

FN Series Scalable N+1 UPS

3kVA to 24kVA Rackmount

Advanced Features:

- Parallel Rackmount Units with a Single Output of up to 24kVA
- * True N+1 Redundancy
- * ECO Mode: 97% Efficiency
- * DSP Double-Conversion On-line Sinewave Design
- * Input Power Factor Correction
- * Programmable 50/60Hz Frequency Conversion
- * Precision Output Voltage Regulation
- * Extended Brownout, Surge & Transient Protection
- * Remote Emergency Power Off (REPO)
- * Optional Extended Battery Banks & Chargers
- * RS-232C, USB & Optional SNMP/HTTP Agent

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Scalable Rackmount UPS up to 24kVA

Falcon® Electric's scalable N+1 on-line Uninterruptible Power Supply (UPS) provides the ideal scalable power protection solution. The FN UPS can easily be configured using individual 3, 4, 5 & 6kVA rackmount models, providing up to 18kVA with N+1 redundancy. Alternate parallel configurations of 6 to 24kVA are achievable if N+1 redundancy is not required.

Stand-Alone Units Lower Costs

In contrast to other modular UPSs, the FN is a compact, stand-alone UPS that can be connected in parallel. This economical approach eliminates the added expense of buying cabinets to house control, power and battery modules.

N+1 Redundancy Ensures Reliability

If your equipment has to operate without interruption or downtime, the N+1 configured FN UPS is the clear choice. Should an individual unit require maintenance, it is automatically sensed and taken offline. The user is notified through the LCD display and an audible alarm.

The UPS may be serviced or replaced without powering down the remaining models or connected load. Internal batteries are user-replaceable and hot-swappable, while the UPS and connected equipment are in full operation.

Frequency Converter Ready

The FN UPS is easily programmed for use as a 50Hz or 60Hz frequency converter, making it the ideal choice for worldwide power applications.

ECO Mode Saves Energy

The unit's "ECO Green Mode" setting increases the AC/AC efficiency up to 97% during times when the connected equipment is not in use. Falcon's ECO Mode reduces energy consumption, cooling expense and CO2 emissions.

In addition, the FN UPS features input power factor correction which lowers current demands on building wiring. When not in ECO Mode, the FN operates at a 90% AC/AC efficiency level, further reducing energy demands.

True Regenerative On-line Design

The FN True Regenerative On-line UPS provides the highest level of protection against the widest spectrum of power problems. The incoming AC utility source is converted to a regulated DC voltage. From this DC voltage, a new AC voltage is generated, providing clean, tightly regulated power to your equipment.

Microprocessor Control with DSP

The FN Series has been designed using advanced Digital Signal Processing (DSP) microprocessor technology. DSP technology yields the highest level of internal UPS protection, control, performance and reliability.

RS-232, USB & SNMP/HTTP UPS Management

With the supplied UPSilon® software, all models support unattended shutdown, UPS management, data logging and a power diagnostic tool. The software supports Windows® and other major platforms. For UNIX users, UPSilon is available as an option. Falcon also offers an optional SNMP/HTTP agent board.

