

# DEWEN™



# ATHLON LitePower SERIES

Power range:1KW-10KW single phase

ATHLON LitePower Series UPS:  
High-performance UPS designed for critical  
power protection in business and IT  
environments.

## **About DEWEN®**

DEWEN, a premier brand under KEMET LIMITED, is dedicated to advancing sustainable power backup solutions for modern industries. Rooted in over 20 years of KEMET's expertise across the Middle East and Africa, DEWEN specializes in the design and manufacture of innovative backup power products, including Uninterruptible Power Supplies (UPS), rectifiers, inverters, and power and frequency converters.

Driven by a commitment to sustainability, DEWEN integrates eco-conscious practices throughout its design and manufacturing processes, ensuring that our solutions are not only reliable but also environmentally responsible. Each DEWEN product is crafted to deliver efficiency and resilience, enabling businesses to maintain continuity while minimizing their environmental impact.

With DEWEN, KEMET LIMITED reinforces its mission to support clients in implementing sustainable, reliable, and efficient power solutions tailored to their unique needs, helping pave the way for a greener future in energy and backup power.

The ATHLON LitePower Series by DEWEN® is a high-performance line of online UPS systems built to meet the critical power protection demands of small to medium-sized enterprises, IT infrastructures, and essential applications. This series combines advanced technology with versatile installation options, supporting both 19-inch rack-mounted and tower configurations for seamless adaptation to any environment. With a robust design featuring a unity output power factor of 1.0, it maximizes efficiency by delivering full, real power to connected loads. The LitePower Series ensures stable, continuous power with precise voltage regulation, making it ideal for sensitive equipment that requires uninterrupted operation. For scenarios where extended backup time is critical, the LitePower Series includes the option for an enhanced battery charger, allowing additional battery banks to extend runtime to meet specific needs. This flexibility makes it a reliable solution in settings where power continuity is essential. Whether installed in a rack or as a standalone tower unit, the ATHLON LitePower Series offers dependable, high-quality power with a scalable design that evolves with your requirements, keeping your operations protected and efficient.

### True Double-Conversion Online UPS

The true double-conversion design of this UPS ensures the delivery of clean, high-quality power to safeguard mission-critical systems. It offers robust protection for sensitive equipment, making it ideal for applications such as high-demand networks, small-scale server centers, telecommunications, and industrial environments.

### High Output Power Factor of 1

The ATHLON LitePower Series is engineered with a high-density design that features a unity output power factor, meaning it operates with an output power factor of 1.0. This design provides significant advantages in terms of efficiency and real power delivery, maximizing the amount of usable power provided to connected loads.

In essence, a unity power factor of 1.0 ensures that all power drawn from the utility is effectively utilized without wastage, delivering full, real power directly to critical systems. This feature is particularly valuable in environments where reliable and efficient power delivery is essential, such as data centers, healthcare facilities, industrial sites, and IT infrastructures.

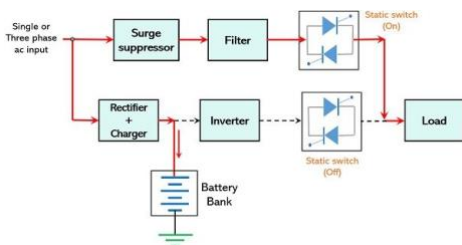
### Advanced High-Current Charging for Rapid Battery Recovery

The DEWEN ATHLON LitePower Series stands out with its high-capacity, fast-charging capabilities, designed to meet the demands of critical applications. This series includes an advanced battery charger that reaches up to 12A for models in the 1 to 1.5 kVA range, 8A for 2 to 3 kVA models, and 4A for 6 to 10 kVA models—placing it among the highest standard charger capacities in its class compared to other brands. This robust charging capability ensures rapid battery recharge, ideal for environments where maintaining continuous power is essential. While the series offers swift battery recharging for quick recovery, it also emphasizes adherence to recommended charging current values, allowing for optimal battery performance and longevity. This high-capacity charger makes the LitePower Series an excellent choice for critical systems requiring both reliable backup power and expedited battery recovery times.

