E Series DX Uninterruptible Power System

Reliable Power Protection for Today's Computing Environments

Introducing the E Series DX UPS

The E Series DX UPS double-conversion online UPS from Eaton® 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.

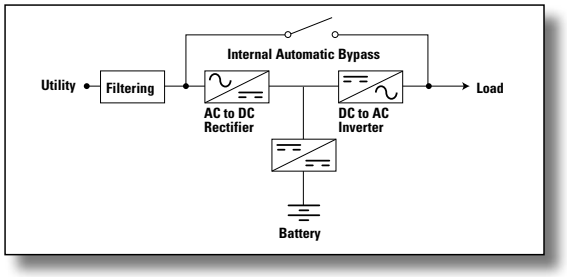
Features

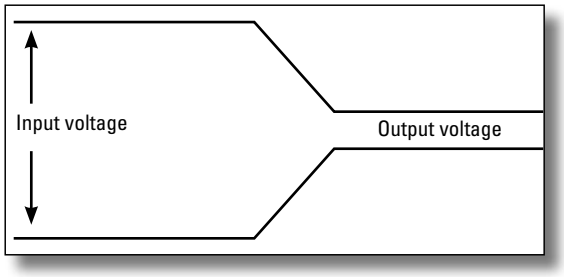
- Online double-conversion topology assures maximum reliability
- Wide input voltage range appropriate for the harshest electrical environments
- Standard models for fixed run-time performance
- Tested for generator compatibility
- Automatic bypass for fault tolerance
- Optional SNMP communications provide 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

Product snapshot

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

Powering Business Worldwide





Online double-conversion topology

This topology guarantees a consistently high level of power quality. Any disturbances on the distribution waveform are 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 of 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

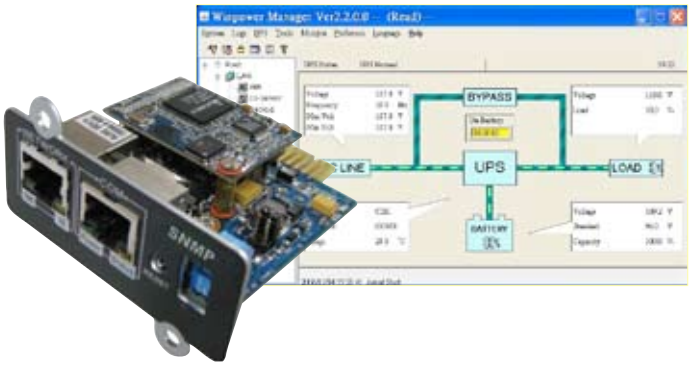
In case of overload or UPS fault, the DX UPS automatically transfers the load to utility AC power.

Advanced communications

An RS232 port is available for easy connection of the UPS to the server. It may be 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 solutions



High-performance battery charger

The DX battery charger:

- Reduces battery recharge time
- Protects the battery against damage caused by deep discharge
- Prevents 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 five minutes to several hours

DX UPS offers a standard backup time of five to eight minutes on full load to protect the applications. XL models allow users 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)

High Voltage 1000 VA

High Voltage 2000 VA

High Voltage 3000 VA

High Voltage 6000 VA

High Voltage 10000 VA

High Voltage 15 kVA/20 kVA

Low Voltage 1000 VA

Low Voltage 1500 VA

Low Voltage 3000 VA

Low Voltage 6000 VA

Low Voltage 10000 VA

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	EDX10KH	N/A		
High Volt - XL Version External Battery	EDX1000HXL	EDX2000HXL	EDX3000HXL	EDX6000HXL	EDX10KHXL	EDX10KHXL31	EDX15KHXL31	EDX20KHXL31
Technology								
	Online 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) 122V to 300V (High Volt)			185V +/- 3% to 266 +/- 3% (Low Volt) 122 to 300V (High Voltage Models)		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 IEC style (two output cables included)				Hardwired			
Output Receptacles (Low Volt)	4 NEMA 5-15 style		6 NEMA 5-15 style		Hardwired			
Input Connection (High Volt Models)	IEC 10A style, for use with computer power cable		IEC 16A (IEC 16A cable included)		Hardwired			
Input Connection (Low Volt Models)	IEC 10A style, for use with computer power cable		Standard Model: Attached L5-30 input plug (cable included) XL Model: Hardwired		Hardwired			
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)	Five hours to 90% (LV 1K-3K std.) / 7 Hrs to 90% (LV 6K std.) / Eight 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	0ºC ~ 40ºC							
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)	145 x 220 x 400	192 x 340 x 460	192 x 340 x 460	260 x 717 x 570				
Dimensions (Low Volt Models)	145 x 220 x 400	192 x 340 x 460	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