DEWEN™

ATHLON FlexiPower SERIES

Power range:20KW-1.2MW

ATHLON FlexiPower Series: Advanced Modular UPS Solutions for Diverse Industry Needs.

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.

ATHLON FlexiPower

The ATHLON FlexiPower Modular UPS Series by DEWEN® represents the pinnacle of flexibility and reliability in power backup solutions. Engineered to support an impressive capacity of up to 600kW per unit, this series can be expanded horizontally to deliver a combined power output of up to 1200kW, making it highly adaptable to large-scale power requirements.

The system's modular design is built around 20kW, 30kW, and 60kW power modules, allowing for customized configurations that cater to a wide range of energy needs without compromising efficiency or reliability.

One of the standout features of the ATHLON FlexiPower series is its ability to ensure uninterrupted power transitions, delivering seamless switchover with zero downtime, a critical capability for environments where continuous operation is paramount. Furthermore, with an efficiency rating of 95%, this series provides significant energy savings, aligning with modern demands for cost-effective and sustainable energy solutions. Thanks to its modular architecture, the ATHLON FlexiPower series offers exceptional adaptability, making it the ideal power backup solution for data centers and various industry applications where conditions can be unpredictable or challenging. It provides a robust, professional-grade power supply that adjusts to specific operational needs, enabling businesses to maintain resilience and high performance across diverse environments. The ATHLON FlexiPower series exemplifies DEWEN's commitment to delivering superior, scalable, and efficient power solutions that meet the rigorous standards of today's power-critical industries.

Modular design lowers MTTR

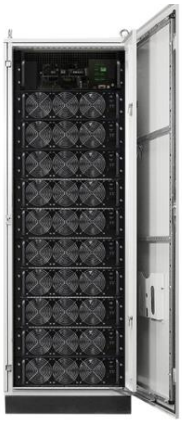
The modular design of the system significantly reduces the Mean Time to Repair (MTTR) by simplifying both maintenance and replacement procedures. Each component, including power modules, Static Transfer Switch (STS) modules, and battery modules, is designed to be easily accessible and independently replaceable. This approach allows for quicker diagnostics and targeted repairs, minimizing downtime and ensuring that the system can be promptly restored to full functionality when needed. By employing a modular architecture, the system not only enhances operational efficiency but also reduces the complexity and time associated with servicing, making it a practical and dependable choice for environments that demand high availability and reliability.

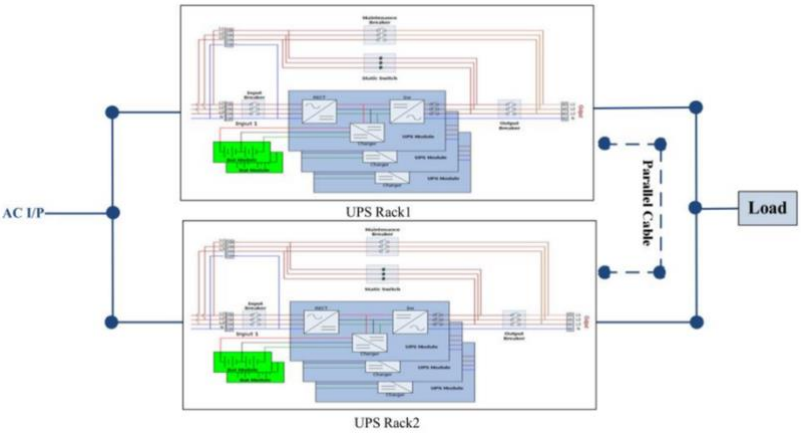
Highly reliable operation with redundant power supply in STS.

The ATHLON FlexiPower series is engineered for maximum reliability, featuring a redundant power supply within the Static Transfer Switch (STS). This dual-power configuration ensures that the system remains fully operational even if one power supply encounters an issue, thereby eliminating the risk of unexpected shutdowns. With this built-in redundancy, ATHLON FlexiPower guarantees uninterrupted performance, providing peace of mind and enhanced security for critical applications where continuous power availability is essential. This design feature makes ATHLON FlexiPower an ideal choice for industries that prioritize reliability and fault tolerance in their power solutions.

