

DX Series

Single Phase UPS

1KVA~3KVA

PF – 0.9/1.0

Transformer Less



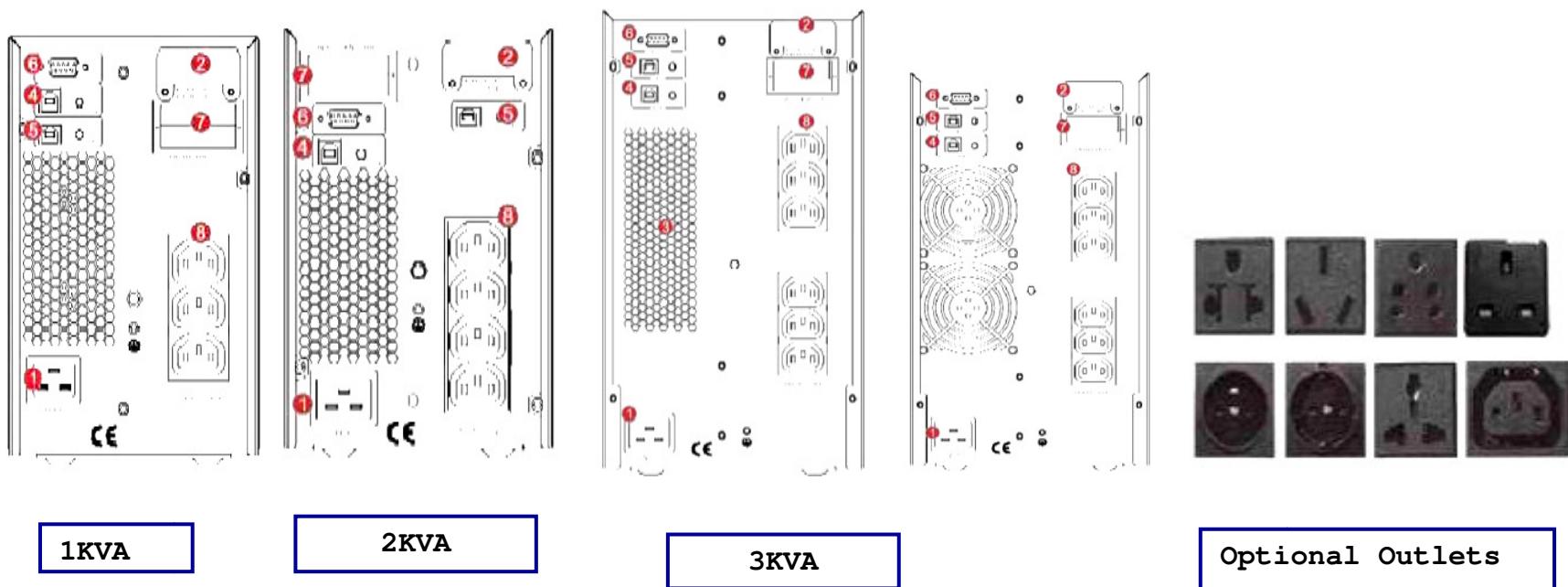
About the DX SERIES

Perpetual Power DX Series is a state-of-the-art single-phase UPS system designed for mission-critical power protection. With an active power output efficiency of up to 90% and operating efficiency up to 96.54%, the DX Series delivers superior performance with minimal energy loss. Built with advanced ABM (Advanced Battery Management) technology, the DX Series ensures extended battery life, intelligent charging, and reliable long-duration backup. Its compact design, robust architecture, and user-friendly interface make it ideal for applications across IT, healthcare, industrial, and commercial sectors.

