

Vendor Landscape: Uninterruptible Power Supply (UPS)

A consolidating market with few viable vendors and many solutions.

Introduction

The UPS market is dominated by few, but many good solutions exist. Choosing the right vendor is as equally important as choosing your UPS products.

This Research Is Designed For:

- ✓ Data center managers, facilities managers, and building managers seeking to select a solution for a uninterruptible power supply (UPS) solution for the data center.
- ✓ Enterprises that have established their stand-by power strategy and have reached the UPS vendor selection stage of planning.
- ✓ Enterprises of all sizes that are evaluating the market in order to upgrade or refresh double on-line conversion UPS systems.
- ✓ Enterprises with minimum UPS requirements starting between 200KW – 900KW, and that also require a solution that is scalable to support future growth.

This Research Will Help You:

- ✓ Identify and rank vendor offerings in the UPS market space.
- ✓ Understand the table stakes and nuanced differences in the product offerings between UPS vendors.
- ✓ Evaluate UPS vendors and products to determine the right fit for your enterprise needs.
- ✓ Select a UPS solution by providing additional scenario-based criteria.

Executive Summary

- The UPS market is moving towards further consolidation on a global scale. This global outlook means more accessible sales and service teams for customers in previously untapped locations. Additionally, green/efficient products are becoming an important inclusion in vendors' product offerings. Data centers and server rooms of all sizes face significant threats in availability of electricity, making enterprises more conscious of efficiency. There will be a lack of new power coming on line as new power utilities cease to be built, turning it into a simple economics equation of supply and demand, where electricity prices will continue to rise. In addition, prices and penalties for carbon emissions will also increase. Thus, customers will also begin including 'green' criteria in vendor evaluations, whether it's exploring a flywheels, or intelligent efficiency modes.
- Champions, Liebert/Emerson Network Power and Eaton Powerware, provide innovative stand-by power solutions that follow market trends and address customer needs. Both vendors feature energy-saving modes, and a global customer base, as well as strong sales and support channels.
- When value for money is taken into consideration, Liebert/Emerson Network Power and Eaton Powerware remain the most compelling options, although Gamatronic rises up in rank as a close third. Due to an inability to provide solution pricing, a few vendors received low value indexing.
- Enterprise use cases provide valuable insight for the vendor selection process. In the UPS vendor field, attention should be paid to your organization's present and future stand-by power size requirements, the vendor's offerings in terms of efficiency software and intelligent modes, and the global breadth of vendors' sales and service teams.

Market Overview

How it got here

- The UPS market has experienced continual consolidation since the 1980s through merger and acquisition creating a market that is currently dominated by a few viable big players. However, each of these large vendors own multiple brands, most of which operate as a standalone entity.
- The UPS market is essentially commoditized, where vendors offer similar products, but differentiate in terms of price, scalability in power capacity, and service.
- UPS devices have come a long way from their original bulky size to in-rack solutions for the data center. Where off-line UPS used to be the norm, vendors are now offering on-line double conversion solutions that are scalable to meet future power demands, contain intelligent management and monitoring software, and are energy efficient.

Where it's going

- The UPS market will continue to consolidate as large vendors expand into global markets and acquire foreign brands over the next 3-5 years.
- Many vendors have begun implementing green initiatives into product development and will continue to incorporate more energy efficient technologies into UPS devices in response to customer demand and rising costs of power.
- The emergence of more mature flywheel technology will challenge the UPS market as alternative ride-through power that offers lower operating costs.
- Within the next 3-5 years, UPS vendors will renew partnerships with flywheel vendors to provide customers with a green option for ride-through stand-by power.
- Vendors will begin to leverage core components in UPS offerings across multiple product lines (i.e. chassis), to lower manufacturing costs, which will in turn bring the price of UPS systems down.

Info-Tech Insight

UPS products are offered through a number of different vendor channels. Service and support are key differentiators in the market. When evaluating UPS vendors, ensure local support is available. When support isn't provided from the vendor directly, evaluate the partner.