SUPERIOR FLEXIBILITY

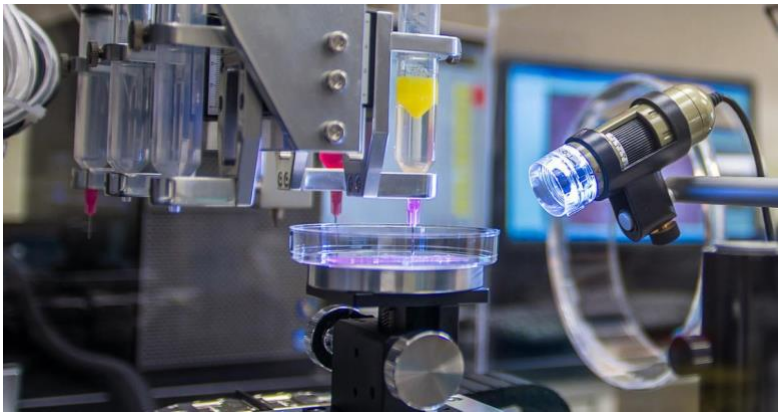
The ATHLON FlexiPower series is designed with remarkable flexibility, offering a variety of modular configurations to suit different power needs. Users can choose between 20 kVA and 30 kVA power modules to build systems up to 300 kVA per single cabinet, with the option to expand to 600 kVA by running two cabinets in parallel. For larger-scale power demands, 60 kVA power modules are available, allowing a single cabinet to reach up to 600 kVA and two parallel cabinets to provide an impressive 1200 kVA. This scalable, modular setup empowers organizations to configure their power systems with precision, whether for small or large applications, without sacrificing efficiency or reliability. By offering such adaptability, ATHLON FlexiPower ensures that businesses can grow their power infrastructure in alignment with evolving requirements, maintaining consistent, high-performance power delivery across varying operational scales.





Versatile Power Solutions for Demanding Industries with DEWEN ATHLON FlexiPower

The DEWEN ATHLON FlexiPower modular UPS system, with its robust IP54-rated design, offers an adaptable and resilient power solution for a wide range of industries with diverse and challenging environmental conditions. Built for durability, the ATHLON FlexiPower system is particularly well-suited for sectors like telecommunications, where reliability is critical, and continuous operation is essential to ensure communication infrastructure stays online. In the oil and gas industry as well as heavy industries, the system withstands harsh conditions, including exposure to dust, moisture, and extreme temperatures, providing dependable backup power that protects sensitive equipment and maintains operational integrity.



In the railway sector, where power resilience is vital to prevent service interruptions, the ATHLON FlexiPower's modular configuration and advanced filtration protect against environmental contaminants, supporting stable performance across varied settings. The medical sector also benefits greatly from the system's reliability and dust-resistant features, as hospitals and healthcare facilities require uninterrupted power for life-saving equipment and critical patient care. Across these demanding applications, DEWEN's ATHLON FlexiPower modular UPS system combines advanced durability with adaptability, meeting the unique power needs of each industry while ensuring sustainable, long-term performance.

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.

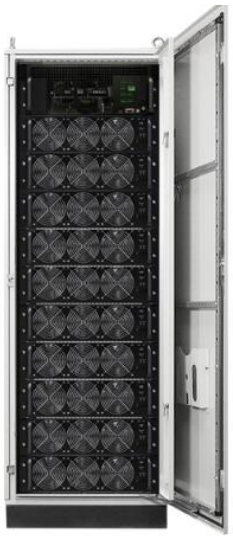
Optimize Total Cost of Ownership with ATHLON FlexiPower UPS

The ATHLON FlexiPower UPS system is designed to enhance sustainability while reducing the total cost of ownership. By prioritizing energy efficiency, scalability, and an ergonomic, maintenance-friendly design, it minimizes environmental impact and operational costs. Its modular architecture allows organizations to scale infrastructure capacity precisely to meet current power needs, with easy expansion options for future growth. This adaptable approach ensures energy and cooling resources are used only when essential, significantly reducing energy consumption over the UPS's lifespan. By maximizing resource efficiency and minimizing waste, ATHLON FlexiPower not only enhances operational sustainability but also offers a cost-effective, long-term solution for organizations aiming to control expenses and maintain a reliable, flexible power infrastructure.

