Total Harmonic Distortion (THDi) below 3% with a harmonic filter.
- Supports various voltage settings to accommodate different countries' requirements.
- Option to remove the input neutral on-site for specific applications.
- Incorporates fusible surge suppression for both AC and DC inputs.
- Redundant fans ensure optimal cooling and system stability.
- Allows for customization of cabinet color from RAL codes for aesthetic harmony.
- Multiple cable entry points available (top, side, bottom, rear) for convenient installation.
- Offers high Ingress Protection up to IP66 for durability against dust and water.
- Supports RS485, TCP, SNMP, and GSM communication for versatile connectivity.
- Conducts automatic battery tests to ensure reliable backup power.
- Features a user-friendly touch panel with a mimic diagram for intuitive control.
- Capable of parallel operation with up to 4 units for increased power capacity.
- Provides DC load supply for efficient power distribution.

MODEL	10-40kVA	60kVA	80kVA	100kVA	120kVA	160kVA	180kVA
INPUT							
Nominal voltage	380/400/415Vac, (3Ph+N+PE)						
Operating voltage range	138~485Vac						
Operating frequency range	40Hz-70Hz						
Power factor	≥0.99						
Harmonic distortion (THDi)	≤3% (100%non-linear load)						
Bypass voltage range	220Vac Max.voltage: +25%(optional +10%,+15%,+20%) 230Vac Max.voltage: +20%(optional +10%,+15%) 240Vac Max.voltage: +15%(optional +10%) Min. voltage: -45% (optional -20%,-30%) Frequency synchronize tracing range: ±10%						
Generator input	Support						
OUTPUT							
Output voltage	380/400/415Vac (3Ph+N+PE)						
Voltage regulation	±1%						
Power factor	1						
Output frequency	1.Line Mode: synchronize with input; when input frequency > ±10% (±1%/±2%/±4%/±5% optional) 2.Battery Mode:50/60*(1±0.02%)Hz						
Crest factor	3:1						
Harmonic distortion (THD)	≤2% with linear load ≤4% with non linear load						
Efficiency	95.5%						
BATTERY							
Battery voltage	Optional Voltage: ±180V/±192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc(30/32/34/36/38/40/42/44/46/48/50pcs optional)						
Charge Current(A) (charge current can be set according to battery capacity installed)	Max.5A/ Max.10A	Max. 15A	Max. 20A	Max. 30A			Max. 45A
SYSTEM FEATURES							
Transfer time	Utility to Battery : 0ms; Utility to bypass: 0ms						
Overload	Load≤110%: last 60min,≤125%: last 10min,≤150%: last 1min						
Alarm	overload, utility abnormal, UPS fault, battery low, etc.						
Backfeed	Support						
Protection	short circuit, overload, over temperature, battery low, fan fault alarm.						
Communication	USB,RS232, RS485, Parallel port, REPO port, LBS port, Backfeed port, Intelligent slot, SNMP card (optional), Relay card (optional)						

ENVIRONMENTAL

Operating temperature	0°C~40°C						
Storage temperature	-25°C~55°C(no battery)						
Humidity range	0~95% (non condensing)						
Altitude	< 1500m.When>1500m,lower the rated power for use						
Noise level	<58dB	<60dB	<62dB	<63dB	<65dB	<66dB	<68dB

PHYSICAL

Dimension D×W×H (mm)	720*250*535 720*250*885	865x250x862			885x440x1200		
Net weight (kg)	35/102	70.5		160	162	196	198

STANDARDS

Safety	IEC/EN62040-1,IEC/EN60950-1						
--------	-----------------------------	--	--	--	--	--	--

