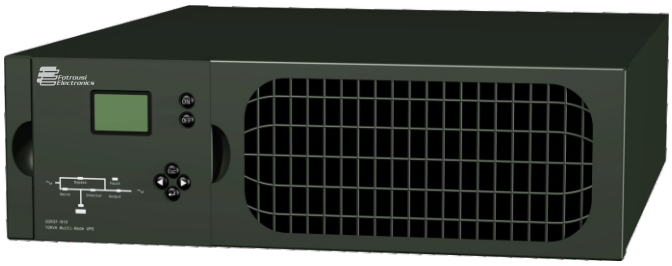
FDR11-N Series UPS



Features

- 1,2,3,6 and 10 kVA UPS capacity
- Rackmount UPS
- Designed for 19” standard rack with 2 units height for 1kVA UPS and 3 units height for others
- Internal battery capability for 1,2 and 3kVA UPS
- 1-Phase input, 1-phase output
- Double Conversion with capability for switching to Multi-Mode
- (Automatically switches between Double Conversion and Line Interactive modes according to mains
- status if Multi-Mode is activated)
- Intelligent controls with Digital Signal Processing (DSP)
- Unlimited parallel expansion capability for 6 and 10 kVA UPS
- 3-Level intelligent charging mode
- Wide ranges of input voltage and input frequency
- Excellent generator compatibility
- Shared or separated batteries in parallel configuration (selectable)
- Adjustable charging current
- Advanced battery management
- Intelligent monitoring function
- Easy maintenance by providing optional MBB (Make Before Break) manual bypass
- Optional Emergency Power Off function (EPO)

Technical Specifications

General					
UPS model	FDR11-N01 / FDR11-N01i	FDR11-N02 / FDR11-N02i	FDR11-N03 / FDR11-N03i	FDR11-N06	FDR11-N10
Rated power	1kVA/0.8kW	2kVA/1.6kW	3kVA/2.4kW	6kVA/5.4kW	10kVA/9kW
Applicable standard	IEC 62040-3				
UPS classification	VFI SS CCC* *C: 1 or 2 or 3 by order refer to IEC 62040-3				
UPS topology	Double Conversion / Multi-Mode (selectable by user)				
Efficiency	87%	89%		94%	
Parallel expansion capability	-			Unlimited	
N+1 redundancy capability	Yes				
Dimensions (HxWxD)	86.5(2U) × 440(19") × 380 mm	131(3U) × 440(19") × 520 mm		131(3U) × 443(19") × 580 mm	
Weight	7kg /12kg	11.7kg /26kg	11.7kg /28kg	23kg	25kg
Acoustic noise at 1m	≤45dBA			≤55dBA	
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	230Vac	
Voltage tolerance		
100% load	±20%	
70% load	-30% to +20%	
50% load	-48% to +20%	
Frequency range	35Hz to 70Hz	
Power factor	≥0.99	
THDi	≤3%	
Bypass voltage range		
max. voltage	230Vac +10%	
min. voltage	230Vac-20% (optional-10%)	
Output		
Output phases available	1Ph+N+PE	
Rated voltage	230Vac	
Voltage regulation		
double conversion mode	±1%	
stored energy mode	±1%	
Power factor	0.8	0.9
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	≤3%	
Transfer time		
double conversion mode to stored energy mode	0.00S	
double conversion mode to bypass	0.00S	
Overload		
double conversion mode energy saving mode	105% up to 150%: 30S then transfer to bypass >150%: transfer to bypass	up to110%: 60min >110% up to 125%: 10min >125% up to 150%: 1min >150%: transfer to bypass
energy saving mode	105% to 150%: 30S then cut off output >150%: cut off output	40A breaker (according to breaker curve) / 60A breaker (according to breaker curve)

Battery			
Battery type	All types of lead acid and gel, sealed or vented		
Battery type Battery type Battery type Battery type	24Vdc	72Vdc	192Vdc up to 240Vdc (selectable)
Max. charge current	7A / 1A		6A
Internal battery	-/ 2x12Vx7or9 Ah	-/ 6x12Vx7or9 Ah	-

Protections
Short circuit
Overload
Output overvoltage
Overheat
Battery low
Battery reverse (optional)
Self-diagnostics
EPO (optional)

Display	
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

Communication Interface
USB, RS485, Dry contacts (optional), SNMP card (optional), Relay card (optional), Parallel port

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