Durability with ATHLON FlexiPower's IP54 Dust Protection

The ATHLON FlexiPower UPS system raises the standard for durability with its IP54-rated cabinet, featuring advanced filtration for superior dust protection. Unlike typical IP20 cabinets, the IP54 design provides a strong defense against dust infiltration, maintaining a clean and controlled environment that safeguards essential components. This robust protection significantly reduces maintenance frequency and replacement needs, enhancing the system's longevity while lowering its environmental footprint.

The ATHLON FlexiPower UPS system raises the standard for durability with its IP54-rated cabinet, featuring advanced filtration for superior dust protection. Unlike typical IP20 cabinets, the IP54 design provides a strong defense against dust infiltration, maintaining a clean and controlled environment that safeguards essential components. This robust protection significantly reduces maintenance frequency and replacement needs, enhancing the system's longevity while lowering its environmental footprint.



DEWEN™

ATHLON FlexiPower

Robust Protection for Unstable and Unsecure grid.

The ATHLON FlexiPower UPS system is specifically designed to perform reliably in environments with unstable or poor network quality, thanks to its wide AC input voltage range. This adaptability makes it an ideal solution for networks that frequently experience fluctuations or disruptions, ensuring that connected loads remain protected against operational failures and potential damage caused by inconsistent power.

The system's three-phase UPS configuration provides robust protection for critical equipment, delivering a stable power supply even in challenging network conditions. Additionally, the ATHLON FlexiPower UPS can function as a frequency converter without the need for static switches, offering versatility in its application. With scalable modules, users can increase power capacity or build redundancy as needed, further enhancing reliability and continuity for essential operations. This comprehensive protection makes ATHLON FlexiPower a dependable choice for safeguarding equipment in unpredictable power environments.