MODEL	200kVA	250kVA	300kVA	350kVA	400kVA	450kVA	500kVA
INPUT							
Nominal voltage	380/400/415Vac, (3Ph+N+PE)						
Operating voltage range	138~485Vac						
Operating frequency range	40Hz-70Hz						
Power factor	≥0.99						
Harmonic distortion (THDi)	≤3% (100%non-linear load)						
Bypass voltage range	220Vac Max.voltage: +25%(optional +10%,+15%,+20%) 230Vac Max.voltage: +20%(optional +10%,+15%) 240Vac Max.voltage: +15%(optional +10%) Min. voltage: -45% (optional -20%,-30%) Frequency synchronize tracing range: ±10%						
Generator input	Support						
OUTPUT							
Output voltage	380/400/415Vac (3Ph+N+PE)						
Voltage regulation	±1%						
Power factor	0.9						
Output frequency	1.Line Mode: synchronize with input; when input frequency > ±10% (±1%/±2%/±4%/±5% optional) 2.Battery Mode:50/60*(1±0.02%)Hz						
Crest factor	3:1						
Harmonic distortion (THD)	≤2% with linear load ≤4% with non linear load						
Efficiency	95.5%						
BATTERY							
Battery voltage	Optional Voltage: ±180V/±192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc(30/32/34/36/38/40/42/44/46/48/50pcs optional)						
Charge Current(A) (charge current can be set according to battery capacity installed)	Max. 50A	Max. 62A	Max. 75A	Max. 88A	Max. 100A	Max. 112A	Max. 125A
SYSTEM FEATURES							
Transfer time	Utility to Battery : 0ms; Utility to bypass: 0ms						
Overload	Load≤110%: last 60min,≤125%: last 10min,≤150%: last 1min						
Alarm	overload, utility abnormal, UPS fault, battery low, etc.						
Backfeed	Support						
Protection	short circuit, overload, over temperature, battery low, fan fault alarm.						
Communication	USB,RS232, RS485, Parallel port, REPO port, LBS port, Backfeed port, Intelligent slot, SNMP card (optional), Relay card (optional)						

ENVIRONMENTAL

Operating temperature	0°C~40°C						
Storage temperature	-25°C~55°C(no battery)						
Humidity range	0~95% (non condensing)						
Altitude	< 1500m.When>1500m,lower the rated power for use						
Noise level	<58dB	<60dB	<62dB	<63dB	<65dB	<66dB	<68dB

PHYSICAL

Dimension D×W×H (mm) Custom designed

Net weight (kg) Variable

STANDARDS

Safety IEC/EN62040-1,IEC/EN60950-1

StandAlone Ups

Single phase PLMT- SERIES 1-10KVA

The Standalone Online UPS serves as a protective measure for small data centers, offering support for both internal and external batteries. It effectively isolates sensitive devices from the primary power source, utilizing it to charge internal batteries and subsequently delivering a consistent and filtered power supply to the connected equipment.



- ◆ Dual battery support for versatile backup options
- ◆ Power isolation for equipment protection
- ◆ Internal battery charging for continuous power
- ◆ Stable and filtered power supply for reliability
- ◆ Comprehensive protection against surges and outages
- ◆ Compact and efficient design for optimized space
- ◆ Intuitive monitoring and control for effective management.

General Specification

- Optional frequency settings for both input and output: 50Hz, 60Hz, with frequency options available.
- Demonstrates outstanding performance on non-linear loads, particularly for computers and switching power supplies.
- Ensures complete reliability through Intelligent Power Module or IGBT technology.
- Employs DSP (Digital Signal Processor) control and Space-vector control technology.
- Achieves a low output distortion factor while maintaining high efficiency.
- Includes an audible alarm for immediate notifications.
- Features a user-friendly control panel for ease of operation.

Features

- Redundant parallel operation for enhanced reliability
- Provides potential-free output voltage
- Utilizes a complete redundant control architecture
- Achieves an exceptionally fast dynamic response time
- Proven output short circuit protection
- Offers a wide range of ratings with standard IP protection up to 56
- Maintains low voltage ripple to extend battery lifespan
- Includes intelligent battery charge and monitoring control
- Ready and available options for charging Lithium Ion Batteries.

Adds On

- Input THDi of less than 3% with a harmonic filter
- Adjustable voltage settings for different countries
- Option to remove input neutral during installation
- AC/DC Fusible Surge Suppression
- Redundant Fans for improved reliability
- Customizable cabinet color selection using RAL codes
- Multiple cable entry points: top, side, bottom, and rear
- Ingress Protection up to IP66 for enhanced durability
- Communication options include RS485, TCP, SNMP, and GSM
- Automated Battery Testing functionality
- Touch Panel equipped with a Mimic Diagram for user-friendly operation
- Ability to operate in parallel with up to 4 units
- Dedicated DC Load supply for efficient power management.