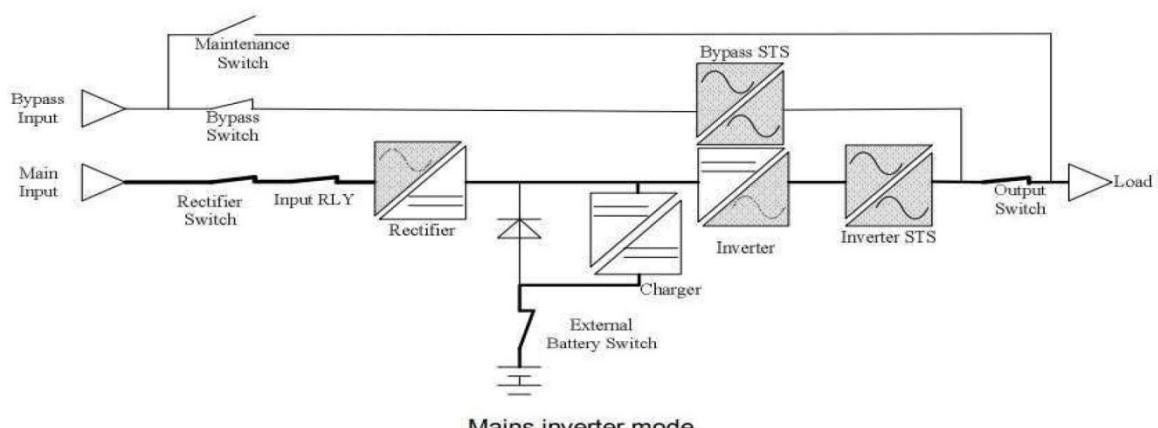
Key Features – DX Series UPS

- High-Frequency Online Double Conversion Technology
- DSP (Digital Signal Processor) Control Technology
- Active Power Factor Correction – Input power factor up to 0.99
- High Output Power Factor – 0.9 to 1.0 for improved load handling
- Wide Input Voltage Range – 110–300 VAC
- Wide Input Frequency Range – 40–70 Hz
- Auto Sensing Frequency – Supports both 50Hz and 60Hz input
- Frequency Conversion Mode – 50Hz ⇄ 60Hz
- Cold Start Function – Enables UPS to start without mains power
- Rear Ventilation Design with Variable Speed Fan for better thermal management
- Effective Software and Hardware Protection
- Quick & Stable Charging – 90% battery capacity restored within 4 hours (Standard Models)
- Advanced Battery Management (ABM) – Prolongs battery life
- Linear Derated at Low Input Voltage – Reduces unnecessary battery usage
- Configurable Delayed Start – When mains power is restored
- Multi-Function LCD Display – Allows setting and viewing
 - ❖ Output voltage
 - ❖ End of Discharge (EOD) voltage
 - ❖ Auto-start
 - ❖ Bypass mode
 - ❖ ECO mode
 - ❖ Frequency conversion mode
- Multi-Platform Communication
 - ❖ Standard: RS232
- Optional Add-Ons (for 1–3KVA Models)
 - ❖ USB / RS485 Cards
 - ❖ AS400 Dry Contact Card
 - ❖ SNMP Card
 - ❖ SMS Alarm Module
 - ❖ EPO (Emergency Power Off) Function
 - ❖ 12A High-Capacity Charger