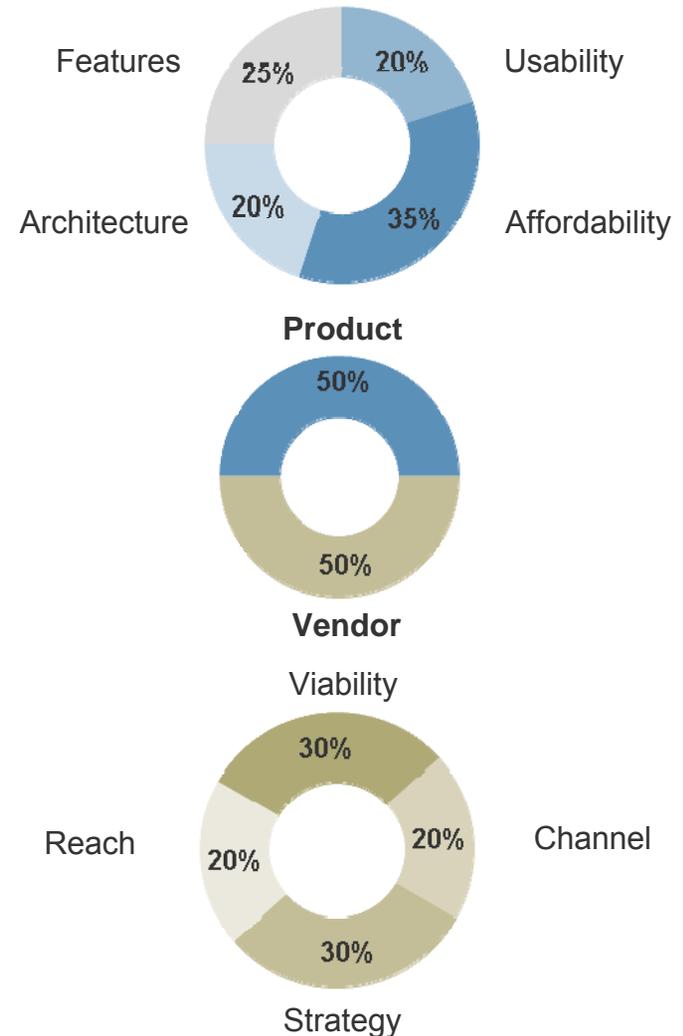
UPS Criteria & Weighting Factors

Product Evaluation

Features	The solution provides basic and advanced feature/functionality.
Affordability	The five year TCO of the solution is economical.
Usability	The solution can be easily integrated with facilities management systems and generators.
Architecture	The solution can be easily scaled for future growth and allows for hot-swapping.

Vendor Evaluation

Viability	Vendor is profitable, knowledgeable, and will be around for the long-term.
Strategy	Vendor is committed to the space and has a future product and portfolio roadmap.
Reach	Vendor offers global coverage and is able to sell and provide post-sales support.
Channel	Vendor channel strategy is appropriate and the channels themselves are strong.



The Info-Tech UPS Vendor Landscape; a market dominated by few but with many product offerings