Long type (Without Battery) 1/2/3/6/10 kVA

MODEL		1 kVA	2 kVA	3 kVA	6 kVA	10 kVA
Phase		Single phase + earth				
Capacity (VA/Watts)		1000VA / 1000W	2000VA / 2000W	3000VA / 3000W	6000VA/6000W	10000VA/10000W
INPUT						
Nominal voltage		200/208/220/230/240VAC			208/220/230/240VAC	
Voltage Range	Low voltage transfer	160Vac±5% @100%-80% load; 140Vac±5% @80%-70% load; 120Vac±5% @70%-60% load; 110Vac±5% @60%-0% load; (<35°C)			120~276Vac	
	Under voltage correction	175Vac±5% @100%-80% load; 155Vac±5% @80%-70% load; 135Vac±5% @70%-60% load; 125Vac±5% @60%-0% load; (<35°C)				
	High voltage transfer	300Vac ±5%			276Vac ±5% 320Vac, 1 hour (static)	
	High voltage correction	290Vac ±5%			276Vac ±5%	
Frequency range		40-70Hz			45-65Hz	
Power Factor		0.990 @100% load (Nominal input voltage)				
Feeding From Generator		Yes				
OUTPUT						
Output voltage		200/208/220/230/240Vac			208/220/230/240Vac	
Power Factor		1			1	
Voltage Regulation		±1% (Battery Mode)				
Frequency Range	Line Mode (synchronized)	47-53Hz veya 57-63Hz				
	Battery Mode	(50/60±0.1)Hz				
Crest Factor		3:1				
Harmonic Distortion (THDv)		≤3% THD linear load ≤6% THD non-linear load			≤2% THD linear load ≤5% THD non-linear load	
Waveflow		Pure Sinewave				
Transfer Time	AC mode ↔ Bat. mode	Zero				
	Inverter ↔ bypass	4ms (Typical)				
Efficiency		>88% (AC mode) >83% (DC mode)	>89% (AC mode) >87% (DC mode)	>90% (AC mode) >88% (DC mode)	>90% (AC mode) >88% (DC mode)	
BATTERY						
Battery Quantity		2	4	6	16/18/20 pcs adjustable	
Charge Voltage		27.4 VDC ±1%	54.7 VDC ±1%	82.1 VDC ±1%	219/246/274 Vdc ±1%	
Charge Current		12A	12A	12A	6A	6A
SYSTEM FEATURES						
Overload	Line Mode	Ambient temperature.<35°C 105%~110%: Load 10 minutes later transfers the load to the bypass. 110%~130%: Load 1 minutes later transfers the load to the bypass. >130%: Load 3 seconds later transfers the load to the bypass.				
	Bypass Mode	8A(Input Fuse)	16A(Input Fuse)	25A(Input Fuse)	50A(Input Fuse)	100A(Input Fuse)
Protection		IP20				
EPO (Optional)		UPS shuts down				
Audio & Visual Alarms		Line failure, Battery low, Overload, System fault				
Communication Interface		USB(or RS232), SNMP adapter(optional), Relay board (optional)				
ENVIRONMENTAL						
Operation Temperature		0°C ~40°C				
Storage Temperature		-25°C ~55°C				
Humidity		20-90 RH @ 0- 40°C (non-condensing)				
Altitude		< 1500m				
Noise Level		< 50dBA 1 from meter			< 55dBA 1 from meter	
DIMENSION & WEIGHT						
DxWxH (mm)		293*144*209	399*144*209	399*144*209	355*191*330	415*191*330
Weight (kg)		4.2	6.3	6.5	10	12
STANDARDS						
Safety		IEC/EN62040-2,IEC/EN60950-1			IEC62040-1, GB4943	
Electro Magnetic Compatibility		IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8			IEC62040-2, IEC60664-1 1.2/50uS+8/20uS 6kV/3kA karşilanır	