### Hot-Swappable Battery Design for 1–3 kVA Models

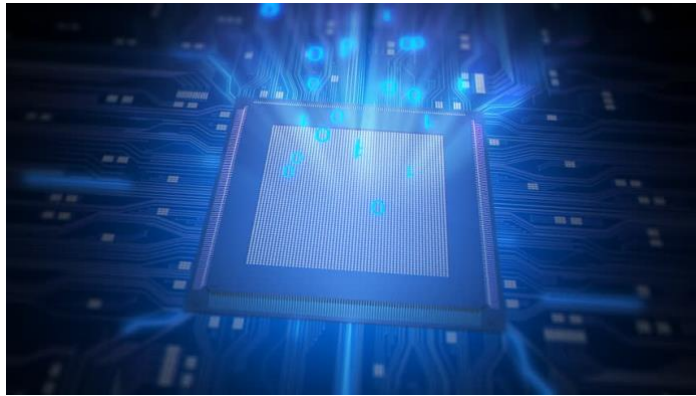
The ATHLON LitePower Series UPS for 1–3 kVA models features an advanced hot-swappable battery design, allowing for uninterrupted power supply to connected devices even during battery maintenance or replacement. This functionality means that the batteries can be safely removed and replaced without shutting down the UPS or cutting power to essential systems. With hot-swappable batteries, IT professionals and facility managers gain the flexibility to perform routine maintenance or replace batteries quickly and easily, ensuring that critical systems remain operational and fully protected at all times. This is particularly valuable in environments where uptime is crucial, such as server rooms, data centers, and other sensitive applications. The seamless design also reduces the risk of power disruptions during maintenance, supporting continuous business operations and minimizing downtime.

By enabling ongoing power continuity, the hot-swappable battery design enhances system resilience, making the LitePower Series an ideal choice for applications requiring dependable, 24/7 protection. This feature also helps streamline maintenance procedures, as batteries can be replaced in a few simple steps without the need for specialized tools or technical expertise.



## DSP Technology for Enhanced Performance in 6 kVA and Higher Models: Optimized Control and Efficiency

The ATHLON LitePower Series UPS models rated at 6 kVA and above are equipped with advanced Digital Signal Processing (DSP) technology, a cutting-edge feature that significantly enhances system performance, control, and overall efficiency. DSP technology utilizes sophisticated algorithms to process signals in real-time, delivering an unprecedented level of precision in power management. This level of control ensures that power is delivered consistently and accurately, safeguarding connected equipment from fluctuations and ensuring stable, uninterrupted operation in critical environments.



The DSP controller plays a key role in improving both the reliability and responsiveness of the UPS, making it well-suited for demanding applications where consistency and quick adaptability are essential. By precisely managing voltage, current, and other critical parameters, DSP technology minimizes power losses, reduces harmonic distortions, and ensures optimal output quality. This results in a more energy-efficient system that supports sustainable operations while keeping operational costs down.

In applications such as data centers, healthcare facilities, financial services, and industrial settings, where any power disruption could have severe implications, DSP technology provides an additional layer of assurance. The high reliability of the DSP controller not only enhances system durability but also reduces the risk of equipment damage, thereby extending the lifespan of both the UPS and the devices it supports.

In summary, DSP technology in the LitePower Series 6 kVA and higher models delivers an optimized, cost-effective solution that combines high performance with advanced power management. This feature offers peace of mind for organizations relying on continuous power protection, making it an invaluable asset for mission-critical environments.



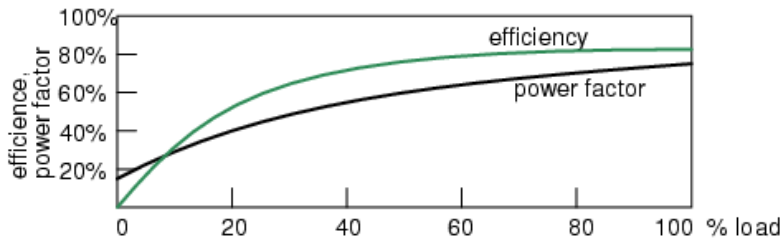
## DEWEN's Commitment to Sustainable Power Solutions!

In today's world, sustainability is not just a value but a necessity. DEWEN is dedicated to creating power solutions that embody environmental responsibility, integrating sustainable practices into every aspect of its products. Through thoughtful design, durable construction, and advanced technology, DEWEN addresses the critical need for reliable power with a minimal environmental footprint.



### Unity Power Factor: Key to Efficiency and Sustainability

The unity output power factor (PF = 1.0) in the ATHLON LitePower Series UPS plays a critical role in improving system efficiency and sustainability. The power factor represents the ratio of real power (used to perform work) to apparent power (the total power supplied by the utility). A power factor of 1.0 means that all the supplied power is being effectively utilized by the system, with no energy wasted in the process. In practical terms, a unity power factor ensures that the UPS operates with maximum efficiency, reducing energy loss and enhancing the overall performance of connected equipment. This also leads to less heat generation, lower operating costs, and a more sustainable solution with a reduced environmental footprint. By achieving a unity power factor, the ATHLON LitePower Series minimizes the need for over-sizing and optimizes the use of electrical capacity, which is especially crucial in critical applications where power quality and reliability are non-negotiable. For industries looking to improve energy efficiency and reduce their carbon footprint, this feature is an essential asset.