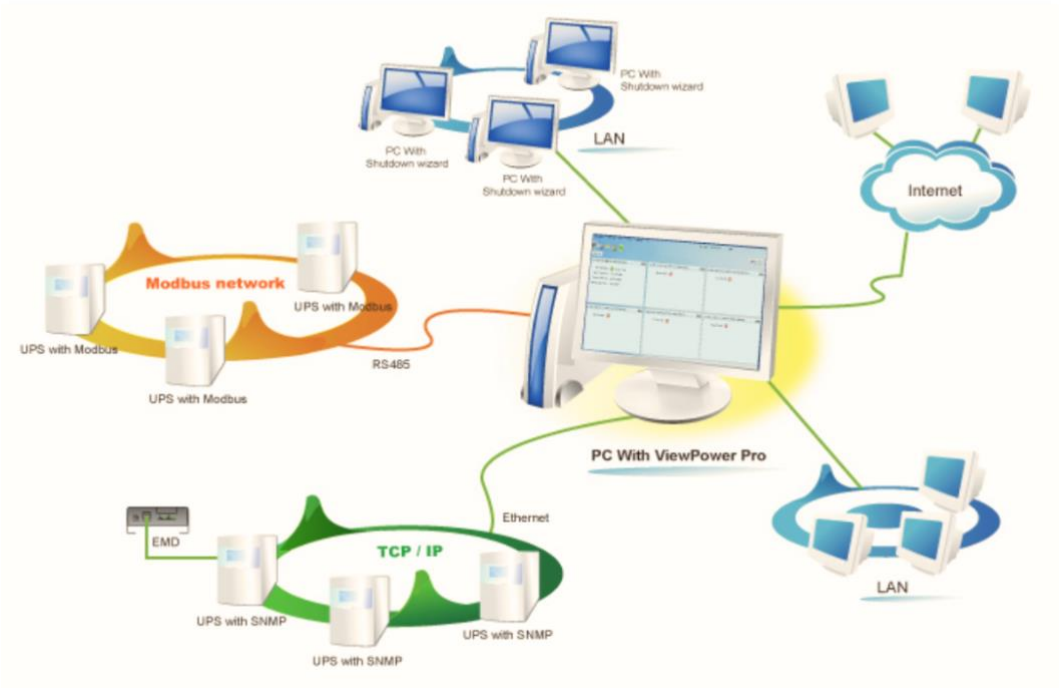
Capabilities and Reliability

- **High overload capability**
  ATHLON FlexiPower supports 110% overload for 60 minutes, 125% for 10 minutes, and 150% for 1 minute.
- **Optimal Protection**
  Ensures maximum safety for connected equipment.
- **HIGH EFFICIENCY**
  Significantly reduces energy costs.
- **MAXIMUM OUTPUT POWER**
  Highest output power (KVA = KW)
- **ADVANCED PERFORMANCE CONTROL**
  Precision management via intelligent, integrated control.
- **BATTERY CAPACITY & RESERVE TIME MONITORING**
  Real-time battery status and backup duration.
- **HOT-SWAPPABLE MODULES**
  Seamless module replacement during operation.
- **STARTABLE WITHOUT GRID.**
  Cold start is possible without problems.

Advanced Communication and Monitoring Capabilities

The ATHLON FlexiPower system is equipped with a large, multilingual 10" touch display, 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, along with status reports and a log of historical records for comprehensive monitoring. Additionally, a one-line diagram of the system's power flow offers a clear visual of power distribution within the system, enhancing situational awareness.

To ensure seamless integration and remote communication, ATHLON FlexiPower supports Web (HTTP), Modbus, and SNMP protocols, allowing users to monitor and manage the UPS system efficiently from various locations and platforms. These advanced communication features make ATHLON FlexiPower a versatile and user-friendly solution for reliable power management.



Technical Data:

	FLXi-3-42/30-90/60	FLXi-4-42-120/80	FLXi-4-42/30-120/80	FLXi-6-42/30-180/120	FLXi-10-42-200	FLXi-8-42-210	FLXi-10-42-300
PHASE	3-phase in / 3-phase out						
CABINET CAPACITY*	90 KW	120 KW	120 KW	180 KW	200 KW	210 KW	300 KW
BATTERY TYPE	Built-in Battery		External Battery				
POWER MODULE CAPACITY	30KW		20 or 30KW		20KW	30KW	30KW
MAX. POWER MODULE NO.	3	4	4	6	10	8	10
MAX. BATTERY SET NO.	3	5	-	-	-	-	-
INPUT							
Nominal Voltage	3 x 380VAC/400VAC/415VAC (3Ph+N)						
Voltage Range	305 ~ 478 VAC at 100% load; 208 ~ 478VAC at <70% load						
Nominal Frequency	50/60Hz (Auto Sensing)						
Frequency Range	40Hz ~70Hz						
Power Factor	> 0.99 @ 100% Load , >0.98 @ 50% Load						
Harmonic Distortion (THDi)	< 3% @ 100% load						
OUTPUT							
Nominal Voltage	3 x 380VAC/400VAC/415VAC (3Ph+N)						
Voltage Regulation (Steady state)	≤ ± 1% Typical (balanced load) ; ≤ ± 2% Typical (imbalanced load)						
Nominal Frequency	50/60Hz						
Frequency Range (Synchronized)	46Hz ~ 54Hz or 56Hz ~ 64Hz						
Overload Capability	1 hour for 110%, 10 mins for 125%, 1 min for 150%, 200ms for >150%						
Harmonic Distortion	≤ 2% THD (Linear Load) ; ≤ 4% THD (Non-linear Load)						
Efficiency	Up to 96%						
BATTERY / CHARGER							
Nominal Voltage	+/- 216V (12V x 36 pcs)						
Maximum Voltage	+/- 240V (12V x 40 pcs)						
Minimum Voltage	+/- 192V (12V x 32 pcs)						
Float Charging Voltage	2.25V / Cell						
Boost Charging Voltage	2.35V / Cell						
Temperature Compensation	Yes						
Maximum Charging Current	8A for 30KVA power module/ 6A for 20KVA power module (User-adjustable)						
PHYSICAL							
Cabinet Dimension (W x D x H)mm	600 x 1100 x 1475		600 x 1100 x 2100		600 x 1100 x 1475		600 x 1100 x 2100
Net Weight (Kg)	675	923	335	437	611	549	620
ENVIRONMENT							
Operating Temperature	0 ~ 40°C						
Relative Humidity	0 ~ 95% non-condensing						
Altitude**	<1000m for Nominal power						
IP Protection	IP 54						
MANAGEMENT							
Smart RS-232 / USB	Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC						
Optional SNMP	Power management from SNMP manager and web browser						
MODULES STANDARDS							
Safety	UL1778, CSA C22.2 No. 107.3-05						
EMC	FCC Part 15, Subpart B Class A						