Standard Model Without Internal Battery

1/2/3 kVA

MODEL		1K(L)	2K(L)	3K(L)
Capacity (VA/W)		1000VA / 1000W	2000VA / 2000W	3000VA / 3000W
INPUT				
Nominal Voltage		200 / 208 / 220 / 230 / 240 VAC		
Voltage Range	Low Line Transfer	160VAC ±5% @ 100% - 80% load, 140VAC ±5% @ 80% - 70% load, 120VAC ±5% @ 70% - 60% load, 110VAC ±5% @ 60% - 0 (<35°C)		
	High Line Transfer	300VAC ±5%		
Frequency Range		40Hz ~ 70 Hz		
Phase		Single phase with ground		
Power Factor		≥0.99 @ nominal voltage (input voltage)		
THDi		220-230VAC'da ≤%5		
OUTPUT				
Output voltage		200 / 208 / 220 / 230 / 240 VAC		
Power Factor		1		
AC Voltage Regulation		±1% (Bat. Mode)		
Frequency Range	Synchronized Mode	47 ~ 53 Hz or 57 ~ 63 Hz		
	Battery Mode	50 Hz ±0.25 Hz or 60 Hz ±0.3 Hz		
Overload		%105 - %110: UPS shuts down after 10min , %110 - %130: UPS shuts down after 1min , >%130: UPS shuts down after 3sec (<35°C)		
Crest Ratio		3:1		
Transfer Time		≤%2 (linear load), ≤%4 (non-linear load)		
Transfer Time	Line <-> Bat. Mode	0ms		
	Inverter <-> Bypass	4ms (Typical)		
Waveform		Pure Sinewave		
EFFICIENCY				
AC Mode		92%	93%	94%
Battery Mode		86%	87%	91%
BATTERY				
Standard Model	Battery Type	12V 9AH	12V 9AH	12V9AH
	Bttery Numbers	2	4	6
	Recharge Time	4 hours recover to 90% capacity (Typical)		
	Charging Current	1.5A (Max)		
	Charging Voltage	27.4VDC ±%1	82.1VDC ±%1	
Long Run Model	Battery Numbers	2	4	6
	Charging Current	1.0A / 2.0A / 4.0A / 6.0A / 8.0A		
	Charging Voltage	27.4 VDC ±%1	54.7 VDC ±%1	82.1 VDC ±%1
DIMENSIONS & WEIGHT				
Standard Model	D x W x H (mm)	145 x 282 x 220	145 x 397 x 220	190 x 421 x 318
	Weight (kg)	9.8	17	26.2
Long Run Model	D x W x H (mm)	145 x 282 x 220	190 x 421 x318	
	Weight (kg)	4.1	12	14.2
ENVIRONMENTAL				
Operating Temperature		0 - 50°C		
Humidity		%20-90 (non-condensing)		
Noise Level		<50dBA @ 1 meter		
MANAGEMENT				
Smart RS232 or USB		Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux, Unix and MAC		
SNMP (Optional)		Power management from SNMP manager and web browser		