FN Series Scalable N+1 UPS Rackmount 3kVA - 12kVA

Model Number (Includes FNITRM-2)	FN3KRM-2TXI	FN3KRM-2TXI	FN3KRM-2TXI	FN3KRM-2TXI
Number of Parallel Units	1	2	3	4
N+1 VA Rating	N/A	3,000	6,000	9,000
Maximum VA Rating (not-N+1)	3,000	6,000	9,000	12,000
Electrical Input				
Nominal AC Voltage		, , ,	e input voltage at the time of order)	
Voltage Range			– 280Vac	
Bypass Voltage Window		1	60Vac (Programmable)	1
Current-Amps (system) N+1 (not N+1)	N/A 14.5A	14.5A 29A	29A 44A	N/A 58A
· , , , , , , , , , , , , , , , , , , ,) Hz (Synchronized Auto – Tracking) or	ļ	
requency Power Factor Correction	50/60).95	onized)
Efficiency AC/AC			o 97%, Battery Mode 85%	
Electrical Output		Op to 90 %, ECO Mode to	5 97 %, Battery Wode 65 %	
Vatts	2,100	4,200	6,300	8,400
N+1 Redundant Mode	2,100 N/A	2,100	4,200	6,300
√oltage (Non-isolated)	208, 220, 230, 240Vac Programmal	ble (UPS modules may not be connect	ted in parallel without a FNITRM-2 is	olation module installed on the out
UPS OUTPUT ONLY)		of each UF	PS module.)	
/oltage (Isolated)	Note: T	Two 120Vac outputs may be connected		ac output.
FNITRM-6K-2 OUTPUT)			se (3 wire plus ground)	
Overload Capability		00 Watts continuous output (each UPS) 15 Watts for 25 seconds (each UPS), 15		
/oltage Regulation			S Module ±2% Transformer Module ±3%	
/oltage Adjustment		<u> </u>	±3% (Programmable)	
Frequency	50/60 Hz ± 5Hz (Synchronized	d Auto-Tracking) or 50 Hz and 60 Hz (Programmable Fixed Output) Note: L	JPS output capacity designed to
2.18		, ,	for fixed output frequency	
Frequency Stability	±0.2% (Fixed	d frequency operation) Fixed frequency	' '	tigurations only
Frequency Window			nable, Auto-Tracking mode)	
Harmonic Distortion	5% Typical			
Crest Ratio		3	:1	
Battery				
DC Voltage		240)Vdc	
Туре		12V, 7AH Sealed Lead-Acid	Maintenance-Free (20 pieces)	
Charger Current	1.5A			
Back-Up Time (Full Load /Half Load)	25.5 Minutes / 61 Minutes			
Recharge Time	4 Hours to 90%			
Replacement		Hot-Swappable & User-Replaceab	ole Through Removable Front Panel	
Transfer Time				
Line Fails/Recovers		0	ms	
UPS to Bypass or Reverse		0-1	ms	
After Overload		Auto Trans	sfer to UPS	
Electrical Connections				
Input		Hardwire Te	erminal Block	
Output	Hardwire Terminal Block			
REPO		Hardwire Conr	nector Supplied	
Environmental				
Operating Temperature		0° C - 40° C (3	32° F to 104° F)	
Humidity	10% to 95% Non – Condensing			
Altitude	10,000 Feet			
Cooling	Low Velocity Forced Air Fans			
Audible Noise @ 1 Meter		50	dbA	
Controls and Indicators				
Status on LCD & LED	Line mode, Backup mode, ECC	O (green) mode, Bypass, Low Battery,	Defective Battery, Overload, UPS Ala	arm, Transferring with interruption
LCD Displayed Readings	Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature			
Self-Diagnostics	At power up, Manual front panel button & Software control with programmable 24-hour automatic self-test			
Audible Alarms	Utility Loss, Low Battery, Transfer to Bypass and UPS Failure			
Communications		RS-232 Serial Port (Bundled UPS	Silon Software) & REPO Connector	
Mechanical				
JPS Dimensions HxWxD (inches)	2U 3.47 x 17.4 x 26.3 88 x 440 x 667	2U 3.47 x 17.4 x 26.3 88 x 440 x 667	2U 3.47 x 17.4 x 26.3 88 x 440 x 667	2U 3.47 x 17.4 x 26.3 88 x 440 x 667
(mm) Number of cabinets	88 x 440 x 667	88 x 440 x 667 2	88 x 440 x 667	88 X 440 X 667 4
Battery Bank Dimensions HxWxD (inches) Model FNBRM-1S7 (mm)	3U 6.93 x 17.4 x 26.3 176 x 440 x 667	3U 6.93 x 17.4 x 26.3 176 x 440 x 667	3U 6.92 x 17.4 x 26.3 176 x 440 x 667	3U 6.93 x 17.4 x 26.3 176 x 440 x 667
Number of cabinets Transformer Module HxWxD (inches)	1 2U 3.47 x 17.4 x 26.3	2U 3.47 x 17.4 x 26.3	3 2U 3.47 x 17.4 x 26.3	4 2U 3.47 x 17.4 x 26.3
Iransformer Module HxWxD (inches) Model FNITRM-6K-2 (mm)	2U 3.47 x 17.4 x 26.3 88 x 440 x 667	20 3.47 x 17.4 x 26.3 88 x 440 x 667	2U 3.47 x 17.4 x 26.3 88 x 440 x 667	2U 3.47 x 17.4 x 26.3 88 x 440 x 667
If not needed use -2 UPS model)	1			25 % 1.15 % 507
(2	3	4
Number of cabinets	1	:		
Number of cabinets JPS Weight lb. (kg)	53 (24)	106 (48)	159 (72)	212 (96)
Number of cabinets		:		+