### Main Features

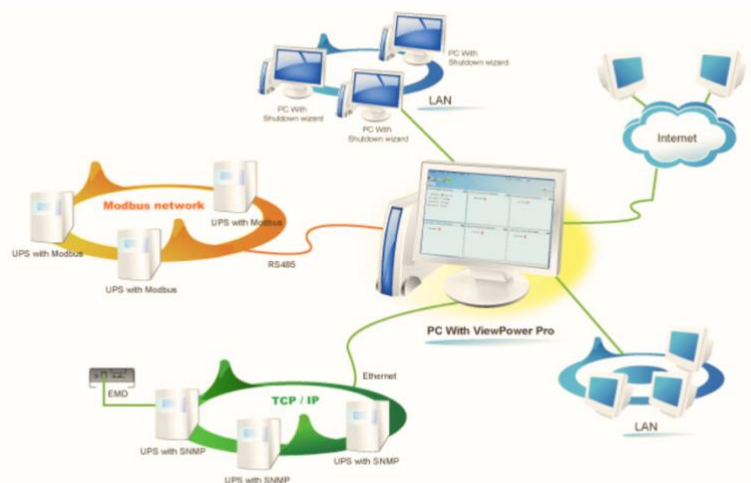
- True double-conversion online UPS.
- Output power factor 1.
- User-friendly and 2.8" touch LCD display.
- Rack/Tower design.
- Generator compatibility (from 6KVA)
- 50/60 Hz frequency converter mode.
- Charger up to 12A (adjustable) from 3KVA and below.
- Emergency Power Off Function (EPO).
- Hot-swappable battery design (up to 3KVA).
- DSP technology applied (from 6KVA).
- Adjustable charging current via LCD panel
- N+X parallel redundancy (from 6KVA)

### Advanced Communication and Monitoring Capabilities

The ATHLON LitePower system is equipped with a built in 2.8" touch LCD, providing users with critical operational insights in an accessible format. This intuitive interface displays essential information, including alarm status, system configuration, startup/shutdown procedures, transfer operations, and advanced metering details.

Through the display, users can access real-time measurements of key metrics such as system currents, voltages, and both active and reactive power.

To ensure seamless integration and remote communication, ATHLON LitePower supports RS232 & SNMP, allowing users to monitor and manage the UPS system efficiently from various locations and platforms. These advanced communication features make ATHLON LitePower a versatile and user-friendly solution for reliable power management.



## Technical Data:

	ALP 1K	ALP 1.5K	ALP 2K	ALP 3K		
PHASE	Single phase with ground					
CAPACITY	1KVA/1KW	1.5KVA/1.5KW	2KVA/2KW	3KVA/3KW		
<b>INPUT</b>						
Nominal Voltage	100/110/115/120/127 VAC or 200/208/220/230/240 VAC					
Voltage Range	55-150 VAC ± 5% or 110-300 VAC ± 5% @ 50% load 80-150 VAC ± 5% or 160-300 VAC ± 5% @ 100% load					
Nominal Frequency	50/60 Hz (Auto Sensing)					
Frequency Range	40 Hz -70 Hz					
Power Factor	> 0.99 @ Nominal Voltage (100% Load)					
Harmonic Distortion (THDi)	≤ 5% @ nominal input voltage					
<b>OUTPUT</b>						
Nominal Voltage	100*/110*/115*/120/127 VAC or 200/208/220/230/240 VAC					
Voltage Regulation (Steady state)	± 1%					
Nominal Frequency	50/60Hz					
Frequency Range (Sync. Range)	57-63 Hz or 47-53 Hz					
Frequency Range (Batt. Mode)	60 Hz ± 0.1 Hz or 50 Hz ± 0.1 Hz					
Harmonic Distortion	≤ 2% THD (Linear Load) ; ≤ 4% THD (Non-linear Load)					
Transfer Time	Zero (AC mode to battery mode) 4 ms (Typical, Inverter to bypass)					
Waveform (Batt. Mode)	Pure Sinwave					
<b>EFFICIENCY</b>						
AC Mode	≥ 89% @ full charged battery		≥ 91% @ full charged battery			
ECO Mode	≥ 96% @ full charged battery					
Battery Mode	≥ 88%		≥ 90%			
<b>BATTERY</b>						
Battery Type	12 V / 9 Ah	12 V / 7 Ah	12 V / 9 Ah	12 V / 7 Ah	12 V / 9 Ah	12 V / 9 Ah
Numbers	2	3	3	4	6	6
Recharge Time	3 hours recover to 95% capacity for internal battery @ 2A charging current					
Charging Current	100/110/115/120/127 VAC models; up to 8A adjustable			200/208/220/230/240 VAC models; up to 12A adjustable		
Charging Voltage	27.4 VDC ± 1%	41.1 VDC ± 1%	41.1 VDC ± 1%	54.8 VDC ±1%	82.1 VDC ±1%	82.1 VDC ±1%
<b>INDICATORS/ALARMS</b>						
LCD Display	Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator					
Battery Mode	Sounding every 5 seconds					
Low Battery	Sounding every 2 seconds					
Overload	Sounding twice every second					
Fault	Continuously sounding					
<b>PHYSICAL</b>						
Cabinet Dimension (W x D x H)mm	438 x 410 x 88 (2U)		438x410x88(2U)	438x510x88(2U)	438x630x88 (2U)	438 x 630 x 88 (2U)
Net Weight with int bat. (Kg)	11.6	14.1	15.5	19.5	23.3	27.5
<b>ENVIRONMENT</b>						
Noise Level	<50dBA @ 1 Meter		<55dBA @ 1 Meter			
Relative Humidity	20-90 % RH @ 0- 40°C (Non-condensing)					
<b>MANAGEMENT</b>						
Smart RS-232 / USB	Supports Windows® Family, Linux and MAC					
Optional SNMP	Power management from SNMP manager and web browser					
<b>STANDARD</b>						
EMC / Safety	cTUVus (comply to UL1778), Fcc (1-1.5K Class B, 2-3K Class A)					