Standard Model Without Internal Battery

6/10 kVA

MODEL		6 kVA	10 kVA
Capacity* (VA/W)		6000 VA / 6000 W	10000 VA / 10000 W
INPUT			
Nominal Voltage		208 / 220 / 230 / 240 VAC	
Voltage Range	High Voltage Transfrer	At %100-%60 load 176VAC ±%5, at %60-%0 load 110VAC ±%3	
	Low Volage Transfrer	300VAC ±%3	
Frequency Range		At 50Hz system 46Hz ~ 54 Hz, At 60Hz system 56Hz ~ 64 Hz	
Phase		Single phase with ground	
Power Factor		≥ 0.99 (@ 100% load)	
OUTPUT			
Output Voltage		208 / 220 / 230 / 240 VAC	
Poer Factor (PF)		1	
AC Voltage Regulation		±1%	
Frequency Range	Synchronized Mode	At 50Hz system 46Hz ~ 54 Hz, At 60Hz system 56Hz ~ 64 Hz	
	Battery Mode	50 Hz ±0.1 Hz veya 60 Hz ±0.1 Hz	
Overload	AC Mode	At 100-110% load 60min, At 110 - 125% load 10min, at 125 - 150% load 1min, at >150% load immediately	
	Battery Mode	At 100 - 110% load 3min, at 110 - 130% load 30sec, at >130% load immediately	
Crest Factor		3:1	
Harmonic Distortion		≤%1 (linear load), ≤%4 (non linear load)	
Transfer Time	Line <-> Battery Mode	0ms	
	Inverter <-> Bypass	0ms	
	Inverter <-> ECO	<10ms (Typical))	
Waveform		Pure Sinewave	
EFFICIENCY			
AC Mode		94%	
Battery Mode		92%	
Battery Model			
Battery Type		12V 7AH	12V 9AH
Numbers of Battery		16	16
Recharge Time		7 hours to recover 90% capacity	9 hours to recover 90% capacity
Charging Current		1 A ±%10 (Max.)	
Charging Voltage		218.4VDC ±%1	218.4VDC ±%1
DIMENSIONS & WEIGHT			
W x D x H (mm)		190 x 367 x 635	190 x 439 x 635
Weight (kg)		58	79
ENVIRONMENTAL			
Operating Temperature		0 - 40°C	
Humidity		<%95 (non condensing)	
Altitude**		<1000 m	
Noise Level		<55dBA (@ 1 meter)	<58dBA (@ 1 meter)
SOFTWARE & MANAGEMENT			
Smart RS232 or USB		Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux, Unix ve MAC	
SNMP (Optional)		Power management from SNMP manager and web browser	



Modular Product



Modular UPS

PLRM SERIES

10-500KVA

The PLRM Series is a scalable, redundant Modular UPS system tailored to ensure high-level availability for high-density data centers and critical applications in a cost-effective manner. With True Online Double Conversion and advanced DSP control technology, its Modular Architecture allows for power and runtime scaling as demand increases or higher availability becomes necessary. Integrating the N+X parallel redundancy technology, this UPS effectively filters out potential network disturbances, providing clean energy to sensitive devices.



- Scalable and redundant design for flexibility and reliability
- True online double conversion technology for continuous power supply
- Advanced DSP control technology for precise management
- Modular architecture for customizable configurations
- N+X parallel redundancy technology for uninterrupted power supply
- Network disturbance filtering for safeguarding sensitive devices
- Cost-effective solution for high-level availability.

General Specification

- ◆ Input and Output at 50Hz or 60Hz, with optional frequency settings.
- ◆ Exceptional performance on Non-linear loads such as computers and switching power supplies.
- ◆ Audible alarm for timely alerts and notifications.
- ◆ User-friendly control panel for easy operation and monitoring.
- ◆ Low Output distortion factor leading to superior power quality.
- ◆ High efficiency to ensure optimal energy usage.
- ◆ Full reliability ensured by Intelligent Power Module or IGBT technology.
- ◆ Control facilitated by DSP (Digital Signal Processor) and Space-vector control technology.

Features

- ◆ Redundant parallel operation for enhanced reliability and scalability.
- ◆ Potential free output voltage for safe and efficient power distribution.
- ◆ Full redundant control architecture ensuring continuous and stable performance.
- ◆ Very fast dynamic response time for quick and effective power management.
- ◆ Output short circuit proof design for increased safety and protection.
- ◆ Wide range of ratings with IP protection up to 56 as a standard feature.
- ◆ Low voltage ripple, effectively extending the battery life span.
- ◆ Intelligent battery charge and monitoring control for optimized battery performance.
- ◆ Readiness and availability of Lithium Ion Battery charging options for versatile power supply solutions.

Adds On

- ◆ Input THDi of less than 3% with a harmonic filter for improved power quality.
- ◆ Support for various voltage settings, accommodating diverse requirements globally.
- ◆ Option to remove the input neutral during installation for customized setups.
- ◆ Fusible Surge Suppression for both AC and DC inputs, ensuring reliable protection.
- ◆ Incorporation of redundant fans for enhanced cooling and system resilience.
- ◆ Customizable cabinet color selection using RAL codes for personalized aesthetics.
- ◆ Multiple cable entry points: top, side, bottom, and rear, allowing flexibility
- ◆ Ingress Protection rated up to IP66, ensuring robust resistance to dust and water.
- ◆ Communication options include RS485, TCP, SNMP, and GSM for seamless connectivity.
- ◆ Automated Battery Test feature for convenient maintenance and reliability.
- ◆ User-friendly Touch Panel with a Mimic Diagram for intuitive operation.
- ◆ Ability to operate in parallel with up to 4 units, ensuring scalability and reliability.
- ◆ Provision of a dedicated DC Load supply for efficient power distribution.

