

4kVA SRNDTI Series UPS & UPR

Uninterruptible Power Supplies (UPS) and Power Conditioners (UPR) for Rackmount Applications

PURPOSE AND CAPABILITIES

Our 4kVA SRNDTI Series UPS & UPR's are 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
- EMI Suppression Technologies
- Inverter Powers Load Continuously
- Ruggedized Steel Chassis
- 50 Amp-rated 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
- Auxiliary Battery Trays available for battery backup capability (UPS)
- Ability to support load equipment with power factors of 0.84 or worse
- Integral slide mounts and spacers tapped for Jonathan and Accuride slides
- Fits most 19" rack applications
- Airflow Front-to-Rear Standard (Rear-to-Front also available)
- Optional SNMP Network Cards available (SNMPv3 and IPv6)
- Remote load control via front panel or SNMP available (ask for details)
- Many Input & Output connector options available, inquire for more details

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Product Datasheet



Front View

BENEFITS:

- Ruggedized COTS Design
- MIL-STD-1399, Section 300B
- True On-Line UPS
- Electrically Isolated Input
- 5x Inrush Current Limit
- PVC-free Internal Wiring
- 70ms Hold-up Time (UPR)
- Remote load control available
- Battery backup runtime options available (UPS)
- Customizable to fit your specific application and requirements

Product Datasheet

STANDARD FEATURES:

- Power Factor Corrected
- True On-Line, Sine wave Output
- Designed for Non-linear Loads
- Input Dipole Circuit Breaker
- 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

ELECTRICAL	
Power Factor Corrected	IAW MIL-STD-1399, Section 300B
Input Voltage	115VAC +35%/-20%
Input Frequency	45 to 65Hz
Output Voltage	120VAC ± 3%
Output Frequency	60Hz (default), 50Hz or line-sync (software selectable)
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
Inrush Current Limit	5x of nominal input current
Overload	110% for 10 minutes; 200% for 50ms
Efficiency	85% (@ full load)
UPS Protection	Input and Output Short Circuit; Input and Output Overload; Excessive Battery Discharge
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	42-66 dBA at 25° C
MECHANICAL	
Dimensions	5 ¼"H x 19"W x 23"D
Weight	Approx. 104lbs
Cooling	Low Velocity, Temperature Controlled Forced Air
Airflow	Front to Rear (Rear to Front also available)
Installation	Adjustable Front Faceplate
Battery Backup	Batteries not included in UPS (requires Auxiliary Battery Tray)
Power-loss Event	<i>UPR only:</i> Minimum 70ms hold-up time (@ full load)
Input/Output Connectors	<i>SRNDTI-J:</i> AMP CPC-style <i>SRNDTI-L:</i> MS3102-style
STANDARDS	
Designed to and/or has met:	UL 1778 design; Mil-Std 1399 Section 300B, 167-1A, 901D, 1474D and most elements of 810G and 461F (in a properly shielded rack) as applicable to shipboard environments
MTBF	In Excess of 80,000 Hours (based on component calculation)
CONTROLS AND INDICATORS	
Sequenced LEDs	Load Level, Battery Level (disabled on UPR)
Single LED	AC Input, Inverter On, Bypass On, Fault, AC Output. <i>UPS only:</i> On Battery, Cold Start, Replace Battery (disabled on UPR)
Front Panel Controls	System On/Off, AC Input On/Off, Fault Silence, AC Output On/Off. <i>UPS only:</i> Cold Start (disabled on UPR)
Audible Alarms	Utility Interrupt, Inverter Failure, Overload. <i>UPS only:</i> Low Battery, Self-test (disabled on UPR)
RS232 Data Interface (DB-25F):	Full Interactive, Remote Computer Monitoring and Control of UPS Functions. Compatible with Megatech and 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-09A-2	USHA Mini SNMP Network Agent

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UPS & UPR Part Number	Nominal Apparent Power (VA)	Actual Output Power (W)	Input/Output Connectors	Dimensions (H x W x D)	Approx. Weight	Dual Aux. Back-up Runtime 100%/50%	Remote Load Control?
UPR1-4K-1G-SRNDTI-JS2E	4000	3360	AMP CPC	5½" x 19" x 23"	104lbs	N/A	N/A
UPR1-4K-1G-SRNDTI-LS2E	4000	3360	MS3102	5½" x 19" x 23"	104lbs	N/A	N/A
UPS1-4K-1G-SRNDTI-JS2E	4000	3360	AMP CPC	5½" x 19" x 23"	104lbs	4/14 min	N/A
UPS1-4K-1G-SRNDTI-LS2E	4000	3360	MS3102	5½" x 19" x 23"	104lbs	4/14 min	N/A
UPS1-4K-1G-SRNDTI-IPDU	4000	3360	AMP CPC	5½" x 19" x 23"	104lbs	4/14 min	Available

Dual Auxiliary Battery Tray Part Number	Battery Chemistry	Battery Voltage (VDC)	Input/Output Connectors	Dimensions (H x W x D)	Approx. Weight	Dual Aux. Back-up Runtime 100%/50%
AB-25-SRNDT-96-6P	VRLA	96	Anderson Powerpole	5½" x 19" x 17"	104lbs	4/14
AB-25-SRN-96-6P	VRLA	96	Anderson Powerpole	3½" x 19" x 23"	104lbs	4/14