Delta UPS-Amplon Family

RT Series 5/6/8/10 kVA, Single Phase; 15/20 kVA, Three Phase

A total solution for reliable power with high availability and performance

The Amplon RT Series 5-20kVA is an online double-conversion UPS that provides best-in-class designs in compact 2U size, high power density, system efficiency, and versatile configurations to fulfill customers' requirements. Unity output power factor maximizes capacity for more critical loads, while outstanding energy savings can be achieved based on the AC-AC efficiency of up to 96.5% and 99% in ECO mode. In addition, RT Series 5-20kVA UPS is the first in the market that offers standard Li-ion external battery cabinets, which deliver better power density and sustainability. Along with the parallel capacity of up to four units, the new series is the ideal small power UPS for mission-critical applications, such as servers, data centers, telecommunications, and manufacturing.

Availability & Flexibility

- True online double-conversion topology and zero transfer time to battery provides 24/7 full-time protection
- Wide input voltage range allows the UPS to operate in harsh electrical environments and extends battery life
- · AC-start function allows the UPS to be switched on without connecting to a battery
- Programmable load bank disconnects non-critical loads when a blackout occurs and reserves more battery power for critical loads
- Up to four units parallel capacity allows redundancy and load expansion
- Hot swappable batteries ensure continuous operation even when batteries are being replaced
- VRLA and Li-ion External Battery Cabinet (EBC) are available for scalable runtime
- Extended Runtime models support flexible battery quantity for battery investment optimization. And when one battery fails, it could be removed without replacing the entire battery string, reducing maintenance cost and efforts
- The Power Distribution Box (PDB) and Maintenance Bypass Breaker (MBB), which are default to RT 5-10kVA Standard Runtime models, enable simple configuration
- The Maintenance Bypass Breaker (MBB) is optional for easy UPS replacement without powering down critical systems
- The rRPP (Rack Remote Power Panel), which can be integrated with standard server racks, simplifies power output distribution and power monitoring
- · Common battery configuration is supported in UPS parallel mode to save installation space and additional battery costs

Efficiency & Reliability

- · Unity output power factor guarantees no de-rating with loads and provides permanent 100% kW
- Best-in-class AC-AC efficiency of up to 96.5% and 99% in ECO mode lowers energy costs
- · Automatic fan speed control maximizes system efficiency and significantly reduces audible noise and prolongs battery life
- · Fan failure detection sends early warnings to facilitate predictive maintenance of UPS

Manageability

- Intelligent battery management to extend battery life and maximize battery performance. The battery aging detection monitors battery status for predictive maintenance, and the 3-stage charging mechanism keeps the battery from continuous float charging during the intermission stage to prolong battery life
- Excellent local management through a user-friendly graphical and multi-lingual LCD display
- Various types of communication interfaces, including USB, RS-232, and RS-485 ports, mini slot, REPO/ROO for remote management, and in-built dry contacts for monitoring and notification of system operation conditions
- UPS management software such as ShutdownAgent and InfraSuite Device Manager allow users to monitor UPS status and protect critical devices







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Technical Specifications

| Model | | RT-5K | RT-6K | RT-8K | RT-10K | RT-15K3P | RT-20K3P | |
|---------------------------|--------------------------------|-------------------------------------------------------------------------------------------|---------------------|-------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------|--|
| Power Rating | | 5kVA/5kW | 6kVA/6kW | 8kVA/8kW | 10kVA/10kW | 15kVA/15kW | 20kVA/20kW | |
| Input | Voltage Range | 100 ~ 280V (Single phase, 2-wire + G) 100 ~ 175V with linear de-rating 50 ~ 100% | | | | 138 ~ 485V (Three phase, 4-wire + G) 138 ~ 305V with linear de-rating 40 ~ 100 | | |
| | Frequency | 40 ~ 70 Hz > 0.99 (full load) < 3% | | | | | | |
| | Power Factor | | | | | | | |
| | iTHD | | | | | | | |
| | Input connection | Input terminal x 1 | | | Input terminal x 1, Bypass Input terminal x 1 | | | |
| Output | Power Factor | Unity | | | | | | |
| | Voltage | 200, 208, 220, 230, 240 Vac (Single phase) | | | | 380/400/415 Vac (Three phase), or 220/230/240 Vac (Single phase) | | |
| | Frequency | 50/60Hz ±0.05Hz | | | | | | |
| | Voltage Harmonic Distortion | ≤ 2% (linear l | oad) | | | | | |
| | Overload Capability | ≤ 105%: continuous; 106 ~ 125%, 5 min.; 126 ~ 150%, 1 min.; > 150%: 500ms | | | ≤ 105%: continuous; 106 ~ 125%: 2 min.; 126 ~ 150%: 30 sec; > 150%: 200ms | | | |
| Receptacle | Standard Runtime Model | C13x6, C19x2, Terminal x 1 Load bank: C19x1 Terminal x 1 Load bank: Terminal x 1 | | | Terminal x 1 | | | |
| | Extended Runtime Model | | | | | | | |
| Efficiency | AC-AC | Up to 95.5% | | | Up to 96.5% | | | |
| | ECO Mode | Up to 99% | | | | | | |
| Battery Voltage | Standard Runtime Model | 192 Vdc | 192 Vdc | 240 Vdc | 240 Vdc | ±144 Vdc*, ±192 ~ 264 Vdc | | |
| | Extended Runtime Model | 144 Vdc*, 192 | 2~264 Vdc | | | | | |
| Charger Current | Standard Runtime Model | 1A (default) 1.5A (default) | | |) | Up to 8A | | |
| | Extended Runtime Model | Up to 8A | | | | | | |
| Typical Backup Time | Standard 75% load | 7.5 min. | 5.5 min. | 9 min. | 6 min. | Depending on different configurations required by customers | | |
| | Runtime Model Full load | 5 min. | 3 min. | 5 min. | 3.5 min. | | | |
| | Extended Runtime Model | Depending or | n different configu | rations required | by customers | | | |
| Audible Noise | <u>,</u> | 48 dB 50 dB | | | | 54 dB | | |
| Display | | Graphical and multi-lingual LCD | | | | | | |
| Communicatio | on Interfaces | MINI Slot x 1, Parallel Port** x 2, USB Port x 1, RS232 Port*** x Dry Contact x 4 | | | | 1, RS485 Port x 1, | REPO/ROO Port x 1, | |
| Dimensions (W x D x H) | Standard Runtime Model | 440 x 665 x 176 mm 440 x 750 x 218 mm 440 x 430 x 88.2 mm 440 x 565 x 88.2 mm | | 440 x 750 x 218 mm | | 440 x 760 x 88.2 mm | | |
| | Extended Runtime Model | | | 440 X 700 X 88.2 [[][]] | | | | |
| Weight | Standard Runtime Model | 54 kg | 54 kg | 85.5 kg | 85.5 kg | 22.5 kg 22.5 kg | | |
| | Extended Runtime Model | 10.9 kg | 10.9 kg | 15.2 kg | 15.2 kg | | | |
| Environment | Operating Temperature | 0 ~ 55° C**** | | | | | | |
| | Relative Humidity | 5 ~ 95% (non | -condensing) | | | | | |

* De-rating to 70% load

** Only applicable to RT 5-10kVA Extended Runtime Model and RT 15/20kVA

*** Not applicable to RT 20kVA

**** When the operating temperature is at 40 ~ 55° C, the UPS will be de-rated to 75% of its capacity

All specifications are subject to change without prior notice.





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