

## Pyramid DSP Series

On-Line "Double Conversion" Technology, DSP Controlled IGBT Rectifier UPS  
3 phase in / 3phase out 10 to 400kVA (PDSP version)  
3 phase in / 3phase out 5 to 200kVA (PDSP-U version)  
3 phase in / 1phase out 10 to 40kVA (1ph output version)

- ▶ IGBT Rectifier
- ▶ Real Digital Signal Processor (DSP) controlled transformerless design
- ▶ Input Power Factor Correction PFC(>0,9)
- ▶ 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)

\* 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 CSI4IBSC or CY504, slot box, cable
- External Adapter  
SNMP Adapter Net Agent Mini DY522  
SNMP Adapter CSI4IBL  
SNMP Adapter with Modbus CSI4ILM

#### 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)

- BCO0, BC10, BC20, BC30, BC40, BC50, BC60



TESID Innovation and  
Creativity Reward  
2005



# Pyramid DSP Series 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&485@ 10 to 120rVA / RS232&422 @ 160 to 400rVA														
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 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															
	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		
Weight (kg)	100	114	116	122	180	202	253	285	405	522	570	735	750	800	
STANDARDS															
Standards	EN 62040-1-1 (safety), EN 62040-2(EMC), EN 62040-3 (VFI-SS-III)														
(*) for source having THDv < 2% @ nominal load (**) varies depending on ups power															