



## E Series DX Uninterruptible Power System

Product Focus

*Reliable Power Protection for Today's Computing Environments.*



### Product Snapshot

<b>Power Rating:</b>	1KVA-20KVA
<b>Voltage:</b>	60 to 138 VAC (low voltage) 80 to 300 VAC (high voltage)
<b>Frequency:</b>	50/60 Hz (auto-sensing)
<b>Technology:</b>	High-frequency double-conversion online

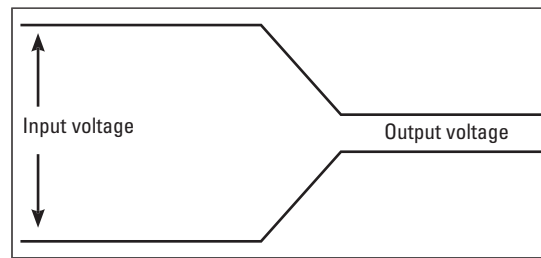
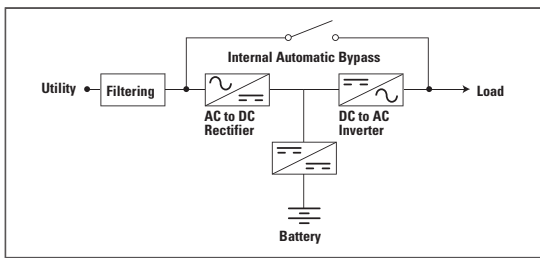
### Introducing the E Series DX UPS

The E Series® DX UPS double-conversion online UPS affordably protects mission critical applications from downtime, data loss and corruption. The double-conversion architecture incorporates rectifier and inverter stages to completely isolate the output power from all input anomalies. By adapting to a wide range of input voltages, the E Series DX avoids battery usage during minor power fluctuations, saving its capacity for times when utility power is completely lost.



### Features

- On-line double conversion topology assures maximum reliability
- Wide input-voltage range appropriate for the harshest electrical environments
- Standard Models for fixed-run time performance
- Tested for generator compatibility
- Automatic bypass for fault-tolerance
- Optional SNMP communications provides remote network-based monitoring
- XL Models for customized, long run-time applications, with fast recharging
- Cold start on battery power allows portable power
- WINPOWER software monitors power conditions
- Intuitive front-panel user interface for consistent status indication



### On-line double-conversion topology

This topology guarantees consistently high level of power quality. Whatever the disturbances on the distribution waveform is regenerated via the AC to DC then DC to AC conversion process. The battery is used only as a backup source.

### High performance and reliability

DX uses High Frequency technology to bring its users a compact UPS that delivers perfect sine wave output.

### Wide Input-voltage range

DX UPS have a very wide input voltage range up to 120-300V, optimized to improve compatibility with engine generator sets and reduce the numbers of transfer to battery power. The batteries are used only for the most serious incidents, maximizing available back-up time and extending battery life.

### Automatic bypass

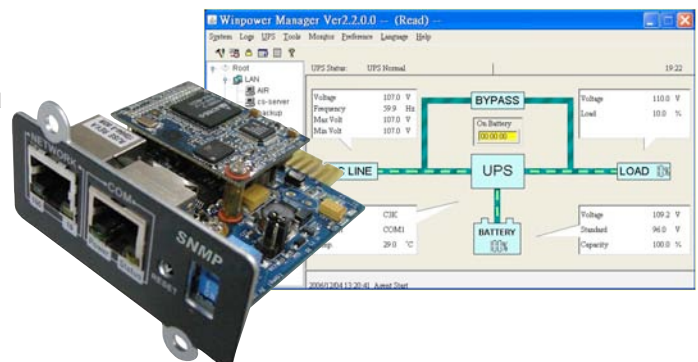
In case of overload or UPS fault, DX UPS automatically transfers the load to utility AC power.

### Advanced communications

An RS232 port is available for easy connection of the UPS to the server. It maybe used for local monitoring. An optional SNMP card is also available for network administration.

WINPOWER monitoring software can be used to:

- Alert users of a power event or pre specified condition
- Automatically shut down your servers
- Remotely supervise and control UPS



### High-performance battery charger

The DX battery charger:

- reduces battery recharge time
- protects the battery against damage caused by deep discharge
- avoids disturbances on the distribution system by correcting the power factor
- avoids propagating faults on the distribution system (back feed protection)

### Cold start on battery power

This function ensures trouble free start-up of your applications even during a utility power outage.