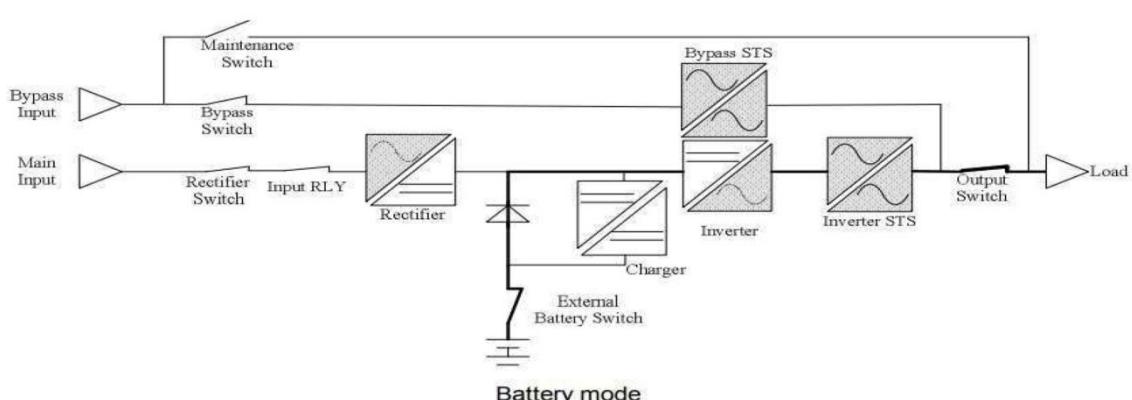
Rear Panel Overview - DX Series UPS



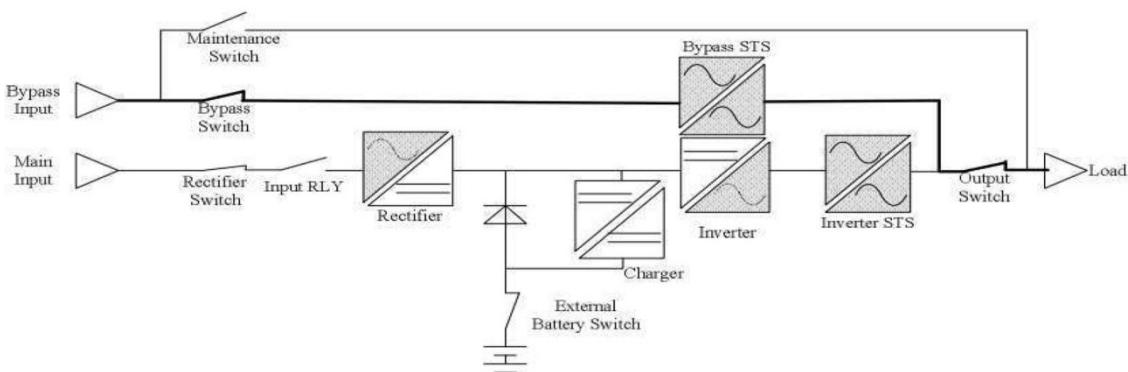
Rear Panel Overview - DX Series UPS



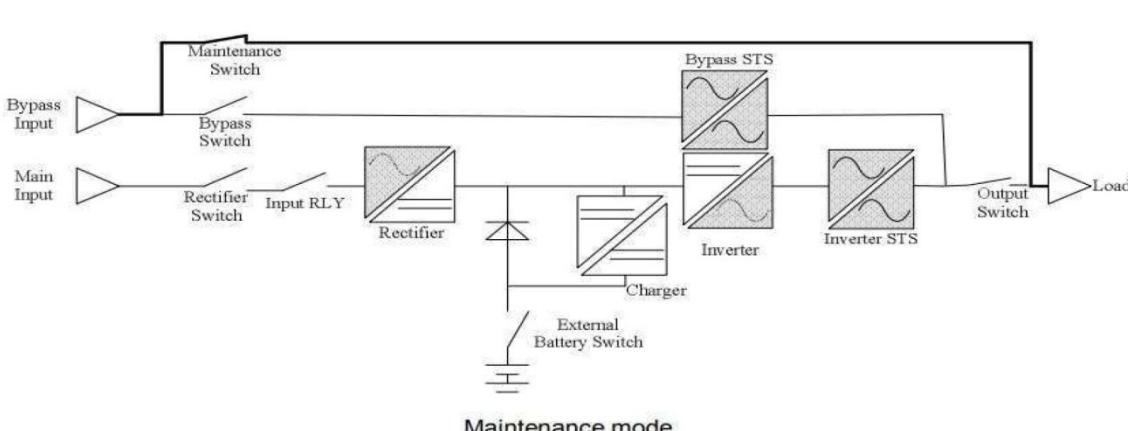
**Mains
Inverter
Mode**



Battery Mode



Bypass Mode



**Maintenance
Mode**

Technical Specifications

MODEL	DX11E	DX11IB3	DX12E	DX12IB6	DX12IB8	DX13E	DX13IB6	DX13IB8						
CAPACITY-Load	1 KVA(900 Watt)		2KVA(1800 Watt)			3 KVA(2700 Watt)								
INPUT														
Phase	Single Phase With Ground													
Rated Voltage	208 / 220 / 230 / 240 VAC													
Voltage Range	110~176 VAC (Linear Deratings Between 50% and 100% Load) 176~280(No Deratings)280~300VAC(Deratings 50%)													
Frequency	40Hz~70Hz (Auto-Sensing)													
Power Factor	≥ 0.99 @ Nominal Voltage (100% Load)													
By Pass Voltage Range	-25% - 15%(Settable)													
OUTPUT														
Voltage Range	208 / 220 / 230 /240 VAC(Settable LCD)													
Voltage Regulation	±1%													
Frequency-Synchronized Range	45Hz~55 Hz or 55Hz~65Hz													
Frequency-Online Mode	50Hz / 60Hz ± 0.1Hz													
Waveform	Sinusoidal													
Power Factor	0.9 / 1.0 (Optional)													
Total Harmonic Distortion(THDv)	≤1% (Linear Load) ≤ 3% (Non-Liner Load)													
Crest Factor	3:1													
Overload	105%~125% For 1 Min, 125%~150% for 30s, >150% for 300 ms													
BATTERIES														
Features	External	External	External	Internal	Internal	External	Internal	Internal						
Type	Sealed Lead Acid Maintenance Free Battery													
Capacity		12V/7AH		12V/7AH	12V/7AH		12V/7AH	12V/7AH						
Numbers	3		6	6	8	6	6	8						
Dc Voltage	36 VDC		72 VDC	72 VDC	96 VDC	72 VDC	72 VDC	96 VDC						
Charging Current	6A/12A (Set)	1A	6A/12A (Set)	1A	1A	6A/12A (Set)	1A	1A						
Charging Output VDC	40.7 ± 0.6	40.7 ± 0.6	108.4 ± 1.6	81.3 ± 1.2	108.4 ± 1.6	108.4 ± 1.6	81.3 ± 1.2	108.4 ± 1.6						
Typical Recharge Time	Standard Model 90% Capacity Restored in 3 Hours Long Run Model Depend on the Capacity of Battery													
SYSTEM														
Efficiency	≥90% (Online Mode)		≥90% (Online Mode)			≥90% (Online Mode)								
Transfer Time	Mains Mode to Battery Mode : 0 ms Inverter Mode to Bypass <2 ms (Typical)													