FN Series Scalable N+1 UPS Rackmount 4kVA - 16kVA

Mountain of Privated United Moun					
Marchane		FN4KRM-2TXI	FN4KRM-2TXI	FN4KRM-2TXI	FN4KRM-2TXI
Mile March Mile	` ,	1	2	3	4
Manufacture					
Notice Progress 28 of 24 Priling Provider (1996) as the form of order)					
Vollage Register	Electrical Input				
Spanse (plang Windows 19,000 19,0	Nominal AC Voltage		208 or 240Vac (Please specify the	input voltage at the time of order)	
Common Anger (system)	Voltage Range		160Vac -	- 280Vac	
Programmy	Bypass Voltage Window		184-260Vac or 195-26	0Vac (Programmable)	
Programmy	Current-Amps (system) N+1	N/A	19.3A	38.5A	N/A
Power Factor Correction Filestification Power		19.3A	38.5A	58A	77A
Emberries AC-ACC	Frequency	50/60	Hz (Synchronized Auto – Tracking) or	47-63 Hz (Programmable Unsynchro	onized)
	Power Factor Correction		> 0	.95	
Note Note Note No. N	Efficiency AC-AC		Up to 90%, ECO Mode to	97%, Battery Mode 85%	
No. 15 Accordance Models Voltage (Robinsoletes) Volt	Electrical Output				
Voltage (Poin residency)				,	
QUESTOLIPET ONLY			· · · · · · · · · · · · · · · · · · ·	<u>'</u>	, , , , , , , , , , , , , , , , , , ,
Note: Not 2004 output Note: Not 2004 output may be connected in parallel to provide a single (2004) cutput:		208, 220, 230, 240Vac Programmab			plation module installed on the output
PANTEM-NCC QUITPUT)	,	No. 7			
Control of Espailation		Note: IV			c output.
129% of 2800 Watts for 2300 multis for 2300 multis for 2300 multiseconds (each UPS) Voltage Regulation	,	<105% of 280	· · · · · · · · · · · · · · · · · · ·	, , ,	ts (each LIPS)
Cart Model Willin Output Transferrent Model 23% Voltage Adjustment 50% Hz ± 5Hz (Synchronized Auto-Transfer) (Programmable) Frequency 50% Hz ± 5Hz (Synchronized Auto-Transfer) or 50 Hz and 60 Hz (Programmable) Fixed Output) Note: UPS output capacity designed to 75% when programmed for five doutput fourputs 75% when programmed for five doutput doutputs 75% when programmed for five five doutputs 75%					
Cart Model Willin Output Transferrent Model 23% Voltage Adjustment 50% Hz ± 5Hz (Synchronized Auto-Transfer) (Programmable) Frequency 50% Hz ± 5Hz (Synchronized Auto-Transfer) or 50 Hz and 60 Hz (Programmable) Fixed Output) Note: UPS output capacity designed to 75% when programmed for five doutput fourputs 75% when programmed for five doutput doutputs 75% when programmed for five five doutputs 75%	Voltage Regulation				
S0/80 Hz ± SHz (Synchronized Auto-Tecking) of 50 Hz and 60 Hz (Programmable Fixed Output) Note: URS output capacity designed to 75% when programmed for fixed output frequency (stability)					
Finoquency \$000 Hz ± SHz (Synchronized Auto-Tracking) or 50 Hz and 60 Hz (Programmable Fixed Output) Note: UPS output capacity designed to 75% when programmed for fixed output frequency solidation for fixed output frequency output valuable in non-parallel configurations only Programmed Fixed Programmable Auto-Tracking mode)	Voltage Adjustment		±0%, ±1%, ±2% or ±	:3% (Programmable)	
Feaguency Window	Frequency	50/60 Hz ± 5Hz (Synchronized	Auto-Tracking) or 50 Hz and 60 Hz (Programmable Fixed Output) Note: U	PS output capacity designed to
Finguisery Window			75% when programmed	for fixed output frequency	· -
Namonic Distortion	Frequency Stability	±0.2% (Fixed	frequency operation) Fixed frequency	output available in non-parallel confi	gurations only
Seatery Sea	Frequency Window		±1 Hz or ±3 Hz (Programm	nable, Auto-Tracking mode)	
DC Voltage	Harmonic Distortion		5% T	ypical	
DC Voltage	Crest Ratio		3	:1	
Type	Battery				
Sear-Current	DC Voltage		240	Vdc	