### Backup times from 5 minutes to several hours

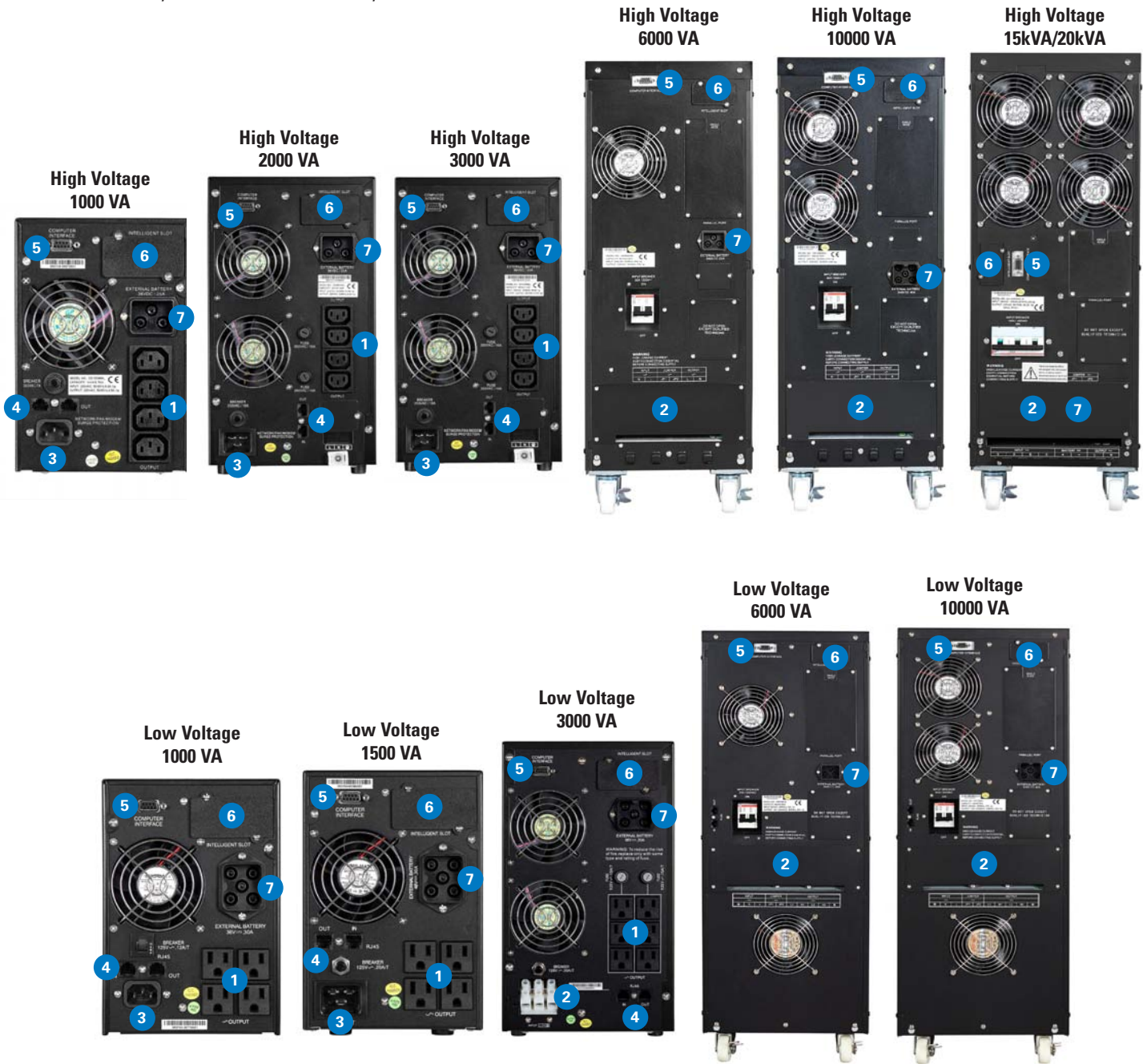
DX UPS offers a standard backup time of 5-8 minutes on full load to protect the applications. Using XL models allows you to reach several hours of runtime using external batteries.

### E SERIES DX BATTERY RUNTIME CHART

LV Model	1000	1500	3000	6000	10000 1:1	10000 3:1	15000 3:1	20000 3:1
Battery Runtime 1/2 load	14min	14min	17.5min	23min	12min	External bat	External bat	External bat
Battery Runtime Full load	5min	5min	5min	8min	5min	External bat	External bat	External bat
HV Model	1000	2000	3000	6000	10000 1:1	10000 3:1	15000 3:1	20000 3:1
Battery Runtime 1/2 load	14min	31min	16min	20min	16min	External bat	External bat	External bat
Battery Runtime Full load	7min	11min	>5min	8min	>5min	External bat	External bat	External bat

## E SERIES DX REAR PANEL

1. Output receptacles
2. Input/Output Terminal Block
3. AC Input
4. Modem Surge Protection
5. Standard RS232 Communication Port
6. Optional SNMP Communication Port
7. Extended Battery Connector (XL models only)