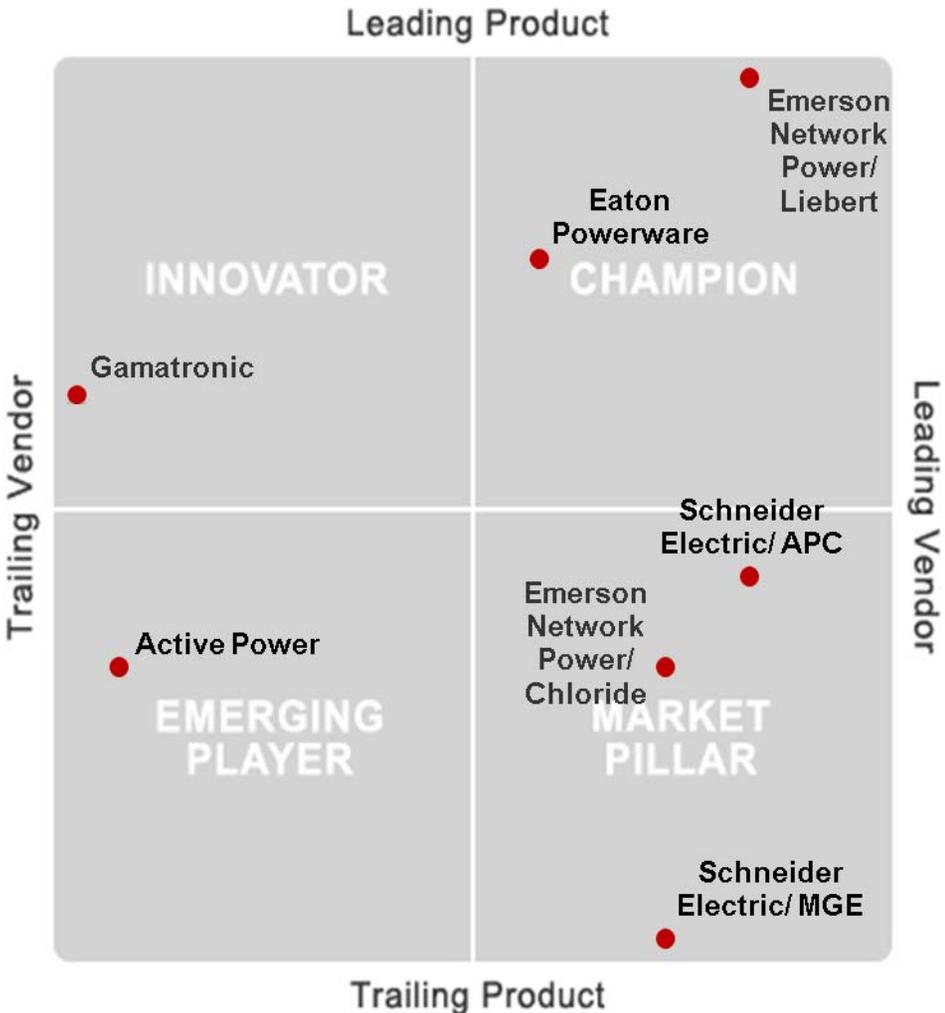
Champions receive high scores for most evaluation criteria and offer excellent value. They have a strong market presence and are usually the trend setters for the industry.

Innovators have demonstrated innovative product strengths that act as their competitive advantage in appealing to niche segments of the market.

Market Pillars are established players with very strong vendor credentials, but with more average product scores.

Emerging players are newer vendors who are starting to gain a foothold in the marketplace. They balance product and vendor attributes, though score lower relative to market Champions.

For a complete description of Info-Tech's Vendor Landscape methodology, see the Appendix.