Technical Data:

	FLXi-2-42/30-120	FLXi-3-42/30-180	FLXi-5-42-300	FLXi-7-42-420	FLXi-8-42-480	FLXi-10-42-600
PHASE	3-phase in / 3-phase out					
CABINET CAPACITY*	120KW	180KW	300KW	420KW	480KW	600KW
BATTERY TYPE	External Battery					
POWER MODULE CAPACITY	60KVA/60KW					
MAX. POWER MODULE NO.	2	3	5	7	8	10
INPUT						
Nominal Voltage	3 x 380VAC/400VAC/415VAC (3Ph+N)					
Voltage Range	305 ~ 478 VAC at 100% load; 208 ~ 478VAC at <70% load					
Nominal Frequency	50/60Hz (Auto Sensing)					
Frequency Range	40Hz ~70Hz					
Power Factor	> 0.99 @ 100% Load , >0.98 @ 50% Load					
Harmonic Distortion (THDi)	< 3% @ 100% load					
OUTPUT						
Nominal Voltage	3 x 380VAC/400VAC/415VAC (3Ph+N)					
Voltage Regulation (Steady state)	≤ ± 1% Typical (balanced load) ; ≤ ± 2% Typical (imbalanced load)					
Nominal Frequency	50/60Hz					
Frequency Range (Synchronized)	46Hz ~ 54Hz or 56Hz ~ 64Hz					
Overload Capability	1 hour for 110%, 10 mins for 125%, 1 min for 150%, 200ms for >150%					
Harmonic Distortion	≤ 2% THD (Linear Load) ; ≤ 4% THD (Non-linear Load)					
Efficiency	96%					
BATTERY / CHARGER						
Nominal Voltage	+/- 216V (12V x 36 pcs)					
Maximum Voltage	+/- 240V (12V x 40 pcs)					
Minimum Voltage	+/- 192V (12V x 32 pcs)					
Float Charging Voltage	2.25V / Cell					
Boost Charging Voltage	2.35V / Cell					
Temperature Compensation	Yes					
Maximum Charging Current	18A (Adjustable)					
PHYSICAL						
Cabinet Dimension (W x D x H)mm	600 x 1100 x 1475	600 x 1100 x 1475	600 x 1100 x 2100	1200 x 1100 x 2100	1000 x 1100 x 2100	1000 x 1100 x 2100
Net Weight (Kg)	308	352	516	654	932	1020
ENVIRONMENT						
Operating Temperature	0 ~ 40°C					
Relative Humidity	0 ~ 95% non-condensing					
Altitude**	<1000m for Nominal power					
IP Protection	IP 54					
MANAGEMENT						
Smart RS-232 / USB	Supports Windows® Family, Linux and MAC					
Optional SNMP	Power management from SNMP manager and web browser					
MODULES STANDARDS						
Safety	UL1778, CSA C22.2 No. 107.3-05					
EMC	FCC Part 15, Subpart B Class A					

* When temperature is above 30°C, the output power will be derated with 10% till 35°C and 20% till 40°C

** If the system is installed or used in a place where the altitude is above than 1000m, the output power must be derated 1%/100Mt.

DEWEN™

KEMET LIMITED 40 Brtieen road, Elgar road south, Reading RG20AU, England Tel: +44 118 205 8888 www.kemet-engineering.com

Rev.2 01/2025