## E SERIES DX UPS TECHNICAL SPECIFICATIONS - HIGH VOLTAGE MODELS

Model Numbers/Watts	E Series DX 1000/700	E Series DX 1500 LV/1050 E Series DX 2000 HV/1400	E Series DX 3000/2100	E Series DX 6000/4200	E Series DX 10000 1:1/7000	E Series DX 10000 3:1/7000	E Series DX 15000 3:1/10500	E Series DX 20000 3:1/14000
Low Volt - Standard Version	EDX1000L	EDX1500L	EDX3000L	EDX6000L	EDX10KL	N/A		
Low Volt - XL Version External Battery	EDX1000LXL	EDX1500L XL	EDX3000L XL	EDX6000LXL	EDX10KLXL	N/A		
High Volt - Standard Version	EDX1000H	EDX2000H	EDX3000H	EDX6000H	EDX10000H	N/A		
High Volt - XL Version External Battery	EDX1000HXL	EDX2000HXL	EDX3000HXL	EDX6000HXL	EDX10KHXL	EDX10KHXL31	EDX15KHXL31	EDX20KHXL31

### Technology

On Line Double Conversion IGBT with Micro-controller

### Input / Output

Nominal Input Voltage	115V (Low-Voltage Models) 220V (High Voltage Models)		220V (All Models)		380 / 220 Vac three-phase			
Input Voltage Window	60V to 138V (Low Voltage Models) 122 to 300V (High Voltage Models)		185V +/- 3% to 266 +/- 3% (Low Volt) 122V to 300V (High Volt)		20% / -25%			
Nominal Output Voltage	115V (Low-Voltage Models) 220V (High Voltage Models)		240V / 120V (Low Voltage Models) 220V (High Voltage Models)		220V			
Output Voltage on Battery	115V (Low-Voltage Models) 220V (High Voltage Models)		240V / 120V (Low Voltage Models) 220V (High Voltage Models)		220V			
Frequency	50/60Hz, auto-detection							
Data Line Protection	Input / Output jacks included for Telephone / Modem / Internet Line surge protection					N/A		
Output receptacles (High Volt)	4 ea, IEC style				Hard Wired			
Output receptacles (Low Volt)	4 ea, NEMA 5-15 style		6 ea, NEMA 5-15 style		Hard Wired			
Input Connection (High Volt Models)	Detachable 1.5M IEC input cable (cable included)				Hard Wired			
Input Connection (Low Volt Models)	Detachable 1.5M IEC input cable (cable included)		Standard Model: Attached L5-30 input plug (cable included) XL Model: Hardwired		Hard Wired			

### Battery

Battery Quantity (standard model only)	3	4 (1500 Low voltage) 8 (2000 High voltage)	8	20	User-Supplied External Battery			
Charge Capacity (standard model only)	5 Hrs to 90% (LV 1K-3K std.) / 7 Hrs to 90% (LV 6K std.) / 8 hours to recover 90% capacity (LV 10K and HV models std.)				User-Supplied External Battery			
Battery Monitoring (standard model only)	Battery Replacement indicator				User-Supplied External Battery			
Start-On-Battery (standard model only)	Unit can be started without being connected to AC utility power -- allows for portable power source				User-Supplied External Battery			

### User Interface

Visual Operation on mains, battery, inverter, bypass and load/battery-charging levels

### Alarm and Controls

Audible and Visual Alarms Battery Operation Mode, Low Battery, General Fault, Overload, On Bypass

Control Two buttons for On/Off, and Alarm Silence

### Communications / management

Power Management Software WINPOWER power management software, included on CD

Connection Type Standard RS232

SNMP Interface Optional SNMP card

### Environment

Operating Temperature 0°C ~ 40°C

Humidity <95%

Noise Level <45dB (LV 1K-1.5K) / <50dB (others) <55dB <60dB

### Standards

Certification CE, UL (Low Voltage: 1K-3K only), ISO 9001

### Dimensions and weights W x H x D mm

Dimensions (High Volt models)	145x200x400	145x200x465	192 x 340 x 460	260 x 717 x 570				
Dimensions (Low Volt models)	145x200x400	145x200x465	192 x 340 x 460	300 x 830 x 655		N/A	N/A	N/A
Weight (High volt models) Kg	14 (XL: 7)	32 (XL: 15)	35.5 (XL: 16)	84 (XL: 35)	93 (XL: 38)	(XL: 39)	(XL: 55)	
Weight (Low volt models) Kg	14 (XL: 7)	18.7 (XL: 9)	35.5 (XL: 16)	132 (XL:85)	153 (XL: 98)	N/A	N/A	N/A

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