



Pyramid DSP Series

Uninterruptible Power Systems

On-Line "Double Conversion" Technology, DSP Controlled IGBT Rectifier UPS

3 phase in / 3phase out 10 to 300kVA (PDSP version)

3 phase in / 3phase out 5 to 150kVA (PDSP-U version)



- IGBT Rectifier
- Real Digital Signal Processor (DSP) controlled transformerless design
- Input Power Factor Correction PFC(>0,99)
- Low Total Harmonic Distortion Level (THDi \leq 4%)
- High Efficiency (up to 95%)
- 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
- 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)
- 3 phase in 1 phase out version is available (10 to 40 kVA)
- 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 CS121BSC, slot box, cable
- External Adapter
 - SNMP Adapter Net Agent Mini DP 522
 - SNMP Adapter CS121BL
 - SNMP Adapter with Modbus CS121LM

Other

- Splitt 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)

- BC20, BC30, BC40, BC50, BC60



TESID Innovation and Creativity Award 2005

Pyramid DSP Specifications

MODEL (380-400-415V 3Ph Version)	PDSP33010	PDSP33015	PDSP33020	PDSP33030	PDSP33040	PDSP33060	PDSP33080	PDSP33100	PDSP33120	PDSP33160	PDSP33200	PDSP33250	PDSP33300			
Output Power (kVA)	10	15	20	30	40	60	80	100	120	160	200	250	300			
Nominal Active Power (kW)	8	12	16	24	32	48	64	80	96	128	160	200	240			
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			
Output Power (kVA)	5	7.5	10	15	20	30	40	50	60	80	100	125	150			
Nominal Active Power (kW)	4	6	8	12	16	24	32	40	48	64	80	100	120			
INPUT																
Number Of Phases	3Ph+N+PE															
Nominal Voltage (Ph-Ph)	200V / 208V / 220V (PDSP-UJ) or 380V/400V/415V (PDSP)															
Voltage Range (%100 Load)	(-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	0.8															
Number Of Phases	3Ph+N+PE (PDSP & PDSP-UJ)															
Voltage (1Ph_ Phase To Neutral) Voltage (3ph_ Phase To Phase)	200V / 208V / 220V (PDSP-U) or 380V/400V/415V (PDSP)															
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 minutes															
Efficiency	up to 95% (**)															
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, By Pass Voltage, Battery Voltage & Current, Temperature, Alarms															
STATIC BYPASS																
Number Of Phases	3Ph+N+PE															
Voltage Range For By Pass Operation	±10%															
Frequency Range For By Pass Operation (Hz)	± 6% (Configurable)															
COMMUNICATION																
Interface (Communication Ports)	RS232 & RS422															
Dry Contact Signals	AC failure, Battery under Voltage, By Pass Operation, Output Failure															
Others	EPO, Generator Interface															
ENVIRONMENT																
Storage Temperature Range (°C)	-25 to +55 (15 to 40 Recommended For Longer Battery Life Time)															
Operating Temperature Range (°C)	0 to 40 (20 to 25 Recommended For Longer Battery Life Time)															
Relative Humidity Range	0-95% (Non-Condensing)															
Maximum Altitude Without Derating (m)	1000															
Protection Level	IP20															
PHYSICAL SPECIFICATIONS																
Dimensions wxdxh (cm)	40 x 78 x 107			52 x 90 x 130			67x73x153		64x98x140		77x76x168		96x87x186		161x106x193	
Weight (kg)	102		110	240	242	260	295	330	370	380	740	765				
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