20-90KVA

10/15kVA power model in 2U height, saving a great amount of space, easy for capacity expansion.

UPS can be integrated with battery cabinet, PDU, and external maintenance bypass, offering an excellent choice for data center

MODEL	PLRM060/10X	PLRM040/10X	PLRM020/10X	PLRM090/15X	
CAPACITY (kVA)	60kVA	40kVA	20kVA	90kVA	
INPUT					
Phase	3P + N + G (380/400/415V)				
Voltage Range	304-478Vac (line-line), 100% load; 228-304Vac, load derated from 100%-75% linearly				
Frequency	40Hz ~ 70 Hz				
Power Factor	≥ 0.99				
THDi	THDi<4% @ 100% linear load				
OUTPUT					
Power Factor	1.0				
Voltage	3 phase: 380/400/415V 1 phase: 220/230/240V				
Voltage Regulation	1.5%				
Overload Capability	110% for 1 hour; 125% for 10 min; 150% for 1 min; >150% for 200 ms				
Crest Factor	3:1				
THDu (Harmonic Distortion)	<1% THD (linear load), <5.5% THD (non linear load)				
BATTERY					
Voltage	±240Vdc				
Charge Power	20%*System Power				
Charge Voltage Precision	±1%				
SYSTEM					
System Efficiency	Normal mode: 95%; ECO mode: 98%; Battery mode: 94.5%				
Display	7.0" Color touch screen LCD + LED + Keyboard				
IP Class	IP20				
Interface	Standard: RS232, RS485, Dry contacts; Optional: SNMP				
Operation/Storage Temperature	0-40 °C / (-25)-70 °C				
Relative Humidity	0-95%(non-condensing)				
Noise	56dB @50% load (1 meter away)				
PHYSICAL					
Weight	Cabinet	70kg	51kg	42kg	70kg
	Power Module		15.3kg		15.5kg
Dimension (W*D*H)	Cabinet (mm)	485*751*1033	485*697*575	485*697*398	485*751*1033
	Power Module (mm)		436*590*85		436*590*85

60-200KVA

20kVA power model in 2U height, saving a great amount of space, easy for capacity expansion.

Up to 20 power modules in parallel online hot-swappable N+X redundancy

MODEL	PLRM200/20	PLRM120/20	PLRM060/20	PLRM060/20-TX	
CAPACITY (kVA)	200kVA	120kVA	60kVA	60kVA	
Power Module	PM20(20kVA)				
INPUT					
Phase	3Phase + Neutral + Ground, 380V /400V /415V (line to line)				
Voltage Range	304-478Vac (line-line), full load; 228-304Vac (line-line), load decrease linearly according to the min phase voltage				
Frequency	40Hz ~ 70 Hz				
Power Factor	> 0.99				
THDi	THDi<3% @ 100% linear load				
OUTPUT					
Power Factor	1				
Voltage	380/400/415V				
Voltage Regulation	1.5%				
Overload Capability	110% for 1 hour; 125% for 10 min; 150% for 1 min; >150% for 200 ms				
Crest Factor	3:1				
THDu (Harmonic Distortion)	<1% THD (linear load), <5.5% THD (non-linear load)				
BATTERY					
Voltage	±240Vdc				
Charge Power	20%*System Power				
Charge Voltage Precision	±1%				
SYSTEM					
System Efficiency	Normal mode: 95%; ECO mode: 98%; Battery mode: 94.5%				
Display	LCD + LED, Touch Screen + Keyboard				
IP Class	IP20				
Interface	Standard: RS232, RS485, Dry contacts; Optional: SNMP				
Operation/Storage Temperature	0-40 °C / (-40)-70 °C				
Relative Humidity	0-95%(non-condensing)				
Noise	56dB (1 meter away)				
PHYSICAL					
Weight	Cabinet	179kg	145kg	105kg	400kg
	Power Module	22kg			
Dimension (W*D*H)	Cabinet (mm)	485*751*1033	485*697*575	485*697*398	485*751*1033
	Power Module (mm)	436*590*85		436*590*85	

100-500KVA

The PLRM series modular, online UPS ranging from 50kVA to 500kVA is designed to protect any critical load for medium and large data centers achieving maximum availability.

