

SRNDTI Series UPS

Rack mount Uninterruptible Power Systems for Shipboard & Tactical Applications

PURPOSE AND CAPABILITIES

Our SRNDTI Series UPS is Power Factor Corrected (PFC) on the input to near unity. Therefore, when non-linear loads requiring *apparent* power are present, only *real* power is reflected on the input utility line, ensuring efficient use of electricity and preventing harmful load harmonics from re-entering your electrical system.

In a non-linear load, current drawn by the load is either leading or lagging the voltage. These offset current and voltage waveforms produce *apparent* power, measured in Volt-Amperes (VA). Our UPS power-factor corrects the current and voltage waveforms, producing *real* power, measured in watts (W), which is typically less than VA. Therefore, if the load itself is not power factor corrected (non-linear), then current measured on the input may actually be less than the output current.

TRUE ON-LINE, DOUBLE-CONVERSION TECHNOLOGY

Unlike Standby (Off-Line) and Line-Interactive UPS products which only work part-time, this *True On-Line* design provides power 100% of the time in the form of a precise, digitally processed, output sine wave synthesized by an internal microprocessor.

FEATURES:

- Adjustable 5¼" Faceplate
- Additional EMI Suppression Technologies
- Inverter Powers Load Continuously
- Lightweight Aluminum Chassis (Steel also available)
- Dipole breaker on front panel protects both sides of the line and permits testing from the front panel
- Ruggedized internal structure provides resistance to shock and vibration damage
- Cold Start feature allows system startup without AC input
- Automatic Bypass
- Integral slide mounts and spacers tapped for various hole patterns
- Fits most 19" rack applications
- Airflow Front-to-Rear Standard (Rear-to-Front also available)
- Optional Auxiliary Battery Trays extend battery runtime
- Optional SNMP Network Agent available (SNMPv3 & IPv6)
- Optional Auto-Sense Wide Voltage Input available on most models
- Many Input & Output connectors available, inquire for more details



Front View

BENEFITS:

- Ruggedized COTS UPS
- MIL-STD-1399, Section 300B
- True Online UPS
- Customizable to fit your specific application and requirements
- Electrically Isolated Input
- Battery backup runtime to meet your requirements

NOVA

POWER SOLUTIONS, INC.

Product Datasheet

STANDARD FEATURES:

- Power Factor Corrected
- True On-Line, Sine wave Output
- Designed for Non-linear Loads
- Input Dipole Circuit Breaker
- Automatic Bypass
- Ruggedized components for resistance to shock and vibration
- Heavy-duty slide-mounts fit standard slide patterns
- Auxiliary Battery Input Connector
- Rear Mounted Ground Stud
- RS232 Communication & Open-Collector Signal Ports

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¹ Various Output Connectors available upon request, please call for details

² Currently only 2kVA and 2.4kVA models can meet MIL-STD-1474

ELECTRICAL

Power Factor Corrected	IAW MIL-STD-1399, Section 300B
Input Voltage ¹	115/220VAC +35%/-20% (without Battery)
Input Frequency	45-65Hz
Output Voltage	120VAC ± 3%
Output Frequency	60Hz (standard), 50Hz, or Line Sync (software select)
Crest Factor Ratio (typical)	Up to 4.8:1 (@50% Load) Up to 3.2:1 (@75% Load) Up to 2.4:1 (@100% Load) } <i>Non-linear load and less than 5% THD</i>
Harmonic Distortion	5% Max. THD (@80% Non-linear load)
Dynamic Response	±4% for 100% Step Load Change, 500µs Recovery Time
Overload	110% for 10 minutes; 200% for 50ms
Efficiency	85% (@ full load)
UPS Protection	Input and Output Short Circuit; Input and Output Overload; Low-Voltage Battery Cut-off

ENVIRONMENTAL

Operating Temperature	32°F to 122°F (0°C to 50°C)
Humidity	0% to 95% Non-condensing
Altitude	Sea Level to 10,000 Feet
Audible Noise	39-42 dBA at Five Feet

MECHANICAL

Dimensions	5 3/4" H x 19" W x 23" D
Weight	90lbs (1.25kVA, 1.5kVA); 105lbs (2kVA, 2.4kVA)
Cooling	Low Velocity, Temperature Controlled Reversible Forced Air
Airflow	Front to Rear (Rear to Front also available)
Installation	Adjustable Front Faceplate
Battery	Sealed Rechargeable Lead-Acid (non-hazardous, non-spillable)
Input	CPC 17 Locking Inlet; 6 Foot (minimum) power cord with NEMA Type 5-15P or 5-20P plug
Output ¹	2pcs NEMA 5-15R & 2pcs NEMA L5-15R; <i>2.4kVA only: 4pcs NEMA 5-20R</i>

STANDARDS

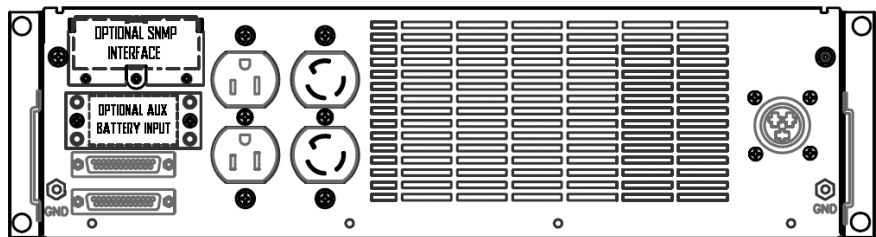
	UL 1778 design; Mil-Std 1399 Sec. 300B, 167-1A, 901D, 1474D ² & most elements of 810G & 461F (in a properly shielded & isolated rack) as applicable to shipboard environments
MTBF	In Excess of 100,000 Hours (based on service records)

CONTROLS AND INDICATORS

Sequenced LEDs	Battery Level, Load Level
Single LED	AC Input, Inverter On, Bypass On, On Battery, Fault, Cold Start, AC Output, Replace Battery
Front Panel Controls	System On/Off, AC Input On/Off, Cold Start, Fault Silence, Battery Test, AC Output On/Off
Audible Alarms	Utility Interrupt, Inverter Failure, Overload, Low Battery, Self-test
RS232 Data Interface (DB-25F):	Full Interactive, Remote Computer Monitoring and Control of UPS Functions. Compatible with Megatech & SEC protocols
Open-Collector (DB-25F):	Allows Alarm Function Monitoring
Optional SNMP Interface (RJ45):	Allows Full Control and Monitoring Over Network Connection. Compatible with OpenView™, NetView™ and CA Unicenter™ & Other UPS Software

OPTIONS

CT-04B	Auto-sense, Input Voltage Select
CT-09A-2	USHA Mini SNMP Network Agent



SYSTEM REAR VIEW

Part Number	Nominal Apparent Power (VA)	Actual Output Power (W)	Dimensions (H x W x D)	Approximate Weight (lbs)	Typical Runtime 100%/50%	Single Aux. Back-up Runtime 100%/50%	Dual Aux. Back-up Runtime 100%/50%
UPS1-1.25K-1G-SRNDTI-2E	1250	875	5 3/4" x 19" x 23"	90	12/25	26/60	40/110
UPS1-1.5K-1G-SRNDTI-2E	1500	1050	5 3/4" x 19" x 23"	90	8/20	19/48	34/95
UPS1-2K-1G-SRNDTI-2E	2000	1400	5 3/4" x 19" x 23"	105	5/18	18/43	34/78
UPS1-2.4K-1G-SRNDTI-K2E	2400	1680	5 3/4" x 19" x 23"	105	4/14	14/38	28/60