Rack-Lip Time Full Load (Half Load) 15.5 Minutes / 37.5 Minutes Racharge Time 4 Hous to 90% Replacement Hot-Swappable & User-Replaceable Through Removable Front Panel Transfer Time	Туре		12V, 7AH Sealed Lead-Acid I	Maintenance-Free (20 pieces)	
Replacement	Charger Current		1.:	5A	
Replacement	Back-Up Time (Full Load /Half Load)	15.5 Minutes / 37.5 Minutes			
Replacement	Recharge Time				
Transfer Time					
UPS to Bypass or Reverse					
UPS to Bypass or Reverse			0.1	าร	
Alter Overload Auto Transfer to UPS					
Input	- ''				
Name			7.00 11010		
Output Hardwire Terminal Block REPO Hardwire Connector Supplied Environmental Operating Temperature 0° C - 40° C (32° F to 104° F) Unuidity 10% to 95% Non - Condensing Altitude 10,000 Feet Cooling Low Velocity Forced Air Fans Audible Noise @ 1 Meter 50 dbA Controls and Indicators Status on LCD & LED Line mode, Backup mode, ECO (green) mode, Bypass, Low Battery, Defective Battery, Overload, UPS Alarm, Transferring with interruption LCD Displayed Readings Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature Self-Diagnostics At power up, Manual front panel button & Software control with programmable 24-hour automatic self-test Audible Alarms Utility Loss, Low Battery, Transfer to Bypass and UPS Failure Communications RS-232 Serial Port (Bundled UPSiton Software) & REPO Connector Mechanical UPS Dimensions HxWxD (inches) 8x x 40 x 667 8x x 440 x 667 176 x 440 x 667 176 x 440 x 667 176 x 440 x			Hardwire Te	rminal Block	
REPO	·				
Departing Temperature					
Operating Temperature 0° C - 40° C (32° F to 104° F) Humidity 10% to 95% Non - Condensing Altitude 10,000 Feet Cooling Low Velocity Forced Air Fans Audible Noise @ 1 Meter 50 dbA Controls and Indicators Status on LCD & LED Line mode, Backup mode, ECO (green) mode, Bypass, Low Battery, Defective Battery, Overload, UPS Alarm, Transferring with interruption LCD Displayed Readings Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature Self-Diagnostics At power up, Manual front panel button & Software control with programmable 24-hour automatic self-test Audible Alarms Utility Loss, Low Battery, Transfer to Bypass and UPS Failure Communications RS-232 Serial Port (Bundled UPSiton Software) & REPO Connector Mechanical UPS Dimensions HxWxD (inches) 8 x 440 x 667 1 2 3 d - 4 4 4 x 40 x 667 1 x 42 x 6.3 3 u 6.93 x 17.4 x 26.3 3			Traidwire Corn	lector Supplied	
Humidity			00 C 400 C (3	2° E to 104° E\	
Altitude 10,000 Feet Cooling				,	
Low Velocity Forced Air Fans	· ·				
Audible Noise @ 1 Meter 50 dbA Controls and Indicators Status on LCD & LED Line mode, Backup mode, ECO (green) mode, Bypass, Low Battery, Defective Battery, Overload, UPS Alarm, Transferring with interruption LCD Displayed Readings Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature Self-Displayed Readings Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature Self-Displayed Readings Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature Self-Displayed Readings Internal Temperature Self-Displayed Internal Temperature Self-Displayed Readings Internal Temperature Self-Displayed Internation Internation Intern					
Controls and Indicators Status on LCD & LED Line mode, Backup mode, ECO (green) mode, Bypass, Low Battery, Defective Battery, Overload, UPS Alarm, Transferring with interruption LCD Displayed Readings Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature Self-Diagnostics At power up, Manual front panel button & Software control with programmable 24-hour automatic self-test Audible Alarms Utility Loss, Low Battery, Transfer to Bypass and UPS Failure Communications RS-232 Serial Port (Bundled UPSilon Software) & REPO Connector Mechanical UPS Dimensions HxWxD (inches) (mm) 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 176 x 440					
Status on LCD & LED			50	UDA	
LCD Displayed Readings Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature Self-Diagnostics At power up, Manual front panel button & Software control with programmable 24-hour automatic self-test Audible Alarms Utility Loss, Low Battery, Transfer to Bypass and UPS Failure Communications RS-232 Serial Port (Bundled UPSilon Software) & REPO Connector Mechanical UPS Dimensions HxWxD (inches) 2U 3.47 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3		Discount Book 1 500	()	Defeative Detter Co. 1 1125 11	Transferite: 90 to 0
Self-Diagnostics At power up, Manual front panel button & Software control with programmable 24-hour automatic self-test Audible Alarms Utility Loss, Low Battery, Transfer to Bypass and UPS Failure Communications RS-232 Serial Port (Bundled UPSilon Software) & REPO Connector Mechanical UPS Dimensions HxWxD (inches) (mm) 2U 3.47 x 17.4 x 26.3 8x 440 x 667 8x 440 x 667 2U 3.47 x 17.4 x 26.3 8x 440 x 667 2U 3.47 x 17.4 x 26.3 8x 440 x 667 2U 3.47 x 17.4 x 26.3 8x 440 x 667 2U 3.47 x 17.4 x 26.3 8x 440 x 667 3U 6.93 x 17.4 x 26.3 3x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 x 17.4 x				•	
Audible Alarms Communications RS-232 Serial Port (Bundled UPSilon Software) & REPO Connector Mechanical UPS Dimensions HxWxD (inches) (mm) (mm) (mm) (mm) (mm) (mm) (mm) (m					
RS-232 Serial Port (Bundled UPSilon Software) & REPO Connector					
Mechanical UPS Dimensions HxWxD (inches) (mm) 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 3U 6.93 x 17.4 x 26.3 30U 6.93 x 17.4 x 26.3 <t< td=""><td></td><td colspan="3"></td></t<>					
UPS Dimensions HxWxD (inches) (mm) 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 3U 6.93 x 17.4 x 26.3 310 6			RS-232 Serial Port (Bundled UPS	Silon Software) & REPO Connector	
Number of cabinets 88 x 440 x 667 3 4 Battery Bank Dimensions HxWxD (inches) 3U 6.93 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 3U 6.92 x 17.4 x 26.3 3U 6.93 x 17.4 x	Mechanical				
Battery Bank Dimensions HxWxD (inches) Model FNBRM-1S7 (mm) 176 x 440 x 667 17	(mm)	88 x 440 x 667	88 x 440 x 667	88 x 440 x 667	88 x 440 x 667
Model FNBRM-1S7 Number of cabinets (mm) 176 x 440 x 667 1 176 x 440 x 667 2 176 x 440 x 667 3 176 x 440 x 667 4 Transformer Module HxWxD (inches) 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 4 Number of cabinets 1 2 3 4 UPS Weight Ib. (kg) 53 (24) 106 (48) 159 (72) 212 (96) Battery Bank Weight Ib. (kg) 150 (68) 300 (136) 450 (204) 600 (272) Transformer Module Ib. (kg) 91 (41) 181 (82) 272 (123) 362 (164)					
Transformer Module HxWxD (inches) 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 40 <td>Model FNBRM-1S7 (mm)</td> <td>176 x 440 x 667</td>	Model FNBRM-1S7 (mm)	176 x 440 x 667	176 x 440 x 667	176 x 440 x 667	176 x 440 x 667
Number of cabinets 1 2 3 4 UPS Weight Ib. (kg) 53 (24) 106 (48) 159 (72) 212 (96) Battery Bank Weight Ib. (kg) 150 (68) 300 (136) 450 (204) 600 (272) Transformer Module Ib. (kg) 91 (41) 181 (82) 272 (123) 362 (164)	Transformer Module HxWxD (inches) Model FNITRM-6K-2 (mm)	2U 3.47 x 17.4 x 26.3	2U 3.47 x 17.4 x 26.3	2U 3.47 x 17.4 x 26.3	2U 3.47 x 17.4 x 26.3
Battery Bank Weight lb. (kg) 150 (68) 300 (136) 450 (204) 600 (272) Transformer Module lb. (kg) 91 (41) 181 (82) 272 (123) 362 (164)	,	1	2	3	4
Transformer Module lb. (kg) 91 (41) 181 (82) 272 (123) 362 (164)		53 (24)	106 (48)	159 (72)	212 (96)
Agency Approvals UL 1778 & CUL Listed, CE and FCC Class A	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	91 (41)			362 (164)

FN Series Scalable N+1 UPS Rackmount 5kVA - 20kVA

Number of Papellat Under	Model Number	FN5KRM-2TXI	FN5KRM-2TXI	FN5KRM-2TXI	FN5KRM-2TXI
N-1 Vis Nating Maximum (N February (non N-1)	(Includes FNITRM-2)				
Management Man					
Description	N+1 VA Rating		· · · · · · · · · · · · · · · · · · ·	· ·	
Normal AD, Voltage		5,000	10,000	15,000	20,000
Vising Paring Storker - Jistificate Storker - Ji			208 or 240Vac (Please specify the	input voltage at the time of order)	
Suppose Supp					
Current Areas (cystem) N-1					
Properties 24A	,,	N/A		<u> </u>	N/A
Power Facts Communities	,		48A	70A	
Efficiency A.C.A.C. Up to 90%, ECO Mode to 97%, Bullery Mode 65%	Frequency	50/60	Hz (Synchronized Auto – Tracking) or	47-63 Hz (Programmable Unsynchro	onized)
Blackrists	Power Factor Correction		> 0	.95	
Walles	Efficiency AC-AC		Up to 90%, ECO Mode to	97%, Battery Mode 85%	
NN-1 Recondered Modes NN 0	•				
Voltage (Periodicida)		,			
Class Cutter Control (Class Cutter)		·	'	'	,
Note Two 1909/soc pulses may be connected in parallel to provide a single 120/9c output.		206, 220, 230, 240 Vac Programmab			nation module installed on the output
Control Capability	,	Note: Tv	vo 120Vac outputs may be connected	I in parallel to provide a single 120Va	c output.
125% of 3500 Wests for 25 seconds (each UPS). 105% of 3500 Wests for 220 milliseconds (each UPS) Voltage Regulation 2.701 Model UPS	(FNITRM-6K-2 OUTPUT)		240/120Vac Split-Phas	se (3 wire plus ground)	·
### Control Miles Age Miles	Overload Capability				
Feequency S0/80 Hz a 542 (Synchronized Auth-Tracking) or 50 Hz and 60 Hz (Programmatile Fixed Output) Note: UPS output capacity designed to 75% the programmed for 600 doubt frequency programmed frequency prog	Voltage Regulation				
Frequency Stability	Voltage Adjustment		±0%, ±1%, ±2% or ±	-3% (Programmable)	
Frequency Window	Frequency	50/60 Hz ± 5Hz (Synchronized			PS output capacity designed to
Harmonic Disortion	Frequency Stability	±0.2% (Fixed	frequency operation) Fixed frequency	output available in non-parallel confi	gurations only
Crost Railo	Frequency Window		±1 Hz or ±3 Hz (Programm	nable, Auto-Tracking mode)	
Description Control	Harmonic Distortion		5% T	ypical	
De Voltage	Crest Ratio				
Type	Battery				
Charger Current	DC Voltage		240	Vdc	
Back-Up Time (Full Load /1/2 Load)	Туре		12V, 7AH Sealed Lead-Acid N	Maintenance-Free (20 pieces)	
Replacement	Charger Current		1.8	5A	
Hot-Swappable & User-Replaceable Through Removable Front Panel Transfer Time	Back-Up Time (Full Load /1/2 Load)	11 Minutes / 30.6 Minutes			
Transfer Time	Recharge Time	4 Hours to 90%			
Line Fails/Recovers	Replacement		Hot-Swappable & User-Replaceab	ole Through Removable Front Panel	
## After Overload Auto Transfer to UPS ### Electrical Connections Input	Transfer Time				
Alto Transfer to UPS	Line Fails/Recovers				
Input	UPS to Bypass or Reverse				
Input Hardwire Terminal Block Hardwire Terminal Block			Auto Trans	efer to UPS	
Dutput					
REPO	•				
Displayed Readings	•				
Operating Temperature 0° C - 40° C (32° F to 104° F) Humidity 10% to 95% Non - Condensing Altitude 10,000 Feet Cooling Low Velocity Forced Air Fans Audible Noise @ 1 Meter 50 dbA Controls and Indicators Status on LCD & LED Line mode, Backup mode, ECO (green) mode, Bypass, Low Battery, Defective Battery, Overload, UPS Alarm, Transferring with interruption LCD Displayed Readings Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature Self-Diagnostics At power up, Manual front panel button & Software control with programmable 24-hour automatic self-test Audible Alarms Utility Loss, Low Battery, Transfer to Bypass and UPS Failure Communications Res-232 Serial Port (Bundled UPSilon Software) & REPO Connector Mechanical UPS Dimensions HxWxXD (inches) 88 x 440 x 667 176 x 440 x 667 176 x 440 x 667 176 x 440 x 667			Hardwire Conn	nector Supplied	
Humidity					
Altitude	, ,		,	,	
Low Velocity Forced Air Fans	· · · · · · · · · · · · · · · · · · ·	·			
Audible Noise @ 1 Meter 50 dbA Controls and Indicators Status on LCD & LED Line mode, Backup mode, ECO (green) mode, Bypass, Low Battery, Defective Battery, Overload, UPS Alarm, Transferring with interruption LCD Displayed Readings Input Voltage, Input Voltage, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature Self-Diagnostics Audible Alarms Utility Loss, Low Battery, Transfer to Bypass and UPS Failure Communications RS-232 Serial Port (Bundled UPSilon Software) & REPO Connector Mechanical UPS Dimensions HxWxD (inches) (mm) 8x x440 x 667 8					
Controls and Indicators Status on LCD & LED Line mode, Backup mode, ECO (green) mode, Bypass, Low Battery, Defective Battery, Overload, UPS Alarm, Transferring with interruption LCD Displayed Readings Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature Self-Diagnostics At power up, Manual front panel button & Software control with programmable 24-hour automatic self-test Audible Alarms Utility Loss, Low Battery, Transfer to Bypass and UPS Failure Communications RS-232 Serial Port (Bundled UPSilon Software) & REPO Connector Mechanical UPS Dimensions HxWxD (inches) (mm) 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 176 x 44					
Line mode, Backup mode, ECO (green) mode, Bypass, Low Battery, Defective Battery, Overload, UPS Alarm, Transferring with interruption Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature Self-Diagnostics			50 (adA	
LCD Displayed Readings		Line mode Bester and 500	(green) made Dimers 1 . D. II	Defeative Potters Over 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Transferring with interest the
Self-Diagnostics At power up, Manual front panel button & Software control with programmable 24-hour automatic self-test Audible Alarms Utility Loss, Low Battery, Transfer to Bypass and UPS Failure Communications RS-232 Serial Port (Bundled UPSilon Software) & REPO Connector Mechanical UPS Dimensions HxWxD (inches) (mm) 2 U 3.47 x 17.4 x 26.3 2U 3.47 x 17.4 x 26.3 2U 3.47 x 17.4 x 26.3 3B x 440 x 667 8B x 440 x 667 8B x 440 x 667 3B x 440 x 667					
Audible Alarms Communications RS-232 Serial Port (Bundled UPSilon Software) & REPO Connector Mechanical UPS Dimensions HxWxD (inches) (mm) (mm) Number of cabinets 176 x 440 x 667 (mm) Number of cabinets	. ,				
RS-232 Serial Port (Bundled UPSilon Software) & REPO Connector					
Mechanical UPS Dimensions HxWxD (inches) (mm) 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 3U 3.47 x 17.4 x 26.3 88 x 440 x 667 3U 3.47 x 17.4 x 26.3 88 x 440 x 667 3U 6.93 x 17.4 x 26.3 88 x 440 x 667 3U 6.93 x 17.4 x 26.3 88 x 440 x 667 3U 6.93 x 17.4 x 26.3 88 x 440 x 667 3U 6.93 x 17.4 x 26.3 80 x 17.4 x 17.4 x 17.4 x 26.3 80 x 17.4 x 17.4 x 26.3 80 x 17.4 x 17.4 x 26.3					
UPS Dimensions HxWxD (inches) (mm) 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 3U 6.93 x 17.4 x 26.3 88 x 440 x 667 3U 6.93 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.3 </td <td></td> <td></td> <td>NO-202 Serial Port (Bundled UPS</td> <td>Silvi Sulware) & REPU Connector</td> <td></td>			NO-202 Serial Port (Bundled UPS	Silvi Sulware) & REPU Connector	
Number of cabinets 88 x 440 x 667 4 Battery Bank Dimensions HxWxD (inches) 3U 6.93 x 17.4 x 26.3 3U 6.93 x 17.4 x 26.		2112 47 × 47 4 · · · 00 2	211 2 47 × 47 4 · · 20 2	2112 47 × 47 4 · · · 20 2	2112 47 × 47 4 ·· 00 0
Battery Bank Dimensions HxWxD (inches) Model FNBRM-1S7 (mm) Number of cabinets 176 x 440 x 667 1 2 176 x 440 x 667 1 3 176 x 440 x 667 2 3 176 x 440 x 667 3 4 176 x 440 x 667 2 3 176 x 440 x 667 3 4 176 x 440 x 667 3 8 x 440 x 667 8 8 x 440 x 66	(mm)	88 x 440 x 667	88 x 440 x 667	88 x 440 x 667	88 x 440 x 667
Number of cabinets 1 2 3 4 Transformer Module HxWxD (inches) Model FNITRM-6K-2 (mm) (If not needed use -2 UPS model) Number of cabinets 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 88 x 440 x 667 2U 3.47 x 17.4 x 26.3 88 x 440 x 667 88 x 440 x	Battery Bank Dimensions HxWxD (inches)	3U 6.93 x 17.4 x 26.3	3U 6.93 x 17.4 x 26.3	3U 6.92 x 17.4 x 26.3	3U 6.93 x 17.4 x 26.3
Model FNITRM-6K-2 (If not needed use -2 UPS model) 88 x 440 x 667 88	Number of cabinets ´	1	2	3	4
UPS Weight lb. (kg) 53 (24) 106 (48) 159 (72) 212 (96) Battery Bank Weight lb. (kg) 150 (68) 300 (136) 450 (204) 600 (272) Transformer Module lb. (kg) 91 (41) 181 (82) 272 (123) 362 (164)	Model FNITRM-6K-2 (mm) (If not needed use -2 UPS model)	88 x 440 x 667	88 x 440 x 667	88 x 440 x 667	88 x 440 x 667
Battery Bank Weight lb. (kg) 150 (68) 300 (136) 450 (204) 600 (272) Transformer Module lb. (kg) 91 (41) 181 (82) 272 (123) 362 (164)	Number of cabinets				
Transformer Module lb. (kg) 91 (41) 181 (82) 272 (123) 362 (164)		` '	` '	` '	` '
		` '	` '	` ′	` '
	Agency Approvals	31 (+1 <i>)</i>			302 (104)