MODEL	PLRM100/50X	PLRM200/50X	PLRM300/50X	PLRM500/50X	
CAPACITY (kVA)	100kVA	200kVA	300kVA	500kVA	
Power Module	50kVA/50kW				
INPUT					
Phase	3Phase + Neutral + Ground, 380V /400V /415V				
Voltage Range	304-478Vac (line-line), full load; 228-304Vac, load decrease linearly				
Frequency	40Hz ~ 70 Hz				
Power Factor	> 0.99				
THDi	THDi<3% @ 100% linear load				
OUTPUT					
Power Factor	1				
Voltage	380/400/415V				
Voltage Regulation	1.5%				
Overload Capability	110% for 1 hour; 125% for 10 min; 150% for 1 min; >150% for 200 ms				
Crest Factor	3:1				
THDu (Harmonic Distortion)	<1% THD (linear load), <5.5% THD (non-linear load)				
BATTERY					
Voltage	±240Vdc				
Charge Power	20%*System Power				
Charge Voltage Precision	±1%				
SYSTEM					
System Efficiency	Normal mode: 96%; Battery mode: 96%				
Display	10.4" Color touch screen LCD + LED, + Keyboard				
IP Class	IP20				
Interface	Standard: RS232, RS485, USB, Dry contacts(programmable); Optional: SNMP, AS400, Parallel kit, Battery cold start(standard for 300kVA and 500kVA), Lightning protection components, Dust filter, LBS				
Operation/Storage Temperature	0-40 °C / (-25)-70 °C				
Relative Humidity	0-95%(non-condensing)				
Noise	72dB @100% load; 69dB @ 45% load (1 meter away)				
PHYSICAL					
Weight	Cabinet	120kg	170kg	220kg	450kg
	Power Module	45kg			
Dimension (W*D*H)	Cabinet (mm)	600*980*1150	650*960*1600	650*960*2000	1300*1100*2000
	Power Module (mm)	510*700*178			

MODULAR RECTIFIER

SDM SERIES

The high-frequency commutated Modular rectifiers are designed to provide direct current stabilized power.

This system's advanced modular design makes it a compact system and can provide enough power to meet the requirements of Communication and Power Industrial Systems.

This system consists of one or multiple rectifier modules together with the monitor module. The power of rectifier systems can vary, depending on the quantity of rectifier modules.



Authorized Distributor | INDONESIA
PT. ANEXCO MITRA ABADI
Tel : 0254 375966 | Fax : 0254 375961
Email : marketing@anexco.co.id
www.anexco.co.id

General Specification

- ◆ High-frequency commutated Modules (IGBT)
- ◆ Modules cooled by forced ventilation
- ◆ 19" rack and cabinet mount configurations
- ◆ Possibility of redundant module operation
- ◆ Room temperature probe included in the equipment
- ◆ Output breakers for loads
- ◆ Audible & LED Alarm
- ◆ User-friendly HMI (All parameters, and calibrations can be made through the frontpanel)
- ◆ High-frequency
- ◆ LVD (Battery Low Voltage Disconnect)

Features

- ◆ Remote monitoring: serial port, Ethernet, and dry contacts
- ◆ Temperature Compensated Battery Charging
- ◆ Battery test function
- ◆ Operation with different types of batteries: Lead Acid VRLA AGM&Gel, NiCd, Li-Ion
- ◆ Built-in intelligent battery management
- ◆ Alarm- and event logger, with a date and time-stamped event log memory
- ◆ Large communication facility options
- ◆ Monitoring of all parameters via the front panel display