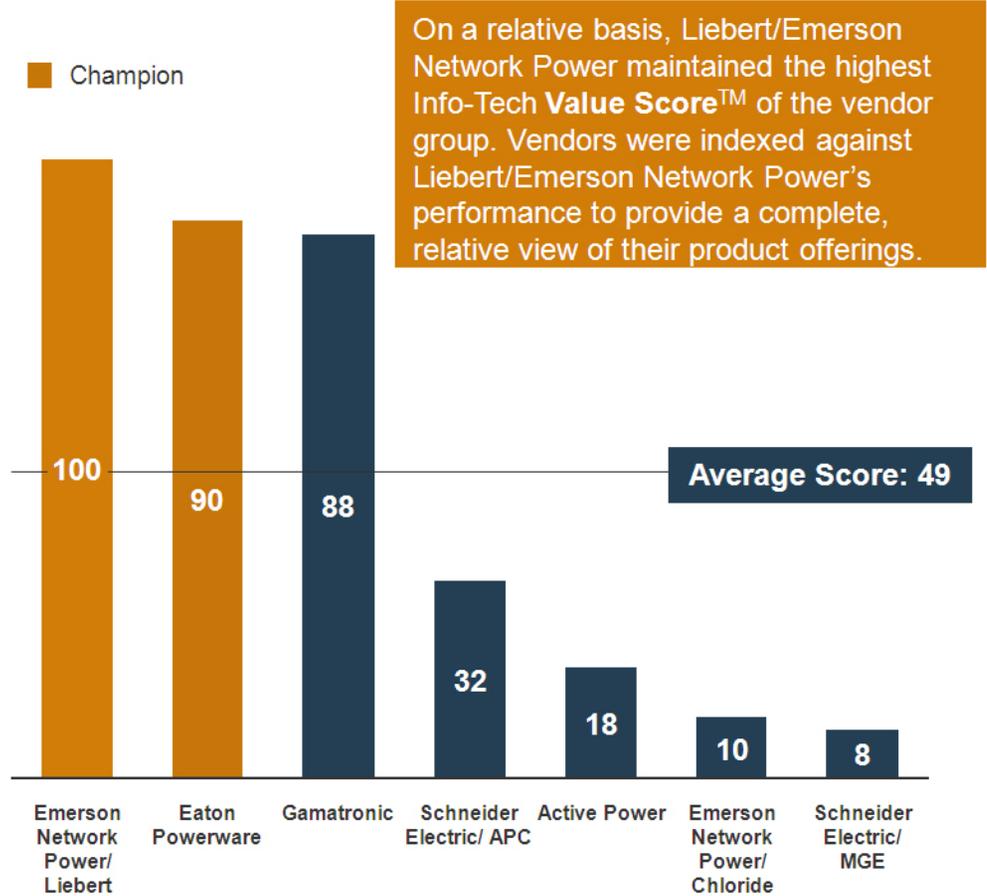
The UPS Value Index

What is a Value Score?

The Value Score indexes each vendor's product offering and business strength **relative to their price point**. It **does not** indicate vendor ranking.

Vendors that score high offer more **bang for the buck** (e.g. features, usability, stability, etc.) than the average vendor, while the inverse is true for those that score lower.

Price-conscious enterprises may wish to give the Value Score more consideration than those who are more focused on specific vendor/product attributes.



Sources:

- To calculate the Value Score for each vendor, the affordability raw score was backed out, the product scoring reweighted, and the affordability score multiplied by the product of the Vendor and Product scores.

Every vendor in the game has the basic table stakes, but who goes above and beyond in the areas that matter to you?

The Table Stakes

Scalability	The solution is scalable from 200KW-900KW and up and allows for quick upgrades of power capacity and additional run time.
Power Conditioning	The solution provides built in protection for the critical load from power disturbances (surges, spikes, etc.).
Management Software	The solution contains management software to monitor battery status both locally and remotely and conducts automatic self-test of batteries.
Efficiency	The solution is designed to achieve at least a 94% uptime efficiency level per month.
Warranty	The solution includes at least a one-year standard warranty on UPS that is included in its price.
Batteries	Battery design life is at least 5 years.
Redundancy	The solution provides high availability by allowing configuration with one or more power modules to support the connected load and redundant batteries.
Generator Compatibility	The solution is compatible to work with generators to transfer load in the case of an extended outage.

What Does This Mean?

The products assessed in this Vendor Landscape™ meet, at the very least, the requirements outlined as Table Stakes.

Many of the vendors go above and beyond the outlined Table Stakes, some even do so in multiple categories. This section aims to highlight the products capabilities **in excess** of the criteria listed here.



If Table Stakes are all you need from your UPS solution, the only true differentiators for the organization are price and vendor stability. Otherwise, dig deeper to find the best price-to-value ratio for your needs by exploring advanced features.

Table Stakes aside, vendors were evaluated on their individual advanced feature offering

Advanced features scoring methodology:

Info-Tech scored each vendor’s features offering as a summation of their individual scores across the listed advanced features. Vendors were given 1 point for each feature the product inherently provided. Some categories were scored on a more granular scale with vendors receiving half points.

Features	What We Looked For
Smart Modes	The solution includes an eco-mode or can select from various intelligent modes based on historical data.
Advanced Integration & PDU	The solution allows for easy expansion without rip and replace to add additional cabinets for future requirements that is available as an add-on or included in price.
Advanced Management Software	The solution includes remote management or allows the vendor to access the UPS and remotely take it over for remote diagnostics and support.
Extended Warranty	The solution comes with an extended warranty that is included in the price or offers an extended warranty that is additional to price.
Extended Battery Design Life	The solution includes batteries with improved (over 5 years) or extended (10 years) design life.
Transformer Options	The solution offers transformer and transformer-free options.
Power Reporting	The solution has enhanced capabilities for reporting power usage and trends in power usage.



Refer to Info-Tech’s [UPS Vendor Shortlist Tool](#) to customize your own shortlist of vendors based on the organization’s requirements.

Gamatronic positions itself in the small to mid-sized space on size and price but lacks North American presence

Innovator

Product: Mega Power +
Range: 25kVA to 500kVA
Employees: 240
Headquarters