

## FDR11-NC Series UPS



### Features

- 1,2,3,6 and 10 kVA UPS capacity
- Rackmount UPS
- Designed for 19" standard rack with 2 units height
- Output power 1,2,3,6 and 10KW with power factor 1
- 1-Phase input, 1-phase output
- Double Conversion UPS
- Intelligent controls with Digital Signal Processing (DSP)
- Compatible with Lead acid and Lithium batteries
- 3-Level intelligent charging mode
- Wide ranges of input voltage and input frequency
- Excellent generator compatibility
- Adjustable charging current
- Advanced battery management
- Intelligent monitoring function
- Optional color screen LCD
- Emergency Power Off function (EPO)

## Technical Specifications

General					
UPS model	FDR11-NC01	FDR11-NC02	FDR11-NC03	FDR11-NC06	FDR11-NC10
Rated power	1kVA/1kW	2kVA/2kW	3kVA/3kW	6kVA/6kW	10kVA/10kW
Applicable standard	IEC 62040-3				
UPS classification	VFI SS <u>CCC</u> *				
UPS topology	Double Conversion				
Efficiency	94.5%	95.5%		95%	
Dimensions (HxWxD)	88(2U) × 440(19") × 250 mm	88(2U) × 440(19") × 370 mm			
Weight	5.2kg	7.3kg	7.5kg	11.5kg	12.1kg
Acoustic noise at 1m	≤50dBA				
Degree of protection against hazards and water ingress	IP20				
Mean Time Between Failures (MTBF)	100,000h				
Environmental					
Operating temperature	0°C to +40°C				
Storage temperature	-25°C to +55°C				
Humidity	0 to 95% non-condensing				
Altitude					
at rated power	≤ 1500m				
0.974 x rated power	≤ 2000m				
0.920 x rated power	≤ 3000m				
0.872 x rated power	≤ 4000m				
0.820 x rated power	≤ 5000m				

Input		
Phases required	1Ph+N+PE	
Rated voltage	220Vac/230Vac	
Voltage tolerance		
100% load	±20%	
70% load	-30% to +20%	
50% load	-48% to +20%	
Frequency range	50Hz ±10%	
Power factor	≥0.99	
THDi	≤5%	
Output		
Output phases available	1Ph+N+PE	
Rated voltage	230Vac	
Voltage regulation		
double conversion mode	±1%	
stored energy mode	±1%	
Power factor	1	
Frequency		
double conversion mode	50/60Hz ±10% (adj.)	
stored energy mode	50/60Hz ±0.1	
Crest factor	3:1	
THD		
linear load	≤2%	
nonlinear load	≤5%	
Transfer time		
double conversion mode to stored energy mode	0.00S	
double conversion mode to bypass	0.00S	
Overload		
double conversion mode	30min @ 102 to 110% load 10min @ 110 to 130% load 30Sec @ 130 to 150% load 200mSec @ >150%	30min @ 102 to 110% load 10min @ 110 to 130% load 30Sec @ 130 to 150% load 500mSec @ >150%
energy saving mode	1min @ 102 to 110% load 10Sec @ 110 to 130% load 3Sec @ 130 to 150% load 200mSec @ >150%	10min @ 102 to 110% load 1min @ 110 to 130% load 10Sec @ 130 to 150% load 500mSec @ >150%

<b>Battery</b>				
Battery type	All types of lead acid and gel, sealed or vented and Lithium batteries			
Battery Voltage	36V	72V	96V	192Vdc up to 240Vdc (selectable)
Max. charge current	12A			
<b>Protections</b>				
Short circuit				
Overload				
Output overvoltage				
Overheat				
Battery low				
Battery reverse				
Self-diagnostics				
EPO (optional)				
<b>Display</b>				
Audible & visual	Mains Failure, Low Battery, Overload, System Fault			
Status LED & LCD	Double Conversion Mode, Energy Saving Mode, Low Battery, Battery Test Failure, Overload, UPS Fault			
LCD information	Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Parameters Set., History Record			
<b>Communication Interface</b>				
RS232 (optional), LAN (optional), SNMP (optional)				

In the interest of continual product improvement all specifications are subject to change without notice.