EMC/Safety/Performance	EN62040-1,EN62040-2,EN61000-3-2,EN61000-3-3,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4,IEC61000-4-5,IEC61000-4-6,IEC61000-4-8,IEC61000-4-11,IEC61000-2-2,IEC62040-2,IEC62040-1,IEC62040-3													
Quality /Security	ISO9001:2015,ISO14001:2015,ISO 27001:2013,ISO45001:2018,ROHS													
DISPLAY CONTROL														
Display	LCD+LED													
Settable Via LCD	Output Voltage , EOD, Auto-Start, Bypass Mode, ECO Mode and Frequency Conversion Mode													
Control Technology	DSP (Digital Signal Processors)													
MANAGEMENT CONTROL AND COMMUNICATION														
Charger Add.	12A Charger													
Output Terminal	Indian Standard Type D(3pin) Grounded and (Type G.M.N.O. for International Market Standard)													
Protections	Short-Circuit, Overload, Over Temperature, Battery Discharge Protection and Fan Testing Protection, Surge Protection (for Network / Fax / Modem)													
SMART RS-232	Supports Windows 2000/2003/XP/Vista/2008,Windows7/8/10, Linux and Mac													
USB/RJ-485														
Optional SNMP	Power Management from SNMP manager and Web browser													
Interface	Bit rate :2400 Bps / Byte :8 Bit / Completion Code :1 Bit													
ENVIRONMENT														
Operating Humidity	0~95% RH @ 0 - 45°C (Non-Condensing)													
Storage Temperature	-25°C - 55°C (Exclude Batteries)													
Operating Altitude	≤1000m, Above 1000m Derate 1% For Each Rising 100m													
Ingress Protection Rating	IP 20 / IP 21													
Noise Level 1m	\$50 db A													
PHYSICAL														
Dimensions (mm) (WxDxH)	144x336x216	144x317x216	191x418x335	191x419x335	191x418x335	191x419x335								
Packaged Dimensions (mm) (WxDxH)	232x417x318	230x460x315	277x500x435	277x500x435	277x500x435	277x500x435								
Net Weight (Kg)	6	12.8	10.5	23.1	29.4	11	24.3	29.5						
Gross Weight (Kg)	7	14	12	24.7	30.9	12.5	25.9	31.1						

**Accuracy weight ± 200gm

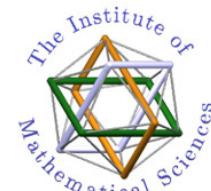
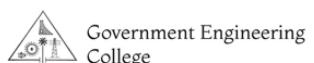
**Accuracy Dimension ± 20mm

- Specifications are subject to change without notice.
- Due to regular upgrade on picture and actual product may vary
- Custom-made specifications are acceptable.

Our Clients



CENTRAL POLYTECHNIC COLLEGE





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