

ATP-ARN Series

Modular Rack Online UPS



- The 1st modular UPS could be used on standard 19" rack.
- True double-conversion.
- DSP technology guarantees high performance.
- Output power factor 1.0.
- Active power factor correction in all phases.
- 50Hz/60Hz frequency converter mode.
- ECO mode operation for energy saving (ECO).
- Emergency power off function (EPO).
- Generator compatible.
- SNMP+USB multiple communications.
- Adjustable battery numbers for long-run application.
- Parallel operation up to 10 units.
- Cold start capability.
- Optional module for extra dry contacts and more card slots.
- Separated Bypass on each UPS module.
- LCD display on each UPS module.



Modular connector box with hot-swappable design for power expansion, installation and maintenance

ATP*-ARN is applied patented modular design to enhance the flexibility of power expansion and maintenance. By simply removing four screws on the connector box, power module can be easily removed out from cabinet without disconnecting all wires. It also simplifies the process of maintenance and replacement to reduce the maintenance cost effectively.



Standard 19" form, tower/rack convertible design

Designed for easy adjustment, the vertical/horizontal conversion design enhances the flexibility and scalability of the modular UPS. 19" form factor suits for the standard rack so it optimizes cost expense to meet the power demands.



Parallel operation with common battery

Compared to general parallel system, multiple ATP-ARN UPSs can form a parallel power backup system by sharing common battery packs which might greatly reduce the expense and reach the same performance.

Adjustable battery design

The number of connected batteries can be adjusted flexibly based on different power demands.

DSP technology guarantees high reliability

A Digital Signal Processor (DSP) technology digitizes the data and mathematically manipulates them to provide an improved solution with higher performance.

Output power factor 1.0

For critical applications, the modular UPS with output power factor 1.0 ensures higher efficiency and advanced performance.

50Hz/60Hz frequency converter mode

Lock output frequency at 50Hz or 60Hz to suit power sensitive equipment's.

ECO mode operation for energy saving

ECO mode improves the efficiency up to 97% to cut energy usage & cost. In this mode, loads are supplied by the mains directly.

While mains failure, the UPS will constantly supply the power to the connected device without any interruption.

Emergency power off function (EPO)

In case of any emergency and fire, the EPO control mechanism can instantly shut down the system.

Generator compatible

This UPS can accept generator as power source and still convert perfect power to the connected loads.

Customized system

Multiple UPSs can easily form a complete system based on customer's demand. Please contact sales directly for the details.



| Customized system | | | |
|--------------------------|-----|---|---|
| Cabinet Height | 17U | | |
| Number of power module | 4 | 2 | 1 |
| Number of battery module | 0 | 2 | 3 |

*This customized system will be embedded 1U centralized communication unit.

