UPS
UNINTERRUPTIBLE POWER SUPPLY

CATALOGUE

A Group brand | legrand

inform

COMPANY PROFILE

Inform Electronic, one of the European leading power solution specialist, is established in 1980 with the aim of designing and building industrial electronic systems. Soon after, it diversified into the production, and marketing of standard professional electronic equipment, and special projects.

The company always combines its experience with its innovative identity and is recognized by its worldwide technology leading character. Right business understanding of Inform makes the company one of the most wanted brands in the world with its exceptional growth ratio. The Company has 31,000 m² closed production area, committed to the manufacturing of electrical products and electronic equipments.

Analysing infrastructural conditions, and customer needs, the company decided to provide complete solutions. Inform product range varies from Uninterruptible Power Supply (UPS) Systems, Voltage Regulators, to DC Power Supply, Telecom Equipments, Battery chargers, Inverters, 19" rack cabinets and other electrical products and electronic equipments.

Since its foundation, INFORM ELECTRONIC has based its strategy on below main policies:

- Quality understanding for its products and services,
- Tailored solutions to specific customer needs,
- Customer satisfaction and happiness,
- After sales service and support
- Continuous improvement for operational excellence and advanced technology

Inform is an official ISO certified company. The company has also Gost, Soncap, and CE certifications. All the Inform products are designed and produced with the worldwide quality understanding, and ISO rules.

Inform was acquired by Legrand Group in 2010.
Legrand is global specialist in electrical and digital building infrastructures. The Group has direct presence in more than 70 countries and number of employee is more than 31.000 people.

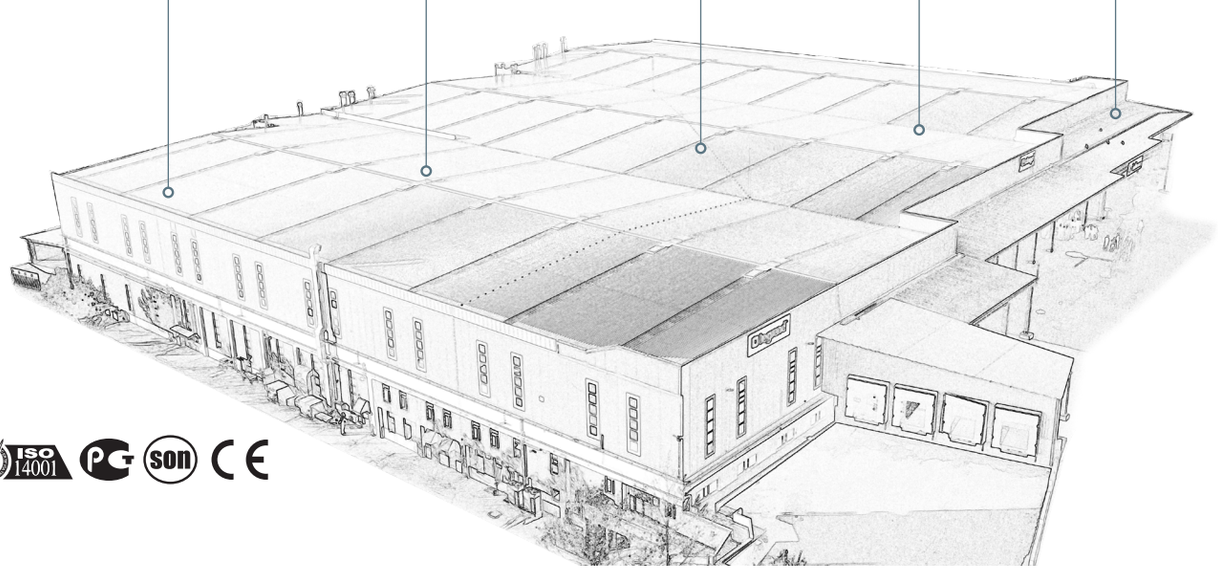
35+
Years experince

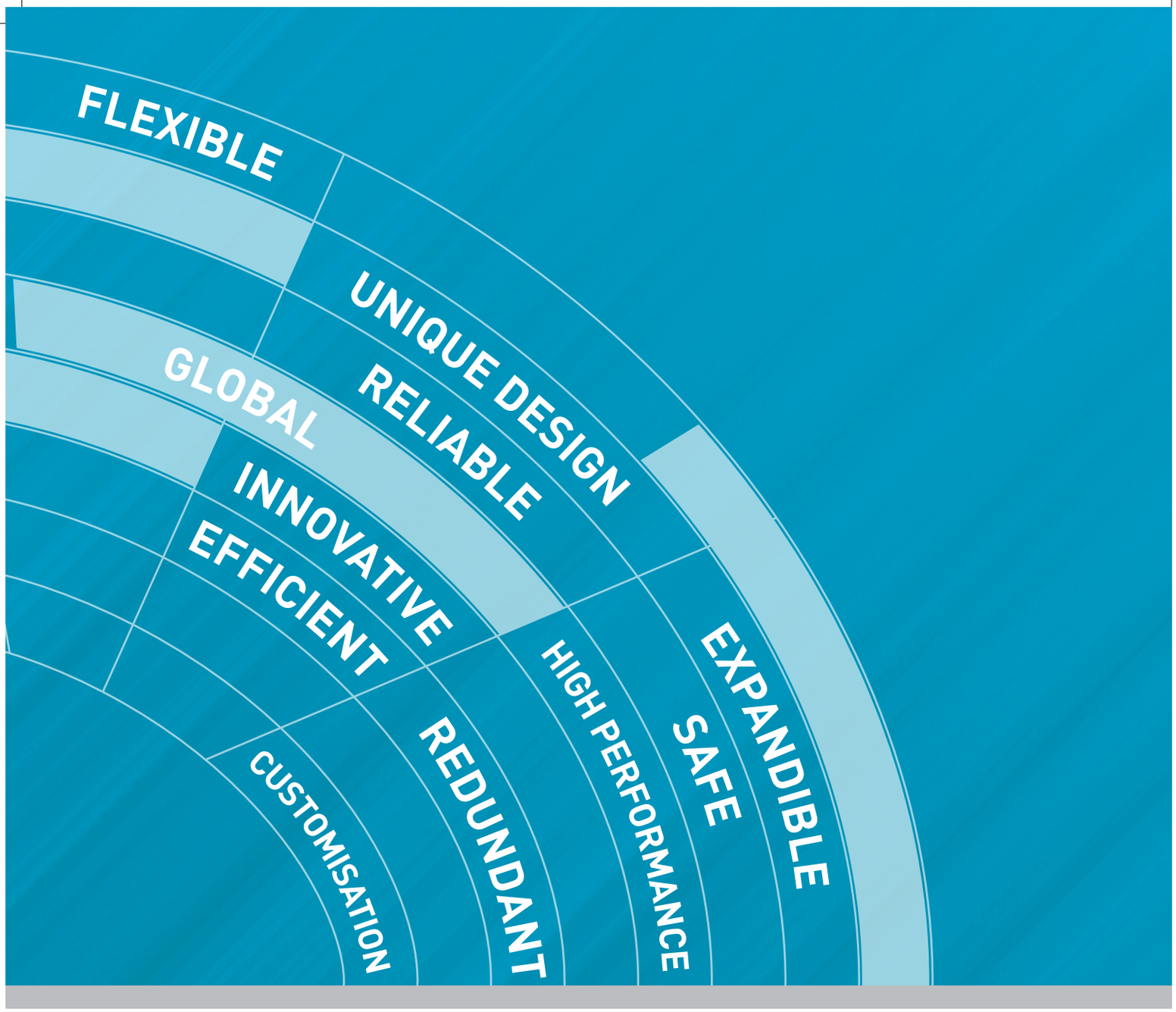
31.000+
Manufacture base (m²)

10.000+
Monthly production

450+
Employees

30+
RnD Engineers





Quality Control

Inform is able to produce every single part of its products in its premises; electronic boards, mechanical parts, plastic cases, cabling, transformers and many others. Final assembly and testing are done at Inform premises. This gives to Inform the ability to control the **quality at every step** of production.

Tailor Made Solutions

If standard product features do not fulfill the customer needs, Inform designs can be adapted to a tailor-made specification due to its ability in manufacturing every single part of own products. Whether it is the voltage, frequency and electrical installation standards, Inform provides its customers complete solutions with the **flexible production** capability.

Thinking Globally, Acting Locally

Having presence everywhere in the world, Inform believes that every market has its own dynamics to be managed closely. So inform has close relation with its partners and supports them with local policies based on global experience.

Solution Provider

From consumer to industrial and defense grade, from customized to standard, Inform's products display a great variety. **Know-how**, technology developer identity, integrated production, wide product portfolio and engineering skills help Inform to **offer turnkey solutions.**

Presales Support

Inform distribution network has presence in 5 continents and presents solution to different demands. This enriches Inform's know-how and experience and all of them are shared with the partners. **Technical Presales support** is essential to analyze the requirements and offer the optimum solution.

Inform Machinery Park

The company has PCB assembling facility in an air-conditioned, specially prepared area for electro static sensible components. In addition to its **automatic assembling** SMD lines, the company has **manual assembling** lines for big components like transformers, coils, and connectors. Quality is the key point for Inform. All the finished PCB is controlled by microscope and optic devices with laser.

APPLICATION FIELDS

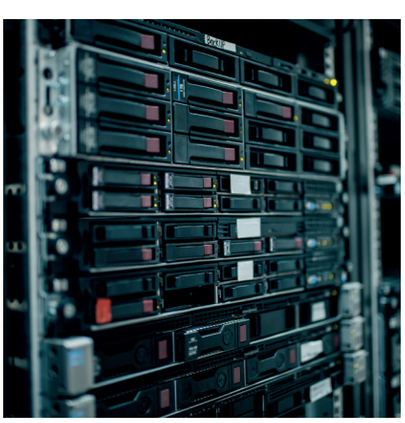
LINE-INTERACTIVE AND ONLINE UPS

Shops

Small / Home office- SOHO

Home Entertainment systems

ONLINE STANDALONE / MODULAR

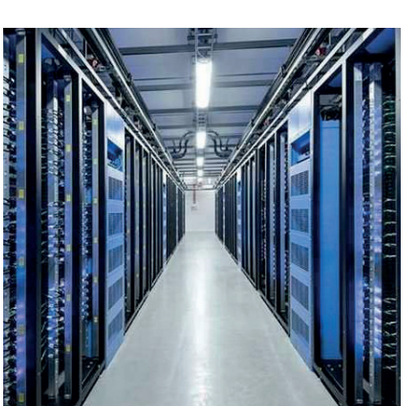


Hospital and healthcare

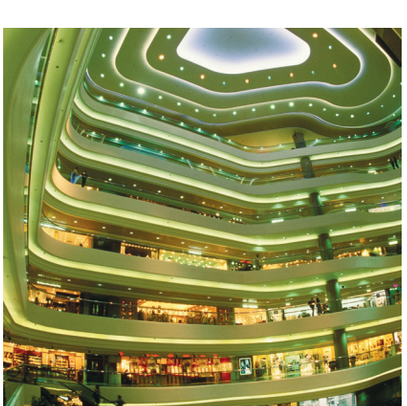
Office and working areas

Transport / Banking / Defense

STANDALONE / MODULAR



Data center



Tertiary / Shopping Mall

Industry

UPS PRODUCT RANGE

PRODUCT		POWER													
LINE INTERACTIVE		**600 VA**	**800 VA**	**1000 VA**	**1500 VA**	**2000 VA**	**3000 VA**								
Line Interactive	GUARDIAN/ GUARDIAN LCD	√	√	√	√	√									
	INFORMER COMPACT			√		√	√								
ONLINE UPS		**1 kVA**	**2 kVA**	**3 kVA**	**5 kVA**	**6 kVA**	**10 kVA**	**15 kVA**	**20 kVA**	**30 kVA**	**40 kVA**				
1 Ph in -1 Ph out	SINUS / SINUS rack	√	√	√											
	SINUS LCD /convertible	√	√	√											
	SINUS EVO SERIES	√	√	√											
	DSP EVO SERIES					√	√								
	DSP MULTIPOWER /convertible				√	√	√								
	DSP FLEXIPOWER			√	√	√	√								
3 Ph in - 1 Ph out	DSP MULTIPOWER /convertible						√	√	√						
	DSP FLEXIPOWER						√								
	SAVER PLUS DSP							√	√						
	DSP MULTIPOWER /tower							√	√						
	PYRAMID DSP						√	√	√	√	√				
ONLINE UPS		**10 kVA**	**15 kVA**	**20 kVA**	**30 kVA**	**40 kVA**	**60 kVA**	**80 kVA**	**100 kVA**	**120 kVA**	**160 kVA**	**200 kVA**	**250 kVA**	**300 kVA**	**400 kVA**
3 Ph in - 3 Ph out	FORTE Series	√	√	√	√	√	√	√	√	√	√	√	√		
	PYRAMID DSP Premium	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	PYRAMID DSP	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	PYRAMID DSP T	√	√	√	√	√	√	√	√	√	√	√	√	√	
	MODULERA Series			√		√	√	√	√	√	√	√			

INDEX

HOME/OFFICE EMERGENCY

Guardian & Guardian LCD

1 Phase In – 1 Phase Out / 600 VA – 2000VA

- Microprocessor controlled Line Interactive Technology
- Boost and Buck Automatic Voltage Regulation (AVR)
- LCD or LED Display Panel
- Advanced Battery Management (ABM)
- Input Frequency auto sensing (50/60 Hz)
- Auto restart after mains recovery
- Charging during switched off mode
- Short circuit and overload protection
- Cold Start Function
- USB Communication Interface and Remote Monitoring Software*
- RJ45 or RJ11 tel-modem surge protection**
- Compact size and user friendly operation

* Available at AP models only
**Available at LCD AP models only

VI TYPE UPS LINE INTERACTIVE | TOWER | PLUG & PLAY | USB | LCD LCD DISPLAY (600-2000 VA)