Adds On

- ◆ Voltage Drop Diode Unit
- ◆ Digital or analog voltage and current meters
- ◆ Internal cabinet lighting
- ◆ Door open sensor
- ◆ Heating resistance to avoid condensation
- ◆ Earth leakage current sensor (positive and negative).
- ◆ Removing input neutral at the site
- ◆ Fusible Surge Suppression (AC/DC)
- ◆ Redundant Fans
- ◆ Cabinet color can be chosen from RAL codes
- ◆ Cable Entry (Top/side/bottom/rear)
- ◆ Ingress Protection: up to IP66
- ◆ RS485, TCP, SNMP and GSM Communication
- ◆ Automatic Battery Test

TYPE		Modular RECTIFIER-CHARGER
System	Input Voltage (1ph)	110 / 125 / 220VAC \pm 15%
	Input Voltage (3ph)	208 / 220 / 380 / 440 / 480 / 690 VAC \pm 15%
	Frequency	50 Hz, 60 Hz \pm 5%
	Input Transformer (optional)	Autotransformer or Isolation Transformer
	Output Current	depends on the number of rectifier modules
	Cabinet dimensions	Variable according to the project
	Input Voltage	90 ~ 290 VAC, rated: 110 VAC, 220 VAC (1 phase) or 208 VAC, 240 VAC (dual phase)
Rectifier module	Frequency	45 Hz – 65 Hz
	Maximum Input Current	Variable according to the project
	Power Factor	\geq 0.98 @ 220 VAC, at 100% load
	Efficiency	\geq 93.2% @ 220 VAC, at 100% load
	Rated Output Voltage	24/48/110/125/220VDC
	Output Voltage Range	\pm 15%
	Rated Power	3000/2500 W /1200W
	Rated Output Current	Variable
	Noise (peak-peak)	\leq 200 mV (0 ~ 20 MHz)
	Weighted noise	\leq 2 mV (300 Hz – 3400 Hz)
	Line Regulation	\pm 1%
	Load Regulation	\pm 0.5 %
	Output Voltage Accuracy	\pm 0.5 %
	Ripple coefficient	\leq 0.5 %
	Current sharing	$\leq \pm$ 5 % (176~264 VAC, 50%~100% carga)
	Working Temperature	40 to +65°C (full load @ +55°C)
	Communication	Alarm output
Digital Input		4 Wet Contact Input Ports
Temperature Input		1 Battery Temperature SensorPort
Communication ports		RS232/RS485, Ethernet Port (TCP/IP Communication) IEC 61850 (Optional)
HMI		LCD Panel
Environment	Operating temperature	-40°C to +65°C
	Storage temperature	-40°C to +70°C
	Relative Humidity	5% ~ 95% (non-condensing)
	Operating Altitude	\leq 2000m from MSL (1% temperature derate each 200m after 2000m)
	Cooling System	Convection / Forced Ventilation
Standards	Safety	GB 4943-2001
	EMC	EN 55022, Class A / GB9254, Class A / FCC Part 15, Class A GB17626.2-1998 / GB17626.4-1998 / GB17626.5-1999 / GB17626.6-1998
	EMS	GB17626.8-1998 / GB17626.10-1998 / GB17626.3-1998 GB17626.12-1998 / IEC 61000-3-2 [6] Class A

*We will find a product
or make a new one*

Contact us:

USA-Missouri

5151 Industrial Loop Rd, Hannibal, MO 63401, USA
Office Phone Number : [+1 \(573\)-629-18 00](tel:+1(573)6291800)

Spain- Valencia

C/ de les Arts Gràfiques, 28, 46010 València, Valencia, Spain
Office Phone Number: [+34 \(670\) 35 71 74](tel:+34(670)357174)

Turkey- Istanbul

Yayla Mahallesi, Durmaz Sokak. No:1, 34994/Tuzla/Istanbul
Office Phone Number: [+90 \(551\)-836-5757](tel:+90(551)8365757)

Authorized Distributor I INDONESIA
PT. ANEXCO MITRA ABADI
Tel : 0254 375966 | Fax : 0254 375961
Email : marketing@anexco.co.id
www.anexco.co.id