FN Series Sca	nable N+1 U	PS Rackmou	int 6	skva - 24kva
lodel Number (Includes FNITRM-2)	FN6KRM-2TXI	FN6KRM-2TXI	FN6KRM-2TXI	FN6KRM-2TXI
umber of Parallel Units	1	2	3	4
+1 VA Rating	N/A	6,000	12,000	18,000
aximum VA Rating (non-N+1)	6,000	12,000	18,000	24,000
lectrical Input	T			
ominal AC Voltage	208 or 240Vac (Please specify the input voltage at the time of order) 160Vac – 280Vac			
oltage Range				
ypass Voltage Window	N/A	184-260Vac or 195-260		N//A
urrent-Amps (system) N+1 (non-N+1)	N/A 29A	29A 58A	58A 87A	N/A 116A
requency		z (Synchronized Auto – Tracking) or	47-63 Hz (Programmable Unsyn	chronized)
ower Factor Correction		> 0.	95	,
fficiency AC-AC		Up to 90%, ECO Mode to	97%, Battery Mode 85%	
lectrical Output				
/atts +1 Redundant Mode	4,200 N/A	8,400 4,200	12,600 8,400	16,800 12,600
oltage (Non-isolated)	208, 220, 230, 240Vac Programmable			2 isolation module installed on the or
IPS OUTPUT ONLY)		of each UPS	,	
oltage (Isolated) (FNITRM-6K-2 OUTPUT)	· · ·	be connected in parallel to provide a	<u> </u>	, , , ,
verload Capability		Watts continuous output (each UPS Vatts for 25 seconds (each UPS), 15		
oltage Regulation		, ,,	el With Output Transformer Modu	,
oltage Adjustment		±0%, ±1%, ±2% or ±3	· · · · · · · · · · · · · · · · · · ·	
requency	50/60 Hz ± 5Hz (Synchronized A	auto-Tracking) or 50 Hz and 60 Hz (P	, ,	e: UPS output capacity designed to
	, ,	75% when programmed for		
requency Stability	±0.2% (Fixed fr	equency operation) Fixed frequency	output available in non-parallel c	onfigurations only
requency Window		±1 Hz or ±3 Hz (Programma	able, Auto-Tracking mode)	
armonic Distortion	5% Typical			
rest Ratio		3:		
attery				
C Voltage		240\		
уре	12V, 7AH Sealed Lead-Acid Maintenance-Free (20 pieces)			
harger Current		1.5	A	
ack-Up Time (Full Load/Half Load)	9.3 Minutes / 25 Minutes			
Recharge Time	4 Hours to 90%			
Replacement		Hot-Swappable & User-Replaceabl	e Through Removable Front Pan	nel
ransfer Time				
ine Fails/Recovers		0 m	S	
JPS to Bypass or Reverse		0-1 i	ms	
After Overload		Auto Transf	er to UPS	
Electrical Connections				
nput		Hardwire Ten		
Dutput		Hardwire Ter		
REPO		Hardwire Conne	ector Supplied	
Invironmental				
Operating Temperature		0° C - 40° C (32	,	
Humidity		10% to 95% Nor		
Altitude	10,000 Feet			
Cooling	Low Velocity Forced Air Fans			
udible Noise @ 1 Meter		50 d	bA	
ontrols and Indicators				
status on LCD & LED		green) mode, Bypass, Low Battery, D		
CD Displayed Readings	Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Internal Temperature			
self-Diagnostics	At power up, Manual front panel button & Software control with programmable 24-hour automatic self-test			
udible Alarms	Utility Loss, Low Battery, Transfer to Bypass and UPS Failure			
ommunications		RS-232 Serial Port (Bundled UPS	Ion Software) & REPO Connecto	or
lechanical		0110.45	0110.1= 1= 1	0,12,12,12,13
PS Dimensions HxWxD (inches) (mm) umber of cabinets	2U 3.47 x 17.4 x 26.3 88 x 440 x 667 1	2U 3.47 x 17.4 x 26.3 88 x 440 x 667 2	2U 3.47 x 17.4 x 26.3 88 x 440 x 667 3	2U 3.47 x 17.4 x 26.3 88 x 440 x 667 4
Battery Bank Dimensions HxWxD (inches) Model FNBRM-1S7 (mm)	3U 6.93 x 17.4 x 26.3 176 x 440 x 667	3U 6.93 x 17.4 x 26.3 176 x 440 x 667	3U 6.92 x 17.4 x 26.3 176 x 440 x 667	3U 6.93 x 17.4 x 26.3 176 x 440 x 667
Iumber of cabinets Fransformer Module HxWxD (inches) Fransformer Module HxWxD (inches) Fransformer Module (mm) Fransformer Module HxWxD (inches) Fransformer Module HxWxD (inches)	1 2U 3.47 x 17.4 x 26.3 88 x 440 x 667	2 2U 3.47 x 17.4 x 26.3 88 x 440 x 667	3 2U 3.47 x 17.4 x 26.3 88 x 440 x 667	2U 3.47 x 17.4 x 26.3 88 x 440 x 667
lumber of cabinets	1	2	3	4
	53 (24)	106 (48)	159 (72)	212 (96)
0 (0)	` '	` ′	,	` '
Ib. (kg)	150 (68) 91 (41)	300 (136) 181 (82)	450 (204) 272 (123)	600 (272) 362 (164)