TECHNICAL SPECIFICATIONS

MODEL	GUARDIAN LED - LCD A/AP				
Nominal Power (VA)	600VA	800VA	1000VA	1500VA	2000VA
INPUT					
Input Voltage	220V/230V				
Input Voltage Range	162-290VAC				
Input Frequency	50 or 60 Hz (Auto-sensing)				
OUTPUT					
Output Power Factor	0,6				
Output Voltage (Battery)	220V or 230V ± 10%				
Output Waveform (Battery)	Simulated Sinewave				
Output Frequency (Battery)	50 or 60 Hz ± 1Hz				
Output Voltage Regulation (AVR)	AVR automatically increases output voltage by 15% above of input voltage if input is -10% to -26% of nominal AVR automatically decreases output voltage by 15% below of input voltage if input is +10% to +22% of nominal				
Transfer Time	2 - 6 ms				
Outputs	1xSchuko & 1x IEC C13		2xSchuko & 2xIEC C13		
BATTERY					
Battery Type	Maintenance Free Lead Acid Batteries				
Battery Charge Duration	6 hours (90% capacity)				
Nominal DC Voltage	12VDC		24VDC		
Battery Quantity	1 x 12V 7Ah	1 x 12V 9Ah	2 x 12V 7Ah	2 x 12V 9Ah	
DISPLAY					
LED Display	Fault (not for 600VA model), Battery Mode, Online Mode				
LCD Display	Input-Output Voltage, Battery Capacity, Load and UPS Status				
LCD Display Dimension (mm)	27x19				
ALARMS					
Alarms	Battery Mode (Sounding every 10 seconds), Low Battery (Sounding every seconds), Overload (Sounding every 0.5 seconds), Fault (Continuously sounding)				
PROTECTION					
Protection	Short-circuit, Overload, Battery overcharge-discharge, Tel/Modem (only for AP model)				
COMMUNICATION					
Interface	AP MODELS: USB PORT, LCD (AP) MODELS: USB PORT and RJ11 (@ 600AP-800AP), RJ45 (@1000AP, 1500AP, 2000AP)				
Software	Present at AP models only				
ENVIRONMENTAL					
Operational Temperature	0 to 40°C (20 to 25 recommended for longer battery life time)				
Humidity	% 0-95 (non-condensing)				
Noise Level (1m distance)	<40dBA				
Protection Level	IP20				
PHYSICAL					
Weight (kg)	4,2	4,9	8,2	10,4	11
Dimensions (WxDxH) mm	101x279x142		130x320x182		
STANDARDS					
Standards	EN 62040-1-1 (Safety), EN 62040-2 (EMC)				

Informer Compact

1 Phase In - 1 Phase Out / 1000VA/2000VA/3000VA

- Pure Sinewave Output for any critical load
- User Friendly LCD Display
- Boost and buck Automatic Voltage Regulation
- 97% High Efficiency in Normal Mode
- Communication Port and Remote Monitoring Software
- Overload and Short Circuit Protection
- Advanced Battery Management
- Discharge Protection
- Fault Alarms and State Warnings
- Cold Start Function
- Compact size, light weight and low noise

VI TYPE UPS LINE INTERACTIVE | TOWER | PLUG & PLAY | USB | LCD LCD DISPLAY (1000, 2000, 3000VA)

TECHNICAL SPECIFICATIONS

MODEL	INF-C1000	INF-C2000	INF-C3000
Capacity (VA)	1000	2000	3000
INPUT			
Voltage	220/230/240VAC ± 25% (adjustable from DIP switches on ups)		
Frequency	50 or 60Hz ± 5%		
OUTPUT			
Power Factor	0.6		
Voltage(on mains)	220/230/240VAC ± 12%		
Voltage(on battery)	220/230/240VAC +3% -10%		
Wave Form	Sine Wave, THD < 3 %		
Frequency(on battery)	50 or 60 Hz ± 0.5%		
Voltage Regulation (AVR)	AVR automatically increase output voltage 15% above input voltage if -9% to 25% of nominal. AVR decrease output voltage 15% below input voltage if +9% to +25% of nominal		
Transfer Time	4 ms.		
Overload	UPS automatically shuts down if overload exceeds 110% of nominal at 10min. (AC Mode) and if overload exceeds 100% of nominal at 10sec. (Battery model)		
Outlets	1 pc Schuko & 2 pcs IEC C13	1 pc Schuko & 3 pcs IEC C13	1 pc Schuko & 3 pcs IEC C13
BATTERY			
Type	Maintenance-free lead acid batteries		
Recharge Time	2 to 4 hours to 90%		
Voltage	24Vdc	48Vdc	
Quantity	2x12V 7Ah	4x12V 7Ah	4x12V 9Ah
Protection	Automatic self-test & discharge protection, replace battery indicator		
DISPLAY			
LED Display	Utility Normal, Backup, UPS Fault and Battery condition		
LCD Display	Load Level, Battery Level, Bypass, AVR, Battery Low-Replace-Fault, UPS Fault, Overload		
ALARMS			
Alarms	Line Failure, Battery Low, Overload and Fault		
PROTECTION			
	Spike Protection (320 joule, 2 ms), overload protection, short circuit protection		
COMMUNICATION			
Interface (Communication Ports)	USB Standard		
Software	Standard		
ENVIRONMENT			
Operating Temperature	0-40 °C		
Humidity	0 to 95% non-condensing		
Audible Noise at 1m	< 40 dBA	< 45 dBA	
Protection Class	IP20		
PHYSICAL SPECIFICATIONS			
Net Weight (kg)	15.5	23	27
Dimensions (mm) WxDxH	175x370x247	175x427x247	
STANDARDS			
Standards	EN 62040-1-1 (safety), EN 62040-2(EMC)		

HOME/OFFICE DATA CENTER MEDICAL INDUSTRY TRANSPORTATION EMERGENCY

Sinus

1 Phase In - 1 Phase Out / 1kVA – 3kVA

- Microprocessor Controlled Online Double Conversion Technology
- Pure sinewave output less than 3% THD
- Wide input voltage range ±27% of nominal
- Smart RS-232 communication port
- Internal SNMP Slot Card Option
- Management software compatible
- Input Power Factor Correction PFC (>0.98)
- Overload & short circuit protection
- Cold start (DC power on)
- Genius battery management (GBM)
- Compact size, light weight & low noise
- Rack version available

19" Rack Mount Type

VFI TYPE UPS ONLINE · TOWER · RACK · PLUG & PLAY · USB

TECHNICAL SPECIFICATIONS

MODEL	SS 210	SS 220	SS 230
Capacity (kVA)	1	2	3
INPUT			
Voltage	160VAC - 280VAC		
Frequency	50/60 Hz ±5%		
Power Factor	0,98		
OUTPUT			
Output Power Factor	0,7		
Voltage	220VAC / 230 / 240VAC		
Voltage Regulation	±%2		
Frequency	50/60 Hz (Auto detection)		
Frequency Regulation	± 0,5%		
Harmonic Distortion	<3% (for linear loads)		
Crest Factor	3:1		
Output Waveform	Sinusoidal		
Overload Capacity	100%-120% for 60 seconds, 120%-150% for 10 seconds		
Whole efficiency	up to 88%		
Inverter efficiency	>90%		
Transfer Time	0ms		
Outlets	2pcs IEC C13 & 1pc Schuko Outlets	3pcs IEC C13 & 1pc Schuko Outlets	3pcs IEC C13 & 1pc Schuko Outlets
BATTERY			
Type	Maintenance-free lead acid batteries		
Recharge Time	8 hours(to 90% of full capacity)		
Voltage	36VDC	72VDC	96VDC
Internal Battery	3 pcs 12V 7Ah	6 pcs 12V 7Ah	8 pcs 12V 7Ah
Back Up Time Full Load	6 min		5 min
Half Load	15 min		12 min
DISPLAY			
LED Display	Utility, Inverter, Bypass Mode, Fault, Overload, Battery Low, Self-test, Load/Battery Level		
ALARMS			
	Line Failure, Battery Low, Transfer to Bypass, Failure Events		
PROTECTION			
	short circuit, over temperature, overload, high voltage, battery low		
COMMUNICATION			
Interface (Communication Port)	RS-232 Standard		
Monitoring and Management Software	Standard		
ENVIRONMENT			
Temperature	0°C - 40°C		
Humidity	0-95% non-condensing		
Noise Level (1m Distance)	<45dBA		
Protection Class	IP20		
PHYSICAL SPECIFICATIONS			
Tower Type			
Net Weight (kg)	15	29	35
Dimensions (mm) WxDxH	147x401x223	130x475x360	190x450x360
19" Rack Mount Type			
Net Weight (kg)	16	28	37
Dimensions (mm) WxDxH	483x390x88	483x485x130	483x460x192
STANDARDS			
Standards	EN 62040-1-1 (safety), EN 62040-2(EMC)		
ACCESSORIES			
Optional	Internal&External SNMP, Dry Contact Board, USB Board, Internal Additional Charger for External Batteries, External Manual Bypass Panel		

Sinus LCD

1 Phase In - 1 Phase Out / 1kVA – 3kVA

- On-line 'double conversion' technology
- Real Digital Signal Processor (DSP) Controller
- Power factor correction PFC (>0,99)
- User friendly LCD display
- Programmable Receptacles
- Wide input voltage range and frequency
- Availability to configure as 50/60Hz Frequency Converter from LCD Panel
- Smart communication port and SNMP management capability
- Hot Swappable Battery
- Emergency shutdown control through EPO
- Overload & short circuit protection
- Cold start (DC power on)
- Genius battery management (GBM)
- RS232, USB and SNMP can be activated simultaneously
- Compact size, light weight & low noise

VFI TYPE UPS ONLINE | CONVERTIBLE (RACK/TOWER) | PLUG & PLAY | USB | LCD LCD DISPLAY (1-3kVA)

TECHNICAL SPECIFICATIONS

MODEL	SS LCD 210	SS LCD 220	SS LCD 230
Power(kVA)	1	2	3
INPUT			
Voltage	160VAC - 288VAC		
Frequency	50/60 Hz ± 5% (Auto Sensing)		
Power Factor	>99%		
OUTPUT			
Power Factor	0,8		
Voltage	220VAC / 230 / 240VAC		
Voltage Regulation	±%1		
Frequency	50/60 Hz		
Frequency Regulation	± 0,1%		
Harmonic Distortion	<3%		
Crest Factor	3:1		
Output Waveform	Sinusoidal		
Overload Capacity	100%-120% for 30 seconds		
	120%-150% for 10seconds		
Whole efficiency	>85%		>88%
Transfer Time	0ms		
Outlets	6 pcs IEC C13 or 2pc Schuko	6 pcs IEC C13 or 2pcs Schuko	4pcs IEC C13 or 2pcs Schuko
BATTERY			
Type	Maintenance-free lead acid batteries		
Recharge Time	3 hours (to 90% of full capacity)		
Voltage	36VDC	72VDC	
Internal Battery	3pcs 12V 7Ah	6pcs 12V 7Ah	6pcs 12V 9Ah
Back Up Time Full Load	5 min		4 min
Half Load	12 min		10 min
Cold Start	YES		
DISPLAY			
LED Display	Utility or Bypass, Battery Low, Battery Abnormal, Overload, Site Wiring Fault, Service Mode, UPS Off, UPS Abnormal		
LCD Display	Input /Output Voltage and Frequency Values, Load%, Battery Voltage, Internal Temperature		
ALARMS			
	Line Failure, Battery Low, Over Load, Failure Events		
PROTECTIONS			
	Short Circuit, Over Temperature, Overload, High Voltage, Battery Low, EPO		
COMMUNICATION			
Interface	RS232 and USB		
ENVIRONMENT			
Temperature	0°C - 40°C		
Humidity	0% - 95% (without condensation)		
Noise Level(1m distance)	<50dBA (at 1 meter)		
Protection Class	IP 20		
PHYSICAL			
Net Weight (kg)	16	29,5	30
Dimensions (mm) WxDxH (Rack)	440x450x88	440x650x88	440x650x88
STANDARDS			
	EN 62040-1-1 (safety), EN 62040-2(EMC)		
ACCESSORIES			
	Internal&External SNMP, Dry Contact Board, External Manual Bypass, Rail Kit, Software		

Sinus EVO

1 Phase In - 1 Phase Out / 1kVA – 3kVA

- On-line 'double conversion' technology
- High Output Power Factor (0,9)
- Input Power Factor correction PFC (>0,99)
- User friendly LCD display
- High Efficiency
- Wide Input Voltage & Frequency Range
- Smart Battery Management System
- 50/60Hz Frequency Converter Operation Mode
- Wide communication option
  Standard: RS-232 and USB
  Optional: SNMP, Dry contact board, Modbus, EPO
- ECO Mode operation feature
- Environment Friendly

VFI TYPE UPS ONLINE | TOWER | PLUG & PLAY | USB | LCD DISPLAY (1-3kVA)

TECHNICAL SPECIFICATIONS

MODEL		Sinus EVO 1kVA	Sinus EVO 2kVA	Sinus EVO 3kVA
Output Power Factor		0.9		
INPUT				
Input Voltage Range		120- 300VAC		
Input Frequency Range		40Hz ~ 70 Hz		
Phase		1PH - N - PE		
Power Factor		⩾ 0.99 @ nominal input voltage		
OUTPUT				
Output Voltage		208/220/230/240VAC		
Voltage Regulation		±2% (Online Mode), ±1% (Battery Mode)		
Frequency		47 ~ 53 Hz or 57 ~ 63 Hz (Synchronized Range)		
Frequency (@Battery Mode)		50 Hz ± 0.5% or 60Hz ± 0.5%		
Overload		105%~110%: 10 minute ,110%~130%: 1 minute, >130%: 3 second		
Crest Factor		3:1		
THD		⩽ 3 % THD (linear load); ⩽ 6 % THD (non-linear load)		
Transfer Time	Online Mode - Battery Mode	0		
	Inverter - Bypass	4 ms (typical)		
Battery Mode Waveform		Pure Sinus		
Outputs		3xIEC Type + 1xSchuko		3xIEC Type + 2xSchuko
Eco Mode		Present		
Frequency Converter		Present		
EFFICIENCY				
Online Mode		90%		
Battery Mode		88%		
BATTERY				
Battery Type		12 V / Maintenance-free lead acid batteries		
QTY		2 x 7Ah	4 x 9Ah	6 x 9Ah
Charge Time		4 hour 90% capacity (typical)		
Charge Current		1.0 A (max.)		
Automatic Battery Test		Present (@ start-up, 1/per week)		
Charge Voltage		27.4 VDC ± 1%	54.7 VDC ±1%	82.1 VDC ±1%
PHYSICAL				
Dimensions W x D x H (mm)		282 x 145 x 220	397 x 145 x 220	421 x 190 x 318
Weight (kg)		9,8	17	27,6
LCD Display (mm)		55x27.5		
ENVIRONMENTAL				
Temperature		0- 40°C (20 to 25 recomended for longer battery life time)		
Humidity		95 % RH (non-condensing)		
Noise Level (1m distance)		<50dBA		
COMMUNICATION				
Standard		Smart RS-232 and USB (Software)		
Optional		SNMP, Dry Contact, Modbus, EPO		

