

## 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)



\* 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



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# 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 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		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														