## Technical Data:

	ALP6K	ALP10K
PHASE		Single phase with ground
CAPACITY*	6KVA/6KW	10KVA/10KW
<b>INPUT</b>		
Nominal Voltage	200/208/220/230/240 VAC	
Voltage Range	110-300 VAC ± 5% @ 50% load 160-300 VAC ± 5% @ 100% load	
Nominal Frequency	50/60 Hz (Auto Sensing)	
Frequency Range	46-54 Hz / 56-64 Hz	
Power Factor	> 0.99 @ Nominal Voltage (100% Load)	
Harmonic Distortion (THDi)	< 4% @ 100% load, < 6% @ 50% load	
<b>OUTPUT</b>		
Nominal Voltage	200/208/220/230/240 VAC	
Voltage Regulation (Steady state)	± 1%	
Nominal Frequency	50/60Hz	
Frequency Range (Sync. Range)	57 ~ 63 Hz or 47 ~ 53 Hz	
Frequency Range (Batt. Mode)	60 Hz ± 0.1 Hz or 50 Hz ± 0.1 Hz	
Harmonic Distortion	≤ 1% THD (Linear Load) ; ≤ 4% THD (Non-linear Load)	
Transfer Time	Zero (AC mode to battery mode) 4 ms (Typical, Inverter to bypass)	
Waveform (Battery Mode)	Pure Sinwave	
Overload (Normal mode)	100%-110%: 10min 110%-130%: 1min >130% : 1sec	
Overload (Battery mode)	100%-110%: 30sec 110%-130%: 10sec >130% : 1sec	
<b>EFFICIENCY</b>		
AC Mode	91%	
ECO Mode	96%	
Battery Mode	88%	
<b>BATTERY</b>		
Battery Type	12 V / 7 Ah	12 V / 9 Ah
Numbers	16 pcs (16-20 pcs)	
Recharge Time	9 hours recover to 90% capacity	
Charging Current	4A	
Float Charging Voltage	13.65 VDC ± 1%	
<b>INDICATORS/ALARMS</b>		
LCD Display	Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator	
Battery Mode	Sounding every 4 seconds	
Low Battery	Sounding every second	
Overload	Sounding twice every second	
Fault	Continuously sounding	
<b>PHYSICAL</b>		
Cabinet Dimension (W x D x H)mm	438 x 610 x 88 (2U)	438 x 610 x 88 (2U)
Net Weight (Kg)	17	20
<b>ENVIRONMENT</b>		
Noise Level	<58dBA @ 1 Meter	<60dBA @ 1 Meter
Relative Humidity	20-90 % RH @ 0- 40°C (Non-condensing)	
<b>MANAGEMENT</b>		
Smart RS-232 / USB	Supports Windows® Family, Linux and MAC	
Optional SNMP	Power management from SNMP manager and web browser	

\* Derate capacity to 60% of capacity in CVCF mode and to 90% when the output voltage is adjusted to 208VAC, or parallel system is operated.

\*\* When using 16 pieces of batteries, the output power factor will be derated to 0.8. If using 18 or 19 pieces of batteries, the output power factor will be derated to 0.9.

\*\*\* If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be derated one percent per 100m.

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