DSP EVO

1 Phase In – 1 Phase Out / 6kVA – 10kVA

- Microprocessor controlled Online 'double conversion' technology
- High Output Power Factor (0,9)
- Input power factor correction PFC (>0,99)
- User friendly LCD display
- High Efficiency
- Wide Input Voltage & Frequency Range
- Intelligent Battery Management System
- 50/60Hz Frequency Converter Operation Mode
- Generator compatible
- Wide communication option
  Standard: RS-232 and USB, EPO
  Optional: SNMP, Dry contact board, Modbus
- ECO Mode operation feature
- Environment friendly

VFI TYPE UPS ONLINE | TOWER | USB | LCD LCD DISPLAY (6-10kVA) | SERVICE SERVICE

TECHNICAL SPECIFICATIONS

	DSP EVO 6 KVA	DSP EVO 10 KVA
Output Power Factor	0.9	
INPUT		
Input Voltage Range	110 - 300VAC @ %50 Load 176 - 300VAC @ %100 Load	
Input Frequency Range	46Hz ~ 54 Hz @ 50Hz system 56Hz ~ 64 Hz @ 60Hz system	
Phase	1PH - N - PE	
Power Factor	≥ 0.99	
OUTPUT		
Output Voltage	208/220/230/240VAC	
Voltage Regulation	±2% (Online Mode), ±1% (Battery Mode)	
Frequency	46 ~ 54 Hz or 56 ~ 64 Hz (Synchronized Range)	
Frequency (@Battery Mode)	50 Hz ± 0.1% or 60Hz ± 0.1%	
Overload	ONLINE: 100%~110%: 30 minute ,110%~130%: 5 minute, >130%: 10 second BATTERY: 100%~110%: 3 minute ,110%~130%: 30 second, >130%: 10 second	
Crest Factor	3:1	
THDv	≤ 3 % THDv (linear load); ≤ 5 % THDv (non-linear load)	
Transfer Time	0 ms	
EFFICIENCY		
Online Mode	93%	
Battery Mode	91%	
BATTERY		
Internal Battery Type	12V 7Ah or 12V 9Ah	
QTY	16	
Automatic Battery Test	PRESENT (@ start-up, 1/per week)	
Charge Time	9 hour 90% capacity (Typical)	
Charge Current	1A, 2A, 4A and max: 6A (adjustable) (for 16pcs battery: max 6A)	
Charge Voltage	218.4V ± 1%	
PHYSICAL		
Dimensions W x D x H (mm)	369 x 190 x 688	442 x 190 x 688
Weight (kg)	61	66
ENVIRONMENTAL		
Humidity	0- 95 % RH (non-condensing)	
Temperature	0 to 40°C (20 to 25 recomended for longer battery life time)	
Noise Level (1m distance)	<55dBA	<58dBA
COMMUNICATION		
Standard	RS-232 and USB, EPO	
Optional	SNMP, Dry Contact, Modbus	

DSP Multipower Convertible

1 Phase In - 1 Phase Out / 5kVA – 10kVA
3 Phase In - 1 Phase Out / 10kVA – 20kVA

- On-line 'double conversion' technology
- Real Digital Signal Processor (DSP) Controller
- Parallel redundant operation up to 4 units
- Input Power Factor Correction PFC
- High output power factor (PF : 0.9)
- Low total harmonic distortion (THD) level
- Convertible display helps to use both for tower and rack applications
- Transformerless Design
- Availability to configure as 50/60Hz Frequency Converter from LCD Panel
- High Performance with the PWM Sinewave Topology
- Cold Start Function
- Intelligent Battery Management System extends the life time of batteries
- Overload, Overheat & Short Circuit Protections
- User Friendly Multi-Functional LED/LCD Display Panel
- Energy Saving Mode (ECOMODE)
- Smart Fan Speed Regulation with temperature controlled
- RS232 Communication Port & Management Software
- Internal SNMP, DRY contact, RS485 card options

VFI TYPE UPS ONLINE | TOWER | RACK | LCD DISPLAY (5-20kVA) | SERVICE

TECHNICAL SPECIFICATIONS

MODEL	DSPMP-1105	DSPMP-1106	DSPMP-1110	DSPMP-3110	DSPMP-3115	DSPMP-3120
Power (kVA)	5	6	10	10	15	20
Power (kW)	4,5	5,4	9	9	13,5	18
INPUT						
Phase Configuration	1Ph + N + PE (Hardwire)			3Ph + N + PE (Hardwire)		
Nominal Voltage	220VAC/230VAC/240VAC			380VAC/400VAC/415VAC		
Minimum Voltage (at Half load)	160VAC			277VAC		
Minimum Voltage (at Full load)	180VAC			312VAC		
Maximum Voltage	280VAC			485VAC		
Frequency	45-65 Hz					
Power Factor	0.99				0.95	
OUTPUT						
Power Factor	0,9					
Phase Configuration	1Ph + N + PE (Hardwire)					
Nominal Voltage	220VAC / 230VAC / 240VAC					
Wave Form	Pure Sine Wave					
Total Harmonic Distortion at 100% linear load	<3%					
at 100% non-linear load	<5%					
Frequency	50Hz or 60Hz (adjustable)					
Frequency Tolerance(free running)	±0,1 %					
Frequency Synchronized Range	±1Hz; ±3Hz (selectable)					
Static Voltage Regulation (0%-100% load)	<1%					
Crest Factor	3					
Transfer Time	0sec					
Overload	Up to 10min. @100%~120%					
	Up to 1min. @120%~150%					
	Transfer to bypass @ >150%					
Total Efficiency	up to 90%		up to 91%		up to 93%	
Greenmode efficiency	≥97%					
Outlets	External Socket Box (2 pcs SCHUKO, 4 pcs IEC C13 Outlets) Optional					
BATTERY						
Type	Maintenance-free lead acid batteries					
Recharge Time	4-6h up to 90%					
Voltage	240VDC				192VDC for 16 pcs 240VDC for 20 pcs	
Quantity per string	20 pcs 12V Batteries				(20 pcs 12V Batteries) or (16 pcs 12V Batteries)**	
Internal batteries	20 pcs 12V 4.5Ah (internal battery version only)		20 pcs 7Ah / 9Ah		N/A	
Built in max. Charge Current	1.6A				4A	
Cold Start	Present					
DISPLAY						
LED + LCD Display	Line Mode, Backup Mode, ECO Mode, Bypass Supply, Battery Low, Battery Bad/Disconnect, Overload and Transferring with Interruption & UPS Fault					
LCD display	Input Voltage, Input Frequency, Output Voltage, Output Current, Output Frequency, Load Percentage, Battery Voltage & Inner Temperature.					
Self Diagnostics	Upon Power-on, Front Panel Setting & Software Control, 24-hour routine checking					
Audible and Visual Alarms	Line Failure, Battery Low, Transfer to Bypass, System Fault Conditions					
PROTECTION						
Overload Protection	Bypass transfer time is calculated by simulating a temperature related model of a fuse					
Short Circuit Protection	Acts as the ideal current source during the short circuit time					
Other Protection	Against excessive (heat,voltage,current) intense battery discharge					
COMMUNICATION						
Interface (Communication ports)	Standard RS232 port and optional RS485, Internal SNMP, Dry Contact Cards					
ENVIRONMENT						
Operating Temperature	0 °C.... + 40 °C					
Proposed Temp. to extend battery life	20 - 25 °C					
Humidity	up to 95% (non-condensing)					
Audible Noise at 1 m	<50 dB				<60 dB	
Protection Class	IP 20					
PHYSICAL SPECIFICATIONS (tower position)						
Net Weight (power module)	25kg		26kg	28kg	36 kg	
Net Weight (with internal batteries)	55kg		85kg with 9Ah battery	-	-	
Dimensions(mm) (HxWxD)-power module	440x88x680		440x132x680		440x220x720	
Dimensions(mm) (HxWxD)- w/battery vers.	440x176x680		-		-	
STANDARDS						
Standards	EN62040-1-1 (safety); EN62040-2 (EMC);EN62040-3(performance); EN60950-1					
ACCESSORIES						
	Internal&External SNMP, Dry Contact Board, External Manual Bypass, Rail Kit, External Battery Connection Cable, External Socket Box, External Additional Charging Board Software					

** Availability to use 16pcs 12V batteries per string if load is less than 85%

DSP Flexipower

1 Phase In - 1 Phase Out / 3kVA - 10kVA
3 Phase In - 1 Phase Out / 10 kVA

- On-Line Double Conversion Technology
- Real Digital Signal Processor (DSP) Controller
- Power Factor Correction
- High output power factor
- Parallel redundant operation up to 4 units (excluding 3kVA)
- Integrated Manual Bypass (excluding 3kVA)
- Low total harmonic distortion (THD) level
- Transformerless Design
- High Performance with the PWM Sinewave Topology
- Cold Start Function
- Intelligent Battery Management System extends the life time of batteries
- Overload, Overheat & Short Circuit Protections
- Emergency Shutdown Control through EPO
- User Friendly Multi-Functional LED/LCD Display Panel
- Energy Saving Mode (ECOMODE)
- RS232 Communication Port & Management Software
- Internal SNMP, Dry contact and RS485 card options
- Possible to operate as 50Hz/60Hz Frequency Converter
- Extended Back up time with External Battery Cabinet

VFI TYPE UPS ONLINE | TOWER | LCD LCD DISPLAY (3-10kVA) | SERVICE SERVICE

TECHNICAL SPECIFICATIONS

MODEL	FP1103	FP1105	FP1106	FP1108	FP1110	FP3110
Power (kVA)	3	5	6	8	10	10
Power (kW)	2,4	4,5	5,4	7,2	9	9
INPUT						
Phase Configuration	1Ph + N + PE					3Ph + N + PE
Nominal Voltage	220V/230/240V					380V/400V/415V
Minimum Voltage	160 V	180 V				320 V
Maximum Voltage	288 V	280 V				485 V
Frequency	± 5 Hz	45 - 65 Hz				
Power Factor	0,99					
OUTPUT						
Power Factor	0,8	0,9				
Phase Configuration	1Ph + N + PE					
Nominal Voltage	220V / 230 / 240V (adjustable)					
Wave Form	Pure Sine Wave					
Total Harmonic Distortion at 100% linear load	<3%					
Frequency	50Hz or 60Hz (adjustable)					
Frequency Tolerance (free running)	±0,2 %					
Static Voltage Regulation (0%-100% load)	<1%					
Crest Factor	3:1					
Transfer Time	0 sec					
Overload	30 sec @ (%106-%120)	2min @ (%100-%120)				
	10 sec @ (%120-%150)	30sec @ (%120-%150)				
	Transfers to Bypass @%150					
Total Efficiency	>90%	>92%				
BATTERY						
Type	Maintenance-free lead acid batteries					
Recharge Time (for Internal Battery)	4-6h up to 90%					
Quantity per String	6pcs 12V Batteries	20 pcs 12V Batteries				
Voltage	72 VDC	240VDC				
Internal Batteries (Optional)	7Ah, 9Ah					
Cold Start	Present					
DISPLAY						
LED + LCD Display	Line Mode, Back up Mode, Eco Mode, Bypass Supply, Battery Low, Battery Bad/Disconnect, Overload, UPS Fault, Interruption during transfer					
LCD display	Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load%, Battery Voltage, Internal Temperature					
Self Diagnostics	Upon Power On, Front Panel Setting and Through Software Control, 24h routine Check					
PROTECTION						
Overload Protection	Bypass transfer time is calculated by simulating a temperature related model of a fuse					
Short Circuit Protection	Acts as the ideal current source during the short circuit time					
Other Protection	Against excessive (heat, voltage, current) intense battery discharge					
COMMUNICATION						
Interface (Communication ports)	Standard RS232 port and optional RS485, Internal SNMP, Dry Contact Cards					
ENVIRONMENT						
Operating Temperature	0 °C.... + 40°C					
Proposed Temp. to extend battery life	20 - 25 °C					
Humidity	up to 95% (non-condensing)					
Audible Noise at 1 m	<50 dB					<52 dB
Protection Class	IP 20					
PHYSICAL SPECIFICATIONS						
Dimensions(mm) (HxWxD)	449x226x454	585x254x710				
Weight - without battery (kg)	19	30		38		45
STANDARDS						
Standards	EN62040-1-1 (Safety); EN62040-2 (EMC)					
ACCESSORIES						
Optional	Internal&External SNMP, Dry Contact Board, Monitoring and Management Software, Internal Battery Holder Apparatus, Additional Charging Set					

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DSP Multipower

3 Phase In - 1 Phase Out / 15kVA – 20kVA

- On-Line Double Conversion Technology
- Real Digital Signal Processor (DSP) Controller
- Paralel redundant operation up to 4 units (Optional)
- Increased Input Power Factor (0,95)
- Transformerless Design
- Cold Start Function
- Overload, Overheat & Short Circuit Protections
- User Friendly Multi-Functional LED/LCD Display Panel
- Energy Saving Mode (GREEN MODE)
- Intelligent Battery Management System
- RS232 Communication Port & Management Software
- SNMP, Dry Contact, RS485, USB Card options

