ISI - NFT & 3NFT STAND-BY SINGLE & THREE PHASE AC SINE WAVE UNINTERRUPTIBLE CENTRAL SYSTEM WITH NEMA 3R ENCLOSURE

The Inverter Systems, Inc. NFT & 3NFT is an emergency lighting inverter available in single or three phase for installation outdoors. The inverter transfers to emergency mode within 2ms when utility power is lost which allows the system to support all types of lighting loads including H.I.D. The outdoor rated cabinet allows installation in remote locations and where space is not available indoors.

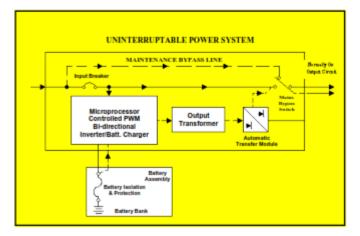
The NFT & 3NFT demonstrate exceptional 98% operating efficiency by means of the fast "no-break" transfer circuit, providing considerable running cost savings over typical double conversion UPS systems. Available in a wide range of capacities and voltages, the NFT & 3NFT are designed to provide up to 90 minutes of standby emergency power in accordance with the requirements of U.L. 924.

OPERATION

The inverter is normally off and the commercial AC power continuously supplies the critical load. The input converter (bi -directional transformer) derives power from the commercial AC power source and supplies to the inverter while simultaneously providing floating charge to the batteries.

Upon failure of the commercial AC power the inverter instantaneously, with a maximum of a 2-millisecond break, switches its power supply from the input converter to the battery system. There shall be no loss of power to the critical load upon failure or restoration of the utility source.

An automatic low voltage cutoff circuit disengages the inverter system at the useful end of the battery capacity preventing deep discharge battery damage. Upon restoration of the utility supply the system automatically returns to the normal "standby" mode and restores the battery to full charge.



All specifications subject to change without notice.



STANDARD FEATURES:

- COMPATIBLE WITH L.E.D. APPLICATIONS
- 65k AIC Rating
- Single Phase units available in standard capacities from 3000 VA to 8000 VA. Three Phase units from 4000 VA to 8000 VA
- Modular design provides electronic assemblies mounted on removable modules for ease of maintenance
- 98% high-efficiency stand-by operation
- Industry proven continuously on PWM inverter utilizes switching transistor failure whilst still maintaining full rated load output
- Short-circuit protected with critical point fuses and breakers
- Digital metering indicates: input voltage, output voltage, output current, battery voltage, battery current, VA output, inverter watts, ambient temperature, system day, inverter minutes
- System test switch
- Available with many alarm function, monitoring and diagnostic options -refer Option Selection chart
- Maintenance free sealed lead calcium batteries
- Heavy gauge steel cabinets with filtered air louvers, key locks and removable hinged front opening doors for ease of access and maintenance
- Engineered for standard 90 minute emergency operation
- Suitable for extreme temperature from 4° to 104° F with optional heater (continuous operation at high or low ambient temperatures may affect battery capacity and life; see battery warranty sheet for details)
- Input lighting protection meets IEEE/ANSI C62.45-45 (CAT A & B)
- Input current harmonic distortion 10% or less at full load
- Input circuit breaker included for complete protection
- Load power factor .5 lag to .5 leading
- Output distortion 3% THD linear load
- U.L. 924 Listed

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ISI-UFT Model Capacity VA	# of Phases	Efficiency @ full load	Audible Noise	Heat Loss BTU's		erter Cal nsions (i H		Number of Batteries	Number of Cabinets	Total system shipping weight
ISI-NFT-3000	1	98%	45	255	48	76	30	10	1	1545 lbs.
ISI-NFT-4000	1	98%	45	340	48	76	30	12	1	1693
ISI-NFT-5000	1	98%	45	408	48	76	30	15	1	1915
ISI-NFT-6500	1	98%	45	544	48	76	30	20	1	2285
ISI-NFT-8000	1	98%	45	680	48	76	30	24	1	2581
ISI-3NFT-4000	3	98%	45	326	48	76	30	12	1	1883
ISI-3NFT-5000	3	98%	45	408	48	76	30	15	1	2105
ISI-3NFT-6500	3	98%	45	544	48	76	30	20	1	2475
ISI-3NFT-8000	3	98%	45	680	48	76	30	24	1	2771

SPECIFICATIONS:

- The emergency lighting inverter system shall be a stand-by no-break system suitable for sustaining and operating H.I.D., fluorescent and incandescent lamps in the event of a power outage for a minimum 90 minutes duration at the rated load and be listed and labeled to U.L. 924.
- The entire system shall be of a modular construction with removable electronic modules for ease of installation and maintenance. Cabinets shall be constructed of code gauge steel with removable key locked hinged doors finished in an acid resistant enamel with a modified vinyl undercoat.
- The inverter shall be a standby UPS. PWM inverter type utilizing IGBT technology with 2ms transfer time.
- The system shall reliably handle from .5 leading to .5 lagging power factor. The output voltage regulation shall be $\pm 3\%$ or better from 0% to 100% of rated load. The system's output shall be capable of 125% overload for 5 minutes. Harmonic distortion <10% total or 3% any single harmonic.
- The battery charger shall be an integrated two step system with temperature controlled 24 hour charge for 90 minute system. The charger shall fully recharge the batteries within the requirements of U.L. 924 specifications.
- The systems batteries shall be of the sealed maintenance free lead acid type.
- Options: Refer to Option Selection Chart for descriptions and nomenclature. Popular options are: Start-up Service, Output Circuit Breakers, Remote Meter Panel, Output Trip Alarms
- The system shall be an Inverter Systems model No.______as manufactured for and warranted by Inverter Systems, Inc. (for copy of detailed specification format - consult factory)

NFT

- The AC input voltage shall be (120 or 277V single phase two wire plus ground).
- The output voltage shall be (120 or 277V single phase two wire plus ground). The output frequency shall be 60HZ ±0.05HZ for all loads.



3NFT

- The AC input voltage shall be (120/208V or 277/480V three phase four wire plus ground).
- The output voltage shall be (120/208V or 277/480V three phase four wire plus ground). The output frequency shall be $60HZ \pm 0.05HZ$ for all loads.

ORDERING GUIDE:

When ordering an ISI-MINI from Inverter Systems, Inc., use:

1.	Model Series	ISI-NFT	ISI-3NFT
2.	Volt Amp (VA) Rating		
	Select required capacity in volt	3K to 8K	4K to 8K
3.	Input Voltage		
	120 Volt	120	120/208
	277 Volt	277	277/480
	Other Voltages	()	()
4.	AC Output Voltage		
	120 Volt	120	120/208
	277 Volt	277	277/480
	Other Voltages	()	()
5.	Output Circuit Breakers		
	Specify number of output circuit breakers	C()	C()
	(Maximum 14 per system)		
6.	Battery Type**		
	Maintenance free sealed lead acid	SB	SB
	Long life sealed lead acid	SB(20)	SB(20)
7.	Options		
	Start-Up Service	SUS	SUS
	Summary Dry Contacts (Form "C")	DCS	DCS
	Output Circuit Breaker Trip Alarm	OTA()	OTA()
	Remote Meter Panel	RMP	RMP
	Battery Charger Upgrade (12 Hour)	FCH	FCH

*Due to space limitations, the 6.5 & 8kva units have a minimum amount of internal area available for optional transformers. Contact factory for details.

**Battery life expectancy is compromised when placed in extreme temperatures.

WARRANTY: Electronics Assembly

Inverter Systems, Inc. warrants the ISI-NFT electronics assembly (except batteries) against defects in material and workmanship for a period of one year from date of shipment. Inverter Systems, Inc. will either repair or replace any properly installed ISI-NFT system which fails under normal operating conditions provided that it is returned to the factory, transportation prepaid, and our inspection determines it to be defective under the terms of this warranty. The warranty covers only equipment other than batteries manufactured by Inverter Systems, Inc.

The warranty covers only equipment other than batteries manufactured by Inverter Systems, Inc. and does not extend to transportation, installation or replacement charges, nor does it apply to any other equipment of another manufacturer used in conjunction with ISI equipment. No other warranty expressed or implied exists beyond that included in this statement.

*TWO YEAR WARRANTY WHEN START-UP SERVICE IS PURCHASED

Battery Warranty

Sealed lead calcium batteries carry a 1 year full, 4 year pro-rated limited warranty. Long life batteries carry a 1 year full, 9 year pro-rated limited warranty. Important note: Battery warranty is limited to certain environmental, operational and installation limitations (refer to detailed Battery Warranty Terms and Conditions).

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