ATP-ARN Online UPS Selection Guide

| MODEL | ATP-ARE 3/3-10K | ATP-ARE 3/1-10K | ATP-ARE 1/1-10K | ATP-ARE 2/2-6K LV | ATP-ARE 3/3-10K LV | |
|---|--|--|---|---|--|-----|
| PHASE | 3 phase in / 3 phase out | 3 phase in / 1 phase out | 1 phase in / 1 phase out | 2 phase in / 2 phase out | 3 phase in / 3 phase out | |
| CAPACITY | 10000 VA / 10000 W | 10000 VA / 10000 W | 10000 VA / 10000 W | 6000 VA / 6000 W | 10000 VA / 8000 W | |
| PARALLEL CAPABILITY | 10 | 10 | 10 | 10 | 10 | |
| INPUT | | | | | | |
| Nominal Voltage | 3 x 360VAC/380VAC/ 400VAC/415VAC (3Ph+N+PE) | 3 x 360VAC/380VAC/ 400VAC/415VAC (3Ph+N+PE) | 208VAC/220VAC/230VAC /240VAC (1Ph+N+PE) | 100/200, 110/220, 120/208, 120/240, 127/220 VAC (2P+N+PE) | 3 x 173VAC/190VAC/200VAC /208/220VAC (3Ph+N+PE) | |
| Voltage Range | 190-520 VAC (3-phase) @ 50% load 305-478 VAC (3-phase) @ 100% load | | 110-300 VAC @ 50% load 176-276 VAC @ 100% load | 88-155 VAC (L-N) 152- 269 VAC (L-L) | 88-155 VAC (L-N) 152- 269 VAC (L-L) | |
| Frequency Range | 40 Hz ~ 70 Hz | | | | | |
| Power Factor | ≥ 0.99 @ 100% load | | | | | |
| THDi | < 4% @ full linear load | | | | | |
| OUTPUT | | | | | | |
| Output Voltage | 360VAC/380VAC/400VAC/ 415VAC (3Ph+N) | 208*/220/230/240VAC (L+N) | 208*/220/230/240VAC (L+N) | 100/200, 110/220, 120/208, 120/240, 127/220 VAC (2Ph+N) | 173VAC/190VAC/200VAC (L+N) | |
| AC Voltage Regulation (Batt. Mode) | ± 1% | | | | | |
| Frequency Range (Synchronized Range) | 46~54Hz or 56~64Hz | | | | | |
| Frequency Range (Batt. Mode) | 50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz | | | | | |
| Current Crest Ratio | 3:1 (max.) | | | | | |
| Harmonic Distortion | ≤ 2% THD (Linear Load) ; ≤ 3% THD (Non-linear Load) | | | | | |
| Transfer Time | AC Mode to Batt. Mode | zero | | | | |
| | Inverter to Bypass | zero | | | | |
| Waveform (Batt. Mode) | Pure Sinewave | | | | | |
| EFFICIENCY | | | | | | |
| AC Mode | 94% | 94% | 93.5% | 91% | 92% | |
| ECO Mode | 97% | 97% | 97% | 97% | 97% | |
| Battery Mode | At Full Load | 93% | 92.5% | 92% | 91% | 92% |
| | Peak | 93.5% | 93% | 92.5% | 91.5% | 92% |
| BATTERY CHARGER | | | | | | |
| Battery Voltage | ± 12V / 9 Ah | | | | | |
| Battery Numbers | 16 ~ 20 pcs (adjustable) x 2 | 16 ~ 20 pcs (adjustable) x 2 | 16 ~ 20 pcs (adjustable) x 2 | 8~10pcs (adjustable) x 2 | 8~10pcs (adjustable) x 2 | |
| Nominal Voltage | +/-192V (12V x 32 pcs) | +/-192V (12V x 32 pcs) | +/-192V (12V x 32 pcs) | +/-96V (12V x 16 pcs) | +/-96V (12V x 16 pcs) | |
| Maximum Voltage | +/- 240V (12V x 40 pcs) | +/- 240V (12V x 40 pcs) | +/- 240V (12V x 40 pcs) | +/-120V (12V x 20pcs) | +/-120V (12V x 20pcs) | |
| Minimum Voltage | +/-192V (12V x 32 pcs) | +/-192V (12V x 32 pcs) | +/-192V (12V x 32 pcs) | +/-96V (12V x 16pcs) | +/-96V (12V x 16pcs) | |
| Charging Voltage | ± 218V | ± 218V | ± 218V | ± 109V | ± 109V | |
| Typical Recharging Time | 9 hours recover to 90% capacity | | | | | |
| Charging Current | ± 4A | | | | | |
| INDICATORS | | | | | | |
| LCD/LED Display | UPS status, Load level, Battery level, Input / Output voltage, Discharge timer, and Fault conditions | | | | | |
| PHYSICAL | | | | | | |
| Dimension, D x W x H(mm) | 678 x 418 x 129 [3U] | | | | | |
| Net Weight (kgs) | 20.5 | 20.5 | 20.5 | 17.6 | 21 | |
| ENVIRONMENT | | | | | | |
| Operating Humidity | 0-95 % RH @ 0-40°C (non-condensing) | | | | | |
| Noise Level | Less than 55dB @ 1 Meter | Less than 55dB @ 1 Meter | Less than 55dB @ 1 Meter | Less than 58dB @ 1 Meter | Less than 58dB @ 1 Meter | |
| MANAGEMENT | | | | | | |
| Smart RS-232/USB | Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC | | | | | |
| Optional SNMP | Power management from SNMP manager and web browser | | | | | |

*Derate capacity to 90% of capacity when the output voltage is adjusted to 208VAC.
Product specifications are subject to change without further notice