VFI TYPE UPS ONLINE | TOWER | RACK | LCD LCD DISPLAY (5-20kVA) | SERVICE SERVICE

TECHNICAL SPECIFICATIONS

MODEL	DSPMP-3115T	DSPMP-3120T
Power (kVA)	15	20
Power (kW)	13,5	18
INPUT		
Phase Configuration	3Ph + N + PE (Hardwire)	
Nominal Voltage	380VAC/400VAC /415VAC	
Minimum Voltage (at 75% Load)	277VAC	
Maximum Voltage	485VAC	
Frequency	45-65 Hz	
Power Factor (@linear load)	0,95	
OUTPUT		
Power Factor	0,9	
Phase Configuration	1Ph + N + PE (Hardwire)	
Nominal Voltage	220VAC/230VAC/240VAC	
Wave Form	Pure Sine Wave	
Total Harmonic Distortion at 0 to 100% linear load	<3%	
Frequency	50Hz or 60Hz (adjustable)	
Frequency Tolerance (free running)	±0,2%	
Frequency Synchronized Range	±1Hz or ±3Hz (selectable)	
Voltage Regulation	±2%	
Crest Factor	3	
Transfer Time	0sec	
Total Efficiency	> 91%	
Greenmode Efficiency	> 95%	
BATTERY		
Type	Maintenance-free lead acid batteries	
Voltage	240VDC	
Quantity per string	20pcs 12V Batteries	
Built in max. Charge Current	4A	
DISPLAY		
LED + LCD Display	Line Mode, Backup Mode, ECO Mode, Bypass Supply, Battery Low, Battery Bad/Disconnect, Overload and Transferring with Interruption & UPS Fault	
LCD display	Input Voltage, Input Frequency, Output Voltage, Output Current, Output Frequency, Load Percentage, Battery Voltage & Inner Temperature.	
Self Diagnostics	Upon Power-on, Front Panel Setting & Software Control, 24-hour routine checking	
Audible and Visual Alarms	Line Failure, Battery Low, Transfer to Bypass, System Fault Conditions	
COMMUNICATION		
Interface (Communication ports)	Standard RS232 port and optional RS485, Internal SNMP, Dry Contact Cards	
ENVIRONMENT		
Operating Temperature	0 °C - 40 °C	
Proposed Temp. to extend battery life	20 - 25 °C	
Humidity	up to 95% (non-condensing)	
Audible Noise at 1 m	<60 dB	
Protection Class	IP 20	
PHYSICAL SPECIFICATIONS		
Net Weight	60kg	62kg
Dimensions (mm) (WxDxH)	290x650x770	
STANDARDS		
Standards	EN62040-1-1 (Safety); EN62040-2 (EMC); EN62040-3 (Performance); EN60950-1	
ACCESSORIES		
Optional	Internal&External SNMP, Dry Contact Board, External Manual Bypass, External Battery Connection Cable, External Additional Charging Board Software	

Saver Plus DSP

3 Phase In - 1 Phase Out / 15kVA - 20kVA

- On-line 'double conversion' technology
- Real Digital Signal Processor (DSP) controlled, IGBT technology
- Wide input voltage range (140V-480V)
- Input Power Factor Correction PFC (>0,97)
- Intelligent Battery Management System extends the life time of batteries
- Transformerless Design
- Small Dimensions
- Manual Bypass
- LCD display
- RS 232 and relay interface
- Management and monitoring software available for all operating systems and SNMP support

VFI TYPE UPS ONLINE | TOWER | LCD LCD DISPLAY (15-20kVA) | SERVICE SERVICE

TECHNICAL SPECIFICATIONS

MODEL	SD3115	SD3120
Power	15kVA	20kVA
INPUT		
Nominal Voltage	380 V / 400V / 415V 3Phase, N	
Minimum Voltage	140V 3Phase, N	
Minimum Voltage (at full load)	260V 3Phase, N	
Maximum Voltage	480V 3Phase, N	
Frequency	50 - 60Hz (45 to 65 Hz)	
Nominal Current	17,4 A / phase	23,3 A / phase
Maximum Current	53 A peak / phase	71 A peak / phase
Power Factor	>0,97	
OUTPUT		
Power Factor	0,7	
Nominal Voltage	220V / 230V (adjustable)	
Wave Form	Sinus	
Total Harmonic Distortion	< 3%	
Frequency	50Hz or 60Hz (adjustable)	
Voltage Regulation (Static)	1%	
Crest Factor	3	
Overload	> 30s (at 150 % load)	
Total Efficiency	> 91%	
BATTERY		
Type	Maintenance-free lead acid batteries	
Quantity per string	32pcs 12V Batteries	
Voltage	384VDC	
Recharge Time for Internal Batteries	< 4 h	
Discharge Current	< 10%	
Internal Batteries (Optional)	12Ah	
Warning	Audible Buzzer through the end of Battery Discharge	
DISPLAY		
LED Panel	Line, Bypass, Battery, Inverter, Overload, Fault Indicators	
LCD Panel	Load%, Battery Temperature, Input&Output&Battery Voltages, Output Frequency	
STATIC BY-PASS		
Voltage Tolerance	10% (adjustable)	
Frequency Tolerance	3Hz (adjustable)	
Transfer Time	0 ms	
PROTECTION		
Protections	Overload Protection, Short Circuit Protection, High Temperature, Over Voltage, Over Current	
COMMUNICATION INTERFACE		
Interface (Communication Ports)	RS 232	
Dry Contact Signals	Ups shutdown, mains failure, low battery, by-pass active, summary alarm	
ENVIRONMENT		
Temperature	0 - 40 °C	
Suggested Temp. to extend battery life	20 - 25 °C	
Humidity	up to 95% (non-condensing)	
Audible Noise (from 1m distance)	< 55 dB	
Protection Class	IP 20	
PHYSICAL SPECIFICATIONS		
Net Weight - without battery (kg)	103,5	108
Dimensions (mm) (WxDxH)	430x870x970	
STANDARDS		
Standards	EN 62040-1-1 (Safety), EN 62040-2 (EMC)	
ACCESSORIES		
Optional	External SNMP, Monitoring and Management Software, Remote Monitoring Panel, Additional Charging Set, Internal Galvanic Isolation Transformer	

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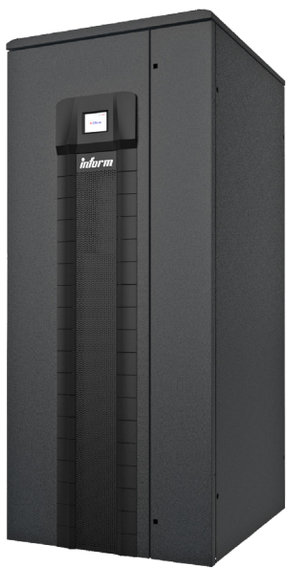
FORTE

3 Phase In – 3 Phase Out / 10kVA – 250kVA
3 Phase In – 1 Phase Out / 10kVA – 40kVA



- 3 Level IGBT Rectifier & Inverter Technology
- Real Digital Signal Processor (DSP) controlled transformerless design
- High Output Power Factor (PF:1, kVA=kW)
- Increased AC-AC Efficiency (up to 96,5%)
- Unity Input Power Factor (p.f. > 0,99)
- Low Input Current THD (<4%)
- Low Output Voltage THD (<2%)
- Wide input voltage range
- Built-in Static & Manual Bypass
- Soft Start Feature
- Parallel connection availability up to 8 units
- Adjustable Battery Qty with optional DC-DC Charger/Booster at 10-15-20kVA Compact version
- Intelligent battery management system extends the life time of batteries
- Colorful Graphical Multi-Functional TouchScreen LCD Panel
- Event Log Display up to 500 Events
- Advanced communication possibility via RS232
- MODBUS connection through RS 485
- Generator Port for Generator Friendly Operation
- EPO Port for Emergency Power Off
- 50/60Hz Frequency Converter Operation Mode (Adjustable from LCD Panel)
- Management and monitoring software available for all operating systems
- Communication with computers and network systems through Optional SNMP
- Optional Programmable 4pcs Relays for dry contact signals
- Compact dimension

VFI TYPE UPS ONLINE | TOWER | LCD LCD DISPLAY (10-250kVA) | SERVICE SERVICE

High Efficiency, Real Economy

- High efficiency of up to 96,5%, reduces the operational cost and provides significant energy saving.
- Continuous Operation, Unique Operational Efficiency, Minimized occupied Installation Area, Maximum Power Delivery, Reduced Infrastructure Material Cost (cable, transformer, generator), Low Cooling Expenses, Optimized TCO (Total Cost of Ownership) features of FORTE guarantees fast return of your investment.

10-20kVA COMPACT | 10-30kVA | 40-60kVA | 80-100kVA | 120-250kVA

FORTE

TECHNICAL SPECIFICATIONS

MODEL (380-400-415V 3ph version)	FORTE 33010	FORTE 33015	FORTE 33020	FORTE 33030	FORTE 33040	FORTE 33060	FORTE 33080	FORTE 33100	FORTE 33120	FORTE 33160	FORTE 33200	FORTE 33250
Power (kVA)	10	15	20	30	40	60	80	100	120	160	200	250
Active Power (kW)	10	15	20	30	40	60	80	100	120	160	200	250
MODEL (200-208-220V 3Ph version)	**FORTE U33005**	**FORTE U33007**	**FORTE U33010**	**FORTE U33015**	**FORTE U33020**	**FORTE U33030**	**FORTE U33040**	**FORTE U33050**	**FORTE U33060**	**FORTE U33080**	**FORTE U33100**	**FORTE U33125**
Power (kVA)	5	7.5	10	15	20	30	40	50	60	80	100	125
Active Power (kW)	5	7.5	10	15	20	30	40	50	60	80	100	125
INPUT												
Phase	3Ph+N+PE											
Nominal Voltage	380V / 400V / 415V											
Voltage Range (%100 Load)	(-15%) (+20%)											
Voltage Range (%50 Load)	(-45%) (+20%)											
Nominal Frequency (Hz)	50 or 60											
Frequency Range (Online Mode)	45-65Hz											
Input Current THD*	<4%											
Input Power Factor	0,99											
OUTPUT												
Output Power Factor	1											
Phase	3Ph+N+PE											
Nominal Voltage	380V / 400V / 415V (adjustable via display)											
Static Voltage Regulation @%100 Linear Load	<%1											
Output Voltage THD* (Online&Battery Mode)	< % 2 (Linear Load)											
Crest Factor	3:1											
Frequency (Hz)	50 Hz / 60 Hz											
Frequency Range	± %0.01 (Battery Mode)											
Overload	"Online – Battery Mode: <%125 Load 10 min, <%150 Load 1 min BypassMode: <%200 continous¨											
Efficiency*	up to 96.5% (Online) , 98.5% (ECO MODE)											
STATIC BYPASS LINE												
Phase	3Ph+N+PE											
Bypass Voltage Range	380V / 400V / 415V (adjustable via display: -%15 +%12)											
Bypass Frequency Range	47 Hz - 53 Hz (adjustable)											
BATTERY												
Type	Maintenance-Free Lead Acid Batteries											
Charge Current (A)	Nominal Charge Current x 0,1 (adjustable via display)											
Battery QTY STANDARD	60											
Battery QTY for FORTE-U version	34											
Internal Battery QTY STANDARD	60pcs 12V 7-9Ah											
Battery QTY COMPACT	20 - 52	30 - 52	36 - 52									
Battery Protection	Deep Decharge Protection, Temperature-compensated Battery Charging											
Battery Test	Standard (Automatic & Manual)											
FRONT DISPLAY PANEL												
Display	3.5" TFT Touch Screen with UPS Operation Modes & Energy Flow Diagram											
Color Graphic Touch Screen TFT	Load %, Input / Output / Bypass Voltage, Output Power (W & VA), Output Current, Output Power Factor, Battery ± Voltage, Input / Output Frequency, DC Bus ± Voltage, Back-up Time, Internal Temperature											
Event Log	500pcs (details can be checked via display)											
COMMUNICATION												
Interface (Communication Port)	RS232 & RS485 MODBUS & SNMP (optional)											
Dry Contact Signals (Optional)	4pcs Relays configurable to ; ¨ General Alarm¨, ¨Input Failure¨, ¨Battery Failure¨, ¨Output Failure¨, ¨Bypass Active¨, ¨Output Overload¨,											
Others as standard	High Temperature¨ Dry contact signals											
ENVIRONMENTAL												
Storage Temperature (°C)	´-25°C - +70°C (15 - 40°C recomended for longer battery life time)											
Operating Temperature (°C)	0 - 40°C (20 - 25 °C recomended for longer battery life time)											
Relative Humidity	0-%95 (non-condensing)											
Operating Altitude (maximum m.)	1000 m											
Protection Class	IP20											
Standards	EN 62040-1 (Safety), EN 62040-2 (EMC), EN 62040-3 (Performance), EN 60950											
PHYSICAL SPECIFICATIONS	FORTE 33010 U33005	FORTE 33015 U33007	FORTE 33020 U33010	FORTE 33030 U33015	FORTE 33040 U33020	FORTE 33060 U33030	FORTE 33080 U33040	FORTE 33100 U33050	FORTE 33120 U33060	FORTE 33160 U33080	FORTE 33200 U33100	FORTE 33250 U33125
Dimensions (WxDxH) (cm) - STANDARD	40 x 75 x 110				52 x 89 x 131		67x77x165		85 x 80 x 185			
Weight (w/o battery) kg - STANDARD	100	114	116	122	180	202	253	285	405	522	570	600
Dimensions (WxDxH) (cm) - COMPACT	27 x 80 x 103											
Weight (w/o battery) kg - COMPACT	75	79	81									
OPTIONS												
Parallel Kit, Internal/External SNMP, Split Bypass, Remote Monitoring Panel, Isolation Transformer, Battery Cabinet, Backfeed Protection												

* May vary depending on UPS power & Load & Environental Conditions.

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Pyramid DSP Premium

3 Phase In – 3 Phase Out / 10 – 400kVA

- High Output Power Factor : 0,9
- Graphical Touch Screen Front Display Panel
- IGBT Rectifier
- Real Digital Signal Processor (DSP) controlled transformerless design
- Input Power Factor Correction PFC(>0,99)
- Low Total Harmonic Distortion Level (THDi ≤ 4%)
- High Efficiency (up to 94%)
- Wide Input Voltage Range
- Generator Compatible Operation
- Evolution and redundancy guaranteed by on site Modular Parallel Systems
- Intelligent battery management system extends the lifetime of batteries
- Static and Manual Bypass
- EPO (Emergency Power Off)
- Communication with computers and network systems with SNMP availability
- Expandable battery blocks
- Low installation and operating costs
- Different voltage applications with refer to country mains characteristic

VFI TYPE — UPS ONLINE | TOWER | LCD — LCD DISPLAY (10-400kVA) | SERVICE — SERVICE

ACCESSORIES

Communication

- Remote Monitoring Panel &25m Cable For Remote Panel
- UPSMAN (Management Software)
- Multiserver Shutdown Licence
- Internal SNMP kit :
  Internal Slot Card SNMP CS141BSC or CY504,
  slot box, cable
- External Adapter
  SNMP Adapter Net Agent Mini DY 522
  SNMP Adapter CS141BL

Other

- Split By-pass
- Parallel Kit
- Drawer Type Internal Battery Shelves 10 - 30kVA
- Special Battery Connection Cable for Drawer Type Shelves

Battery Cabinets

- UPS looking battery Cabinets (different battery configuration available)
  V14, V15, V24, V33, V34

- Eco Cabinets (different battery configurations available)
  BC00, BC10, BC20, BC30, BC40, BC50, BC60

Pyramid DSP Premium

TECHNICAL SPECIFICATIONS

MODEL	PDSP-P 33010	PDSP-P 33015	PDSP-P 33020	PDSP-P 33030	PDSP-P 33040	PDSP-P 33060	PDSP-P 33080	PDSP-P 33100	PDSP-P 33120	PDSP-P 33160	PDSP-P 33200	PDSP-P 33250	PDSP-P 33300	PDSP-P 33400
Output power (kVA)	10	15	20	30	40	60	80	100	120	160	200	250	300	400
Nominal Active Power (kW)	9	13,5	18	27	36	54	72	90	108	144	180	225	270	360
INPUT														
Number of phases	3Ph+N+PE													
Nominal Voltage (3ph Phase to Phase)	380V/400V/415V													
Voltage range	(-15)% (+27)%													
Voltage range (%64 load)	(-45)% (+27)%													
Voltage range (%42 load)	(-64)% (+27)%													
Nominal Frequency (Hz)	50 or 60													
Frequency range for online operation	±10%													
Input Current THD	≤4% (*) (**)													
Input Power Factor	0,99													
OUTPUT														
Power factor	0.9													
Number of phases	3Ph+N+PE													
Voltage (3ph Phase to Phase)	380V/400V/415V													
Static Voltage Regulation at %100 Linear Load (online&battery mode)	<1%													
Voltage THD at rated linear load	<3%													
Crest factor	3:1													
Frequency (Hz)	50 or 60													
Free Running Frequency (Hz)	± 0.01%													
Overload	125% for 10 minutes 150% for 1 minute													
Efficiency	up to 94% (**)													
BATTERY														
Type	Maintenance-free Lead Acid Batteries													
Quantity (pcs)	62 (2*31)									60 (2*30)				
Battery Protection	Deep Discharge Protection with Auto Cut off, Temperature Voltage Compensated Charge													
Battery Test	Standard (Automatic and Manual)													
DISPLAY														
3.5" Graphical Touch Screen	Graphical Flow Diagram for Line, Rectifier, Bypass, Battery, Inverter and Load Input & Output Frequency, Voltage & Current, Load Power Factor, Load%, Load Active & Apparent Power, Bypass Voltage & Frequency, Battery Voltage, Current & Temperature, Autonomy Time (min),													
STATIC BYPASS														
Number of phases	3Ph+N+PE													
Voltage Range for bypass operation	± 10%													
Frequency Range for bypass operation (Hz)	± 6% (Configurable)													
COMMUNICATION														
Interface (Communication Ports)	RS232, RS485 (ModBus)													
Relay Contact Signals (Adjustable)	Programmable 4 Relay Contacts to any of following signals ; General Alarm, Input Failure, Battery Failure, Output Failure, Bypass Acvite, Output Overload, High Temperature													
Others	EPO, Generator Interface													
ENVIRONMENT														
Storage Temperature Range (°C)	-25 to +55 (15 to 40 recomended for longer battery life time)													
Operating Temperature Range (°C)	0 to 40 (20 to 25 recomended for longer battery life time)													
Relative Humidity Range	0-95% (non-condensing)													
Maximum Altitude without derating (m)	1000													
Protection Level	IP20													
Audible Noise Level from 1m (dBA)	50		52		55		58	60	62		67			
PHYSICAL SPECIFICATIONS														
Output power (kVA)	10	15	20	30	40	60	80	100	120	160	200	250	300	400
Dimensions WxDxH (cm)	40 x 78 x 107				52 x 90 x 130	67 x 73 x 163		85 x 78 x 182	98x87x195		134x108x205			
Weight (kg)	100	114	116	122	180	253	285	405	522	570	830	865	900	1070
STANDARDS														
Standards	EN 62040-1-1 (Safety), EN 62040-2 (EMC), EN 62040-3 (VFI-SS-111)													

(*) for source having THDv < 2 % @ nominal load
(**) varies depending on ups power

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Pyramid DSP

3 Phase In - 3 Phase Out / 10 - 400kVA
3 Phase In - 1 Phase Out / 10 - 40kVA

- IGBT Rectifier
- Real Digital Signal Processor (DSP) controlled transformerless design
- Input Power Factor Correction PFC(>0,99)
- Low Total Harmonic Distortion Level (THDi ≤ 4%)
- High Efficiency (up to 94%)
- Wide Input Voltage Range
- Generator Compatible Operation
- Evolution and redundancy guaranteed by on site Modular Parallel Systems
- Intelligent battery management system extends the lifetime of batteries
- Static and Manual Bypass
- Optional Galvanic isolation transformer
- Communication with computers and network systems with SNMP availability
- Expandable battery blocks
- Low installation and operating costs
- Different voltage applications with refer to country mains characteristic;
  PDSP version for 380/400/415V(Ph_Ph) applications
  PDSP-U version for 200/208/220V(Ph_Ph) applications
  Special voltage applications other than stated values
- EPO (Emergency Power Off)

VFI TYPE UPS ONLINE | TOWER | LCD DISPLAY (10-400kVA) | SERVICE

* 3 phase in 1 phase out version is available
(10 to 40 kVA) (380-400-415V version)
* 50/60 Hz Frequency Converter version is available

ACCESSORIES

Communication
- Remote Monitoring Panel &25m Cable For Remote Panel
- UPSMAN (Management Software)
- Multiserver Shutdown Licence
- Internal SNMP kit :
  Internal Slot Card SNMP CS141BSC or CY504, slot box, cable
- External Adapter
  SNMP Adapter Net Agent Mini DY522
  SNMP Adapter CS141BL
  SNMP Adapter with Modbus CS141LM

Other
- Split By-pass
- Parallel Kit
- Drawer Type Internal Battery Shelves 10 - 30kVA
- Special Battery Connection Cable for Drawer Type Shelves

Battery Cabinets
UPS looking battery Cabinets (different battery configuration available)
- V14, V15, V24, V33, V34

Eco Cabinets (different battery configurations available)
- BC00, BC10, BC20, BC30, BC40, BC50, BC60

TESID Innovation and Creativity Reward 2005

Pyramid DSP

TECHNICAL SPECIFICATIONS

MODEL (380-400-415V 3ph version)	PDSP 33010	PDSP 33015	PDSP 33020	PDSP 33030	PDSP 33040	PDSP 33060	PDSP 33080	PDSP 33100	PDSP 33120	PDSP 33160	PDSP 33200	PDSP 33250	PDSP 33300	PDSP 33400
Output power (kVA)	10	15	20	30	40	60	80	100	120	160	200	250	300	400
Nominal Active Power (kW	8	12	16	24	32	48	64	80	96	128	160	200	240	320
MODEL (200-208-220V 3Ph version)	**PDSP-U33005**	**PDSP-U33007**	**PDSP-U33010**	**PDSP-U33015**	**PDSP-U33020**	**PDSP-U33030**	**PDSP-U33040**	**PDSP-U33050**	**PDSP-U33060**	**PDSP-U33080**	**PDSP-U33100**	**PDSP-U33125**	**PDSP-U33150**	**PDSP-U33200**
Output power (kva)	5	7,5	10	15	20	30	40	50	60	80	100	125	150	200
Nominal Active Power (kW)	4	6	8	12	16	24	32	40	48	64	80	100	120	160
INPUT														
Number of phases	3Ph+N+PE													
Nominal Voltage (Ph-Ph)	380V / 400V / 415V (PDSP) & 200V / 208V / 220V (PDSP-U)													
Voltage range (%100 load)	(-15)% (+27)% @PYRAMID DSP / ±15% @PYRAMID DSP-U													
Voltage range (%64 load)	(-45)% (+27)%@PYRAMID DSP													
Voltage range (%42 load)	(-64)% (+27)%@PYRAMID DSP													
Nominal Frequency (Hz)	50 or 60													
Frequency range for online operation	±10%													
Input Current THD	≤4% (*) (**)													
Input Power Factor	0,99													
OUTPUT														
Power factor	0.8													
Number of phases	3Ph+N+PE (PDSP & PDSP-U) / 1Ph+N+PE (1Ph ver.)													
Voltage (3ph_ Phase to Phase)	380V/400V/415V (PDSP) & 200V / 208V / 220V (PDSP-U) / 220 / 230 /240V (1 ph ver.)													
Static Voltage Regulation at %100 Linear Load (online&battery mode)	<1%													
Voltage THD at rated linear load	<3%													
Crest Factor	3:1													
Frequency (Hz)	50 or 60													
Free Running Frequency (Hz)	± 0.01%													
Overload	125% for 10 minutes													
	150% for 1 minute													
Efficiency	up to 94% (**)													
BATTERY														
Type	Maintenance-free lead acid batteries													
Quantity (pcs) PDSP version	62 (2*31)									60 (2*30)				
Quantity (pcs) PDSP-U version	34 (2*17)													
Battery Protection	Deep Discharge Protection with Auto Cut off													
Battery Test	Standard (Automatic and Manual)													
DISPLAY														
LED Display	Line, Bypass, Battery, Inverter, Load, Fault Indications													
LCD Display	Load%, Input & Output Frequency, Voltage & Current, Bypass voltage, Battery Voltage & Current, Temperature, Alarms													
STATIC BYPASS														
Number of phases	3Ph+N+PE													
Voltage Range for bypass operation	± 10%													
¨Frequency Range for bypass operation (Hz)¨	± 6% (Configurable)													
COMMUNICATION														
Interface (Communication Ports)	RS232 or RS485 & Modbus (optional)													
Dry Contact Signals (optional)	AC failure, Battery under voltage, bypass operation, output failure													
Others	EPO, Generator interface													
ENVIRONMENT														
Storage Temperature Range (°C)	-25 to +55 (15 to 40 recomended for longer battery life time)													
Operating Temperature Range (°C)	0 to 40 (20 to 25 recomended for longer battery life time)													
Relative Humidity Range	0-95% (non-condensing)													
Maximum Altitude without derating (m)	1000													
Protection Level	IP20													
PHYSICAL SPECIFICATIONS	**PDSP 33010 U33005**	**PDSP 33015 U33007**	**PDSP 33020 U33010**	**PDSP 33030 U33015**	**PDSP 33040 U33020**	**PDSP 33060 U33030**	**PDSP 33080 U33040**	**PDSP 33100 U33050**	**PDSP 33120 U33060**	**PDSP 33160 U33080**	**PDSP 33200 U33100**	**PDSP 33250 U33125**	**PDSP 33300 U33150**	**PDSP 33400 U33200**
Dimensions wxdxh (cm)	40 x 78 x 107				52 x 90 x 130		67x73x163		85x78x182	98x87x195		134x108x195		
Weight (kg)	100	114	116	122	180	202	253	285	405	522	570	735	750	825
STANDARDS														
Standards	EN 62040-1-1 (safety), EN 62040-2(EMC), EN 62040-3 (VFI-SS-111)													
(*) for source having THDv < 2 % @ nominal load (**) varies depending on ups power														

HOME/OFFICE | DATA CENTER | MEDICAL | INDUSTRY | TRANSPORTATION | EMERGENCY

Pyramid DSP T

3 Phase In - 3 Phase Out / 10 – 300kVA

- IGBT Rectifier
- Real Digital Signal Processor (DSP) controlled
- Built in Inverter Output Isolation Transformer
- Input Power Factor Correction PFC(>0,99)
- Low Total Harmonic Distortion Level (THDi ≤ 4%) and (THDv < 1.5%)
- Wide Input Voltage Range
- Generator Compatible Operation
- Evolution and redundancy guaranteed by on site Modular Parallel Systems
- Intelligent battery management system extends the lifetime of batteries
- Synchronization Capability with external sources
- Static and Manual Bypass
- Communication with computers and network systems with SNMP availability
- Expandable battery blocks
- Low installation and operating costs
- EPO (Emergency Power Off)

VFI TYPE UPS ONLINE | TOWER | LCD LCD DISPLAY (1-300kVA) | SERVICE SERVICE

ACCESSORIES

Communication
- Remote Monitoring Panel &25m Cable For Remote Panel
- UPSMAN (Management Software)
- Multiserver Shutdown Licence
- Internal SNMP kit :
  Internal Slot Card SNMP CS141BSC or CY504, slot box, cable
- External Adapter
  SNMP Adapter Net Agent Mini DY 522
  SNMP Adapter CS141BL
  SNMP Adapter with Modbus CS141LM

Other
- Split By-pass
- Parallel Kit

Battery Cabinets
UPS looking battery Cabinets (different battery configuration available)
- V14, V15, V24, V33, V34

Eco Cabinets (different battery configurations available)
- BC00, BC10, BC20, BC30, BC40, BC50, BC60

Pyramid DSP T

TECHNICAL SPECIFICATIONS

MODEL	PDSP-T 33010	PDSP-T 33015	PDSP-T 33020	PDSP-T 33030	PDSP-T 33040	PDSP-T 33060	PDSP-T 33080	PDSP-T 33100	PDSP-T 33120	PDSP-T 33160	PDSP-T 33200	PDSP-T 33250	PDSP-T 33300
Output Power (kVA)	10	15	20	30	40	60	80	100	120	160	200	250	300
Active Power (kW)	8	12	16	24	32	48	64	80	96	128	160	200	240
INPUT													
Number of Phases	3Ph + N + PE												
Nominal Voltage (Ph-Ph)	380V/400V/415V												
Voltage range (100% load)	-15% ~ +27%												
Voltage range (64% load)	-45% ~ +27%												
Voltage range (42% load)	-64% ~ +27%												
Nominal Frequency (Hz)	50 or 60 ±10%												
Input Current THD	4% (*) (**)												
Input Power Factor	0,99												
OUTPUT													
Output Power factor	0.8												
Number of Phases	3Ph + N + PE												
Voltage	380V/400V/415V												
Static Voltage Regulation at %100 Linear Load (online&battery mode)	<1%												
Voltage THD at rated linear load	<1.5%												
Crest factor	3:1												
Free Running Frequency (Hz)	50 or 60 ± 0.01%												
Overload	125% for 10 minutes; 150% for 1 minute												
Efficiency	⩾ 90% (**)												
STATIC BYPASS													
Voltage Range	380V / 400V (Ph-Ph) ± 10%												
"Frequency Range for bypass operation (Hz)"	±6% (Adjustable)												
BATTERY													
Type	Maintenance-free lead acid batteries												
Battery Quantity (pcs)	54 (2 x 27)												
Battery Protection	Deep discharge Protection with Auto Cut off												
Battery Test	Standard (Automatic and Manual)												
COMMUNICATION													
Interface (Communication Ports)	RS232&485@ 10 to 120kVA / RS232&422 @ 160 to 300kVA												
Dry Contact Signals (optional)	AC Failure, Battery Under Voltage, Bypass Operation, Output Failure												
Others	EPO, Generator Interface												
ENVIRONMENT													
Storage Temperature Range (°C)	-25 to +55 (15 to 40 recommended for longer battery life)												
Operating Temperature Range (°C)	0 to 40 (20 to 25 recommended for longer battery life)												
Relative Humidity Range	Up to 95% (non-condensing)												
Maximum Altitude without derating (m)	< 1000												
Protection Class	IP20												
PHYSICAL SPECIFICATIONS	**PDSP-T 33010**	**PDSP-T 33015**	**PDSP-T 33020**	**PDSP-T 33030**	**PDSP-T 33040**	**PDSP-T 33060**	**PDSP-T 33080**	**PDSP-T 33100**	**PDSP-T 33120**	**PDSP-T 33160**	**PDSP-T 33200**	**PDSP-T 33250**	**PDSP-T 33300**
Dimensions (WxDxH) cm	40 x 78 x 107				52 x 90 x 130		64x100x140		76 x 102,5x 168,5	96x108x182		161x108x195	
Weight (kg)	235		238	273	450	502	625	680	790	1200	1290	1675	1775
STANDARDS													
	EN 62040-1-1 (safety), EN 62040-2(EMC), EN 62040-3 (VFI-SS-111)												

(*) for source having THDv < 2 % @ nominal load (**) varies depending on ups power

HOME/OFFICE | DATA CENTER | MEDICAL | INDUSTRY | TRANSPORTATION | EMERGENCY

Modulera

Modular UPS 3 Phase In - 3 Phase Out / 20 - 200 kVA

- Hot Swappable Decentralized Parallel Architecture
- DSP (Digital Signal Processor) Controlled Technology
- Modular N+X Parallel Redundancy
- Plug & Play Type Hot Swappable Power Modules
- Cold Start Function
- Parallel connection availability of UPS Frames up to 4pcs
- Wide Input Voltage Window (208Vac ~ 478Vac)
- Wide input frequency range (40Hz – 70Hz)
- High Overall Efficiency (up to 94%)
- Increased Output Power Factor (0.9)
- Unity Input Power Factor (0.99)
- Low Input Total Harmonic Distortion Level (THDi down to 3 %)
- Fit into standard 19" Rack Cabinet
- Touch-screen LCD display for user's friendly operation
- EPO (Emergency Power Off)
- Smart Fan Speed Control
- Programmable Battery Voltage (32/ 34 / 36 / 38 / 40 blocks of 12V Batteries)
- Three Level Battery Charge system with smart charge current adjustment
- Powerful charger built in each Modular UPS Power Module
- Equip with Maintenance Bypass Switch for easy maintenance
- RS232 & 485 Ports as standard communication
- Megatec/Mod Bus protocol supported
- Optional Communication Interfaces (SNMP Card or DRY contact board)

VFI TYPE UPS ONLINE | MODULAR SYSTEM | LCD DISPLAY (20-200kVA) | SERVICE

Modulera

TECHNICAL SPECIFICATIONS

MODEL		MDL 3300-60K	MDL 3300-100K	MDL 3300-200K
Frame Capacity		20kVA (18kW) to 60kVA (54kW)	20kVA (18kW) to 100kVA (90kW)	20kVA (18kW) to 200kVA (180kW)
MDL Module Capacity		20KVA/18KW		
INPUT				
Phase		3 Phase + Neutral + Ground		
Rated Voltage		380 / 400 / 415Vac		
Voltage Range		208 - 478Vac at 50% load, 305 - 478Vac at 100% load		
Frequency range		40Hz - 70Hz		
Power Factor		⩾ 0.99		
Current THDi		down to 3%		
Generator Input		Present		
OUTPUT				
Phase		3 Phase + Neutral + Ground		
Rated Voltage		380/400/415Vac		
Power Factor		0,9		
Voltage Regulation		±1%		
Frequency	Utility Mode	±1%, ±2%, ±4%, ±5%, ±10% of the rated frequency(optional)		
	Battery Mode	(50/60 ±%0.2)Hz		
Crest Factor		3:1		
THDv		⩽2% with linear load		
Waveform		Pure Sinewave		
Over Load	AC Mode	100% - 110%: 60min,110% - 125%: 10min, 125% - 150%: 1min,		
		⩾150%: immediately transfers to bypass		
	Bat. Mode	100% - 110%: 60min,110% - 125%: 10min, 125% - 150%: 1min,		
		⩾150%: immediately shutdown		
	Bypass Mode	Breaker (40Amp)		
AC-AC Efficiency		Up to 94%		
Eco-Mode Efficiency		97%		
BATTERY				
Type		Maintenance-free lead acid batteries		
Quantity (12V VRLA batteries)		Configurable to 32/34/36/38/40 pcs per string		
Voltage (12V VRLA batteries)		384/408/432V/456V/480V DC		
Charging Current	Frame	18A Max. (charge current can be set according to battery capacity installed)	30A Max. (charge current can be set according to battery capacity installed)	60A Max. (charge current can be set according to battery capacity installed)
	MDL Module	6A Max. (charge current can be set according to battery capacity installed)		
DISPLAY				
Status LED & LCD		Line Mode, Eco Mode, Bypass Mode, Battery Low, Battery Bad, Overload & UPS Fault		
Reading On the LCD		Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage & Inner Temperature		
PROTECTION				
Short Circuit		Hold Whole System		
Overheat		Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately		
Battery Low		Alarm and Switch off		
Self-diagnostics		Upon Power On and Software Control		
EPO (optional)		Shut down UPS immediately		
Battery		Advanced Battery Management		
Noise Suppression		Complies with EN62040-2		
Alarms		Line Failure, Battery Low, Overload, System Fault		
COMMUNICATION				
Standard		1xRS232 Communication port, 2xRS485 Communication ports, 1xModBus port, 2xCommunication Slot		
Optional		SNMP (Megatec Protocol), Dry Contact Board, EPO		
ENVIRONMENT				
Operating Temperature		0°C - 40°C		
Storage Temperature		-25°C - 55°C		
Humidity		0 - %95 non condensing		
Altitude		< 1500m		
Noise		<60dBA (at 1 meter)		
PHYSICAL SPECIFICATIONS				
Dimesions (WxDxH)	MDL Module	443 x 580 x 131- 3U (for all frames)		
	Frame	600x840x1400		600x1100x2000
Weight - Without Batteries (kg)	MDL Module	31		
	Frame	150	152	290
STANDARDS				
CE, EN/IEC 62040-2, EN/IEC 62040-1-1, EN/IEC 62040-3 (VFI SS 111)				

Frequency Converter

3 Phase In - 3 Phase Out / 10 - 120kVA

- Double conversion and PWM technology with pure sinewave output,
- Microprocessor controller,
- Galvanic Isolation,
- Efficiency up to 91%,
- Emergency close switch connection,
- User friendly front panel (5 buttons and LCD indicator), detailed information
- availability to do the adjustment of parameters through front panel,
- History log of 128 events, calendar and time indicators,
- High performance at non-linear loads,
- Remote monitoring via network,
- SNMP compatibility,
- 10 Years spare parts supply warranty,
- Low installation and operating cost

TECHNICAL SPECIFICATIONS

MODEL	FC 3310	FC 3315	FC 3320	FC 3330	FC 3340	FC 3360	FC 3380	FC 33100	FC 33120
Output Power kVA	10	15	20	30	40	60	80	100	120
Output Power Kw	8	12	16	24	32	48	64	80	96
Power factor	0.8								
INPUT									
Voltage	400 VAC or 380VAC 3phase , 4Wire + G								
Tolerance	±10%								
Frequency	50 / 60Hz								
Tolerance	±5%								
Power factor	0,8								
max RFI	EN 50091-2 Class A								
OUTPUT									
Voltage	208VAC, 3Phase, 4Wire+G								
Voltage Stability	static (balanced load) : +/-2%								
	static (unbalanced load) : +/-4%								
	Dynamic (0% - 100%step load) : +/-6%								
Uptum Time	after 0%-100% step load: max 25m sec								
Crest factor	3:1								
Frequency	400 Hz								
Frequency Tolerance	±0.2%								
Overload 101% - 110% load	1h								
Overload 130% load	10min.								
Overload 150% load	1min.								
Overall Efficiency	up to 91%								
Total Harmonic Distortion	<3% at linear load								
	<5% at non-linear load								
COMMUNICATION									
Interface	RS232 and Dry Contact,								
PHYSICAL									
Weight without battery (kg)	240	255	270	285	490	570	600	750	810
Dimensions (mm) WxDxH	490x650x1190				565x820x1400		720x800x1450	1192x874x1720	
ENVIRONMENT									
Audible Noise	<55dBA					<60dBA		63 to 66dBA	
Operating Temperature	0-40°C								
Relative Humidity (non condensing)	0-95%								
Max. Altitude	<1000m								
Standards	EN 50091-1 (safety), EN 50091-2 (EMC), IEC 62040-3 (class VFI), IP20								

AVR Series

One Phase 2-30kVA and Three Phase 6-1000kVA

- Servo Motor Controlled Technology
- Fast Response for Fluctuations
- Reliable Stabilization for Secure Energy
- High efficiency in each model
- Short circuit protection
- Ability to work with non-linear loads
- Manual Bypass Switch
- Wide input voltage range version (optional)
- Electro-mechanic (breaker module) high-low voltage protection (optional)
- Output Isolation Transformer (optional)
- Digital Display option available
- Higher IP applications are available
- Phase Independent Voltage Regulation for Three Phase Models
- Surge Arrester option available

Options (available for all power range)
Digital Display
Breaker Module (provides phase missing and low/high voltage protection)
Wide Voltage Range Model available (135 - 245V (L-N) for Single Phase, 233 - 424V (L-L) for Three Phase)

TECHNICAL SPECIFICATIONS

MODEL	POWER	Dimensions	Weight	Response	Input		Output						ENVIRONMENT		
SINGLE PHASE	(kVA)	WxDxH(cm)	(kg)	V/Sn	Voltage (V) L-N	Max Current	Voltage (V)* L-N	Phase	Frequency	THD	Efficiency(%)	Max Current	Temp.	Audible Noise	Humidity
e-0201	2	25 x 50 x 29,5	21	80	160-245	10,5A	220/230/240±%2	1 Ph+N	same as input	w/o distortion, no affect on harmonics	≥ 95	7.3A	0-40°C	<45dBA	0-95%
e-0351	3.5	25 x 50 x 29,5	26	80	160-245	19A	220/230/240±%2	1 Ph+N			≥ 96	12,7A	0-40°C	<45dBA	0-95%
e-0501	5	50,5 x 39 x 28,5	37	80	160-245	27A	220/230/240±%2	1 Ph+N			≥ 96	19.4A	0-40°C	<45dBA	0-95%
e-0751	7.5	50,5 x 39 x 28,5	46	80	160-245	39A	220/230/240±%2	1 Ph+N			≥ 96	29A	0-40°C	<45dBA	0-95%
e-1001	10	53,5 x 44,5 x 35	61	80	160-245	53A	220/230/240±%2	1 Ph+N			≥ 96	39A	0-40°C	<45dBA	0-95%
e-1501	15	36,5 x 62 x 64	85	80	160-245	79A	220/230/240±%2	1 Ph+N			≥ 96	58A	0-40°C	<45dBA	0-95%
e-2001	20	49,5 x 73 x 77,5	136	80	160-245	106A	220/230/240±%2	1 Ph+N			≥ 96	74A	0-40°C	<45dBA	0-95%
e-3001	30	49,5 x 73 x 77,5	160	80	160-245	159A	220/230/240±%2	1 Ph+N			≥ 96	111A	0-40°C	<45dBA	0-95%
THREE PHASE	(kVA)	WxDxH(cm)	(kg)	V/Sn	Voltage (V) L-L	Max Current	Voltage (V)* L-L	Phase	Frequency	THD	Efficiency(%)	Max Current	Temp.	Audible Noise	Humidity
e-0603	6	39,5 x 53,5 x 88	77,5	80	277-424	3x10,5A	380/400/415±%2	3 Ph+N	same as input	w/o distortion, no affect on harmonics	≥ 95	3x7.2A	0-40°C	<50dBA	0-95%
e-1053	10,5	39,5 x 53,5 x 88	90	80	277-424	3x19A	380/400/415±%2	3 Ph+N			≥ 96	3x12,7A	0-40°C	<50dBA	0-95%
e-1503	15	39,5 x 58 x 91,5	130	80	277-424	3x27A	380/400/415±%2	3 Ph+N			≥ 96	3x19.4A	0-40°C	<50dBA	0-95%
e-2253	22,5	39,5 x 58 x 91,5	144	80	277-424	3x39A	380/400/415±%2	3 Ph+N			≥ 96	3x29A	0-40°C	<50dBA	0-95%
e-3003	30	44,5 x 68,5 x 102,5	196	80	277-424	3x53A	380/400/415±%2	3 Ph+N			≥ 97	3x39A	0-40°C	<50dBA	0-95%
e-4503	45	44,5 x 68,5 x 102,5	226	80	277-424	3x79A	380/400/415±%2	3 Ph+N			≥ 97	3x58A	0-40°C	<50dBA	0-95%
e-6003	60	54,5 x 103 x 131,5	360	80	277-424	3x106A	380/400/415±%2	3 Ph+N			≥ 97	3x74A	0-40°C	<50dBA	0-95%
e-7503	75	54,5 x 103 x 131,5	390	80	277-424	3x131A	380/400/415±%2	3 Ph+N			≥ 97	3x91A	0-40°C	<50dBA	0-95%
e-9003	90	54,5 x 103 x 131,5	455	80	277-424	3x158A	380/400/415±%2	3 Ph+N			≥ 97	3x110A	0-40°C	<50dBA	0-95%
e-11003	110	61,5 x 114,5 x 153	486	80	277-424	3x191A	380/400/415±%2	3 Ph+N			≥ 97	3x133A	0-40°C	<50dBA	0-95%
e-12003	120	61,5 x 114,5 x 153	500	80	277-424	3x210A	380/400/415±%2	3 Ph+N			≥ 97	3x146A	0-40°C	<50dBA	0-95%
e-15003	150	61,5 x 114,5 x 153	584	80	277-424	3x265A	380/400/415±%2	3 Ph+N			≥ 97	3x182A	0-40°C	<50dBA	0-95%
e-22003	220	88,5 x 180,5 x 142,5	960	80	277-424	3x387A	380/400/415±%2	3 Ph+N			≥ 97	3x269A	0-40°C	<50dBA	0-95%
e-27003	270	88,5 x 180,5 x 142,5	1200	80	277-424	3x470A	380/400/415±%2	3 Ph+N			≥ 97	3x327A	0-40°C	<50dBA	0-95%
e-36003	360	110 x 210 x 157	2045	80	277-424	3x633A	380/400/415±%2	3 Ph+N			≥ 97	3x438A	0-40°C	<50dBA	0-95%
e-40003	400	110 x 210 x 157	2300	80	277-424	3x688A	380/400/415±%2	3 Ph+N			≥ 97	3x484A	0-40°C	<50dBA	0-95%
e-50003	500	184,5 x 135,5 x 152	2740	80	277-424	3x877A	380/400/415±%2	3 Ph+N			≥ 97	3x610A	0-40°C	<50dBA	0-95%
e-60003	600	250,5 x 151 x 186,5	2910	80	277-424	3x1031A	380/400/415±%2	3Ph + N			≥ 97	3x727A	0-40°C	<50dBA	0-95%
e-80003	800	322,5 x 170 x 163	3600	80	277-424	3x1375A	380/400/415±%2	3Ph + N			≥ 97	3x970A	0-40°C	<50dBA	0-95%
e-100003	1000	322,5 x 170 x 163	3800	80	277-424	3x1758A	380/400/415±%2	3Ph + N			≥ 97	3X1223A	0-40°C	<50dBA	0-95%

* ±1% to ±5% adjustable at Digital Version

- Inform AVR is used with any computer system, fax and photocopy machines, industrial, medical, laboratory, office appliances and household for secure energy.
Inform AVR protects your load from all fluctuations of the mains voltage and regulates it.
- It disconnects the output voltage electro-mechanically when an increase or decrease occurs that is out of limits and prevents all the possible problems by electronic protection (optional).
- The booster transformer and sensitive variac do the voltage regulation.
- Servo system is based on the control of DC motor by thyristor.
- Output voltage is observed by analogue or digital display (optional). Over current protection is ensured by magnetic switch and inside cooling is assured by natural cooling or fan depending on power. In single- phase models special inside structure and natural cooling is applied. Connections of the unit are done by NK model Terminals.
- Phase protection, which is operated optionally, disconnects the output during low or high voltage value, and if there is no phase, again disconnects the output voltage by contactor. In order to avoid the possible problems that can be caused by sudden voltage fluctuations, Inform AVR includes a time relay, which can take the control in 2 seconds. It has a by-pass switch and on/off property.
- Wide voltage range models may be produced upon request. The standard voltage range of these models may be altered upon request.
- Digital Version enables monitoring of the following parameters;
- Input/Output Voltage, Output Current (optional), output frequency
It also has Regulator in operation, output voltage high / low LED indicators
- Digital AVR provides output is present (Regulator in operation) & Output voltage high / low dry contact alarm signals.

Infocharger

25-200 A

- Microprocessor Controller
- IGBT Technology (ICH Series)
- PFC Technology (ICC Series)
- Transformerless Design
- Wide Input Voltage Range
- Operation according to constant voltage and current principle
- Adjustable Boost and Nominal Charge Voltage
- Adjustable Output Current
- High Voltage, Over Current, Short Circuit Protections
- Over Temperature Protection
- Alphanumerical LCD Display and Control Panel
- Low DC Voltage Protection (LVD) - Optional
- Dry Contact Alarms- Optional
- Parallel Connection Availability at ICH Series - Optional
- Small Footprints, Compact Size

ICC Series

ICH Series

TECHNICAL SPECIFICATIONS

TYPE	ICC2460	ICC4830	ICC11015	ICH2450	ICH24100	ICH24200	ICH4850	ICH48100	ICH11025	ICH11050
Power	60Amp	30Amp	15Amp	50Amp	100Amp	200Amp	50Amp	100Amp	25Amp	50Amp
DC Voltage	24VDC	48VDC	110VDC	24VDC			48VDC		110VDC	
INPUT										
Input Phase	1Phase			1phase / 3Phase						
Nominal Voltage Range	90-265VAC			176-280VAC (Ph - N)						
Frequency Range	50/60Hz ± 10%									
Power Factor	>0,98			>0,8						
OUTPUT										
Nominal Voltage	24VDC	48VDC	110VDC	24VDC			48VDC		110VDC	
Nominal current	60Amp	30Amp	15Amp	50Amp	100Amp	200Amp	50Amp	100Amp	25Amp	50Amp
Output Current Adjustment value	0 to 60A	0 to 30A	0 to 15A	0 to 50A	0 to 100A	0 to 200A	0 to 50A	0 to 100A	0 to 25A	0 to 50A
Max Output Current	110% of Inominal									
Boost Charge Voltage	100% - 120% of the nominal output voltage									
Output Fluctuation	<1% rms AC Output Voltage									
Dynamic Response	less than 2% of output voltage									
Output protection	electronic short circuit / over voltage									
DISPLAY										
LCD Display Panel	Voltage, Current, Temperature, Charge and Status Informations									
LED Display Panel	Overload, Line, Battery, Load, LVD, Fault Indications									
GENERAL										
Cooling	Forced (FAN Cooling)									
Isolation Voltage	2000VAC between output and chassis									
Efficiency	90%									
Operating Temperature	0 – 40 °C									
Relative Humidity	0% - 95%									
Input/Output Connections	Terminals									
Fuses	input, load and Battery									
PHYSICAL SPECIFICATIONS										
Net Weight (kg)	11,6			35						
Dimensions (mm) (WxDxH)	250x420x280			265x556x560						
STANDARDS										
Safety	EN62040-1-1									
EMC	EN62040-2									
Performance	EN62040-3									
Protection Class	IP 20									
OPTIONS										
Dry Contact Card	9pcs contact alarms (NO/NC)			8pcs contact alarms (NO/NC)						
LVD	Low Voltage Disconnect (Contactor)									
Parallel Connection	Not Available			up to 7 units						

Battery Charger

5-700 A

- Microprocessor controlled Thyristor Technology
- Built in input transformer topology
- Fully Adjustable float, boost and equalizing charge modes with V/I characteristics
- Advanced technology for phase control
- Very low voltage ripple and extended battery life
- High efficiency and low operation cost
- Ability to operate as voltage or current source
- Wide range of options for monitoring
- Improved environmental operation characteristics
- Remote monitoring via RS232 communication port
- Potential free alarm contacts on extended alarm board
- Internal Over Temperature protection
- User Friendly Control Panel

TECHNICAL SPECIFICATIONS

DC Voltage	24VDC	48VDC	110VDC	220VDC
INPUT				
Input Phase	1Phase/3Phase			
Nominal Voltage Range	1x220V or 1x230V / 3x380V or 3x400V ± 15 % – 2 / 4 wire			
Frequency Range	47-63Hz			
OUTPUT				
Nominal Voltage	24VDC	48VDC	110VDC	220VDC
1Ph Nominal current	60A	15A/30A/40A/60A	5A/20A/30A/40A/60A/80A/100A/120A/150A	15A/30A/40A/60A
3Ph Nonimal current	30A/60A/100A/150A/ 200A/250A/400A	10A/30A/60A/100A/ 150A/200A/250A	30A/60A/100A/150A/ 200A/ 250A/300A/400A/ 500A/700A	30A/60A/100A/150A/ 200A/250A/300A/400A/ 500A/700A
Max Output Current	110% of nominal			
Float Charge Adjustment Range	80% - 115% of the nominal output voltage			
Boost Charge Voltage	80% - 125% of the nominal output voltage			
Equalizing Charge Adjustment Range	80% - 125% of the nominal output voltage			
Current Limit Adjustment Range	25% - 100% of the nominal output voltage			
Voltage Ripple	< 1% (with or without battery)			
Voltage Regulation	< 1% (10% to 100% load)			
Efficiency	87%	89%	91%	93%
DISPLAY				
LCD Display Panel	Voltage, Current, Charge and Status Informations			
LED Display Panel	Line, Operation, Fault Indications			
GENERAL				
Charger Mode	Automatic / Manual U-I Characteristic			
Charger Type	Float / Boost / Equalizing Charge			
Cooling	Forced Cooling with Thermic Controlled Fan			
Input/Output Connections	Terminals			
Fuses	Semiconductor Type			
ENVIRONMENT				
Operating Temperature	-5 – +50 °C			
Relative Humidity	0% - 95%			
Protection Class	IP 20 (Higher IP Class is optional)			
STANDARDS				
Standards	89/336/EEC (EMC); 62040-1, 62040-2, 62040-3, IEC 950, IEC 439, IEC 146			
OPTIONS				
Dry Contact Card	4pcs contact alarms / normally(closed/open /Modbus)			
Parallel Connection	Available			
Others	Earth Leakage Monitoring, Dc Supply & Battery Monitoring, Gauges, Load Voltage Limitation Module / Voltage Drop, Battery Charge Temperature Compensation, IP Protection, Touch panel, LVD, Fan failure monitoring, AC Input Power measurement, Active parallel current sharing			

Info-STS (1 Phase)

1 Phase In - 1 Phase Out / 50 - 100 A

- Uninterruptible transfer between the independent sources
- Synchronous/Asynchronous transfer feature
- "In flight" transfer mode
- RS232/RS485 communication facilities
- Source priority selection
- Automatic and Manual transfer in case of failure on both sources
- Module replacement without interruption under load
- Fast Diagnostic Response with microprocessor controller
- Internal (2 pcs) manual bypass
- Easy Maintenance availability
- Current Distortion level less than 1%
- High Efficiency
- Transfer to the second source in less than 5 ms in case of over low/high voltage values

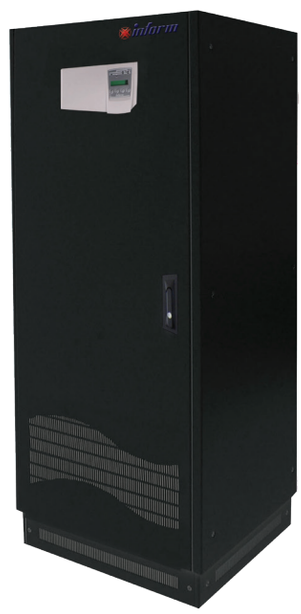
TECHNICAL SPECIFICATIONS

MODEL	STS1050	STS1100
GENERAL SPECIFICATIONS		
Nominal Voltage	220V / 230VAC (Monophase)	
Nominal Operation Current	50A	100A
Transfer Time (Synchronized)	5ms	
PHYSICAL SPECIFICATIONS		
Cable Entry	Rear	
Air Entry/ Exit	Bottom/Top	
Advised Cable Cross Section	10mm2	35mm2
Dimensions WxDxH	(19"x360mmx2U)	(19"x360mmx4U)
Weight (kg)	9kg	17kg
ENVIRONMENT		
Max Altitude	2000m above sea level	
Humidity	0-95%	
Operating Temperature	0-40°C	
Audible Noise (from 1m)	<45dBA	
Protection Class	IP20	
STANDARDS		
Standards	EN 62310-2, EN 62310-1, EN 60950-1	

Info-STS (3 Phase)

3 Phase + Neutral In - 3 Phase + Neutral Out / 50 - 600A

- Increased power quality
- Easy monitoring all parameters on LCD display
- Fast microcontroller (32 mips)
- Power blackout protection
- Automatic static switching
- Remote monitoring of input power sources
- Easy static and mechanical transfer between separate input sources
- Remote management of power events
- Power event logging
- Advanced RS232 communication features
- DRY contact alarm interface
- Password protected login system from remote site (time Access)
- Easy front access to all components inside of the STS
- Second protection cover on live circuits which prevents electrical shock
- Input sources protected by fuses
- 3 positioned Maintenance bypass switch which prevents cross currents between input sources
- User adjustable parameters by entering a password.
- Built in real time clock.
- Alarm history (with date and time)
- Automatic transfer test from a remote site or using front panel
- Front panel Lamp test
- External emergency shutdown (EPO) input
- Hot plug construction during maintenance bypass
- High current output tolerance up to 1000%
- Temperature sensor inside the Cabinet
- Fast voltage black-out circuit
- Input phase balance and phase sequence fault detect circuit
- Adjustable Input source frequency lower/upper limits



TECHNICAL SPECIFICATIONS

MODEL - 3pole MODEL - 4pole	STS3050 STS4050	STS3100 STS4100	STS3150 STS4150	STS3200 STS4200	STS3250 STS4250	STS3300 STS4300	STS3400 STS4400	STS3600 STS4600
INPUT								
Voltage	380,400VAC, (3 wires for 3pole version And 4 wires for 4pole version)							
Voltage Range	310-430VAC							
Frequency	50 or 60Hz +/-5%							
Voltage Distortion	<10%							
Input voltage error window	adjustable							
Input frequency error window	adjustable							
OUTPUT								
Current	50A	100A	150A	200A	250A	300A	400A	600A
Voltage	380,400VAC, (3 wires for 3pole version And 4 wires for 4pole version)							
Crest factor	up to 3,5							
Synchronized transfer time	max 1.8 msec (on 0 current mode)							
Non-syncronised transfer time	max 10 msec in 0 current mode, 0-25 sec adjustable in delay mode and in 0 current mode							
load power factor range	0,6 lagging to 0,9 leading							
Efficiency	>98%							
Overload	100% to 150% = 1 minute 150% to 200% = 10 seconds >200% = 0,5 seconds 1000% = 20 msecs							
Type of transfer	break before make							
As standard	Overcurrent inhibit LCD front panel, MBP							
DISPLAY								
LCD Display	2 lines 16 character LCD Display							
Monitored Parameters	Source 1 Voltages, Source 2 Voltages, Output Load, Phase Balance, Synchronization Source 1 Frequency, Source 2 Frequency, Phase Angel Degree, Temperature							
Indications	8 LEDs arranged as mimic diagram							
Control buttons	5 push button interactive with LCD panel							
Event log	64 recorded alarm logs from panel or RS232							
COMMUNICATION								
Interface (Communication Ports)	RS 232 Standard							
Dry contact signals	Output Inhibit Relay, Summary Alarm Relay, Static Or Manual Transfer Relay, S1 /S2 Backfeed Trip Relay, Preferred Source Indicator Relay, Load Is Connected To Alternate Input Source Relay							
GENERAL								
Neutral connection	available at 4pole version							
transfer time	<5msec : within CBEMA & IEEE for synchronized sources <11msec: for unsynchronized sources.							
Manual transfer switch	available							
ENVIRONMENT								
Operating Temperature	0-40°C							
Relative Humidity (non-condensing)	0-90%							
PHYSICAL SPECIFICATIONS								
Dimensions (mm) WxDxH	685x530x1500			685x570x1770				915x735x1935
Weight (kg)	175			205	215	220	240	340
STANDARDS								
Standards	EN 62310-2, EN 62310-1, EN 60950-1							

MEDICAL

Infomips

Medical Isolation Power Systems

IT Systems are distribution systems which are preferred less compared to Grounded Systems at Industrial Institutions however mandatory to use at Group-2 rooms in hospitals due to the electricity safety that is maintained in compliance to IEC 60364-7-710 Standard. The main difference that discriminates IT systems from Grounded Systems (TN or TT) is the non-presence of the Institution Grounding. This is obtained by isolation transformer and each load that is connected to this distribution system has its own individual grounding. These systems are mainly used in the supply of the hospital critical rooms like surgery, intensive care, premature childbirth, angiography examination rooms.

Key Features

- Providing isolation for critical loads especially in emergency &operating rooms in hospitals
- Maintaining the security of doctor and patient
- Preventing the energy interruption
- Displaying the status info of Utility
- 50-500kΩ isolation resistor
- 5-50A Load Current
- Menu adjustment on LCD screen
- Data transmission through RS232/485
- Transfer less than 5ms (with STS)
- Determination of fault location (with IZL CM6X)
- Remote monitoring (with IZL LAP)
- Central Monitoring System (with IZL-LAP/M)
- Customizing the Panel according to project

MIPS Devices;

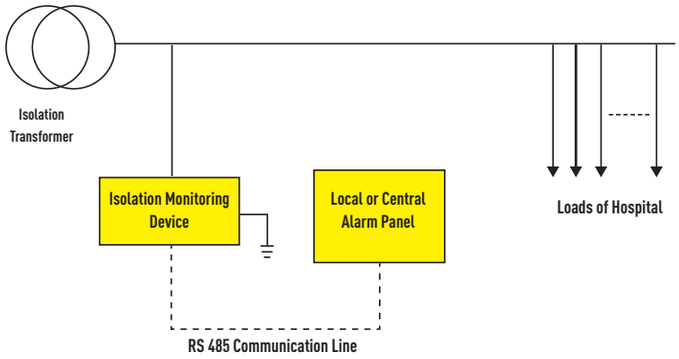
Complete MIPS devices are as follows;

Standard:

- Distribution Panel
- Circuit Breakers for output distribution
- Isolation Transformer (comply with IEC 61558-2-15)
- Isolation Monitoring Device (IZL IMM)

Options:

- Isolation Error Detection System (IZL CM6X)
- Local & Central Alarm Panel (IZL LAP & IZL LAP/M)
- Static Transfer Switch or Contactor for Change over



Benefits of the Isolation System;

- In the event of first isolation failure, energy blackout does not happen. The security equipment controls the system continuously therefore the energy blackout is prevented.
- The Medical Devices continue their normal operations.
- Fault Currents are reduced to non-critical levels which means the leakage current that is present within the room is reduced from mA levels to µA levels.
- A possible inconvenience in the surgery room is prevented where energy is reserved, and blackout does not happen.

Battery Cabinets

	Battery cabinet type	Cabinet model	Capacity											Cabinet dimensions			
			7-9 AH.	12AH.	18 AH.	25 AH.	40 AH.	65 AH.	80 AH.	100 AH.	120 AH.	150 AH.	200 AH.	Length	Width	Height	Weight
	BC Cabinets (multi-purpose)	BC 00	32	22	14	6	6							655	230	530	15
		BC 10	64	42	24	12	12							835	246	700	25
		BC 20	76	48	32	15	15	6	6					957	246	760	30
		BC 30	144	96	40	38	32	16	16					926	386	1073	50
		BC 40	120	72		32								828	386	846	35
		BC 45	109	72	64	28	24							957	422	800	55
		BC 50	240	144		64	48	32	32	32	8			1566	386	1166	80
		BC 55				78	78	38	38	38	30			828	386	846	35
		BC 60			90	100	80	64	64	64	45	45	32	1774	560	1781	230
		BC 65				180	150	90	90	90	60	60	40	828	386	846	35
	V type PDSP Cabinets	V 14			62	31								400	765	1070	51
		V 15		62										400	765	1070	51
		V 24				32	31							525	880	1310	64
		V 33						35	35	35				835	1160	1310	143
		V 34				93	78							835	1160	1310	10
	V type İnformer Cabinets	BC 1000		6										135	430	390	10
		BC 2000	8											135	470	390	10
		BC 3000	12											135	470	390	10
	İnformer Rack Cabinets	RMBC 1000		6										483	470	132	10
		RMBC 2000	8											483	450	132	10
		RMBC 3000	12											483	512	132	10
	V type Saver (plus) DSP Cabinets	BC 1714			14									270	512	685	28
		BC 1426				14								270	655	685	30
		BC 0740	40											270	655	685	28
		BC 1720			20									270	655	685	30
		BC 2620				20								390	755	700	46
		BC 1232		32										270	655	685	30
	Saver DSP Rack Cabinets	RMBC 0714	14											483	535	134	11
		RMBC 1214		14										483	535	222	12
		RMBC 0720	20											483	535	222	11
		RMBC 1220		20										483	535	222	17
	BC Cabinets (DSP Multipower)	MPBC	20	20										425	563	222	16
	V type DSP Multipower Cabinets	MPBC-V	20											445	677	132.9	15
	Battery connection cables depend on UPS models. Battery cable price is not included in cabinet price.																

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- ALBARAK BANK – SOUTH AFRICA
- ALCATEL - PORTUGAL
- ALPHA MEDICAL – FRANCE
- AMALGAMATED HEALTH CARE SOUTH AFRICA
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- ATATURK AIRPORT - TURKEY
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- CUSTOMS POLICE- ROMANIA
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- PETROKAZAKISTAN - KAZAKHSTAN
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- PWC-BULGARIA
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- SIEMENS-KAZAKHSTAN
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- ST JAMES HOSPITAL-UK
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- SYARIKAT PRASARANA NEGARA BERHAD – MALAYSIA
- SWISS INS - SWITZERLAND
- TECHNICAL CHAMBER OF GREECE GREECE
- TECHNICAL UNIVERSITY OF IONIAN ISLANDS-GREECE
- TECHNOLOGY-HONG KONG
- TECHNOPOLIS-BULGARIA
- THALES RECHEARCH AND TECHNOLOGY FRANCE
- THYSSENKRUPP AIRPORT SYSTEMS, S.A.- SPAIN
- TRANSTEL - S.AFRICA
- TRANSWORLD PUBLISHING-UK
- TYGERBERG HOSPITAL - S.AFRICA
- UNIVERSIDAD DE ZARAGOZA-SPAIN
- UNIVERSITY OF SCIENCE & UNIVERSTY OF SINGD-PAKISTAN
- UNIVERSITY HOSPITAL PRAGUE 2 CZECH REPUBLIC
- VÄXJÖ MUNICIPALITY-SWEDEN
- WAGON AUTOMOTIVE (FARNIER PENIN) FRANCE
- WOLMIDO MONORAIL – SOUTH KOREA
- ZANTE HOSPITAL -GREECE
- ZARA SHOP -RUSSIA
- RIYADH POISON CONTROL CENTER – S. ARABIA
- NATIONAL HAYAT HOSPITAL – S. ARABIA
- PRINCE MOHAMMAD BIN ABDULAZIZ HOSPITAL – S. ARABIA
- ALMAJMAAH UNIVERSITY – S. ARABIA
- ABOUARISH HOSPITAL – S. ARABIA
- SAMTA HOSPITAL – S. ARABIA
- SABYA HOSPITAL – S. ARABIA
- ALMOSAM HOSPITAL – S. ARABIA
- AL RAYTH HOSPITAL – S. ARABIA

CUSTOMER SERVICES

Reliable

Directly present in more than 70 countries and servicing its products worldwide, a team of qualified engineers is available 24/7/365 to support your UPS system to ensure power quality and availability to the most critical loads.

Excellent

Inform's competitive edge lies in its ability to provide high value-added UPS systems and services for both end users and business partners.
For Inform, creating value means coming up with solutions for lower energy consumption, but also integrating product design into the overall development process.

Tailor-made

Inform offers a complete range of specific solutions and services to meet customer requirements:

- Technical pre-sales support at the project design stage
- Factory acceptance test
- Supervision of installation, testing and commissioning, site acceptance test
- Operator training
- Site audit
- Warranty extension
- Annual maintenance contract
- Fast intervention on emergency call

SUPPORT

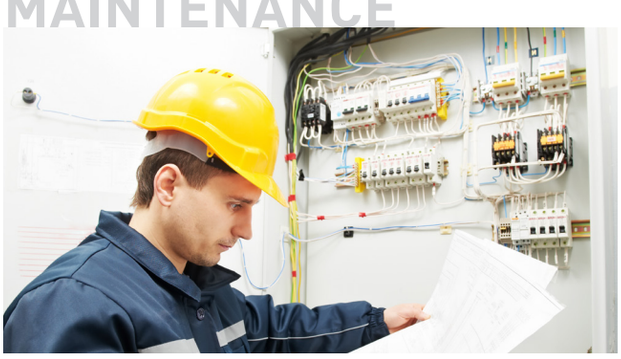
SITE INSPECTION, INSTALLATION SUPERVISION.
We perform a comprehensive check of the UPS environment to ensure safety and fault-free operation.
Our technical experts give manufacturer's recommendations to the site engineer or electrical contractors, and supervise the UPS installation before load power-up.

SITE TEST, COMMISSIONING.
Our Service Engineers conduct rigorous site tests and full setting-up of the UPS system before going live. They also perform site acceptance tests according to your requirements.
Commissioning operations for all UPS are carried out by qualified engineers to guarantee seamless start-up.
After the final handing over of the UPS system, a Test and Commissioning report is delivered to you.

TRAINING

We offer on-site training to ensure your equipment's safe and efficient operation.
Troubleshooting courses are also available in our plants for intensive hands-on practice on UPS training equipment.

MAINTENANCE



PREVENTIVE MAINTENANCE
Electronic equipment and power systems, such as UPS, contain life-limited components and parts that must be replaced according to the manufacturer's specifications.
To ensure optimal performance and to protect your critical application from potential downtime, it is crucial to perform preventive maintenance operations on a regular basis and replace parts when needed. Our Service Contracts include cleaning, IR thermography, measurements, functional tests, event log and power quality analysis, battery health check, hardware and software upgrades, and technical reports.
A Preventive Maintenance Plan is one of the most cost-effective actions that can preserve your initial investment and ensure your business continuity.

CORRECTIVE MAINTENANCE, EMERGENCY CALL
In the event of an Emergency Call, our worldwide service network, with engineers and spare-parts stocks strategically located as close as possible to your site, guarantees a fast intervention time with 24/7/365 assistance.
After connecting his laptop to your UPS, very powerful diagnostic software helps our engineer to identify the fault, thus ensuring short MTTR (Mean Time To Repair).
Corrective actions are performed such as part replacement, adjustments and upgrades to return the UPS system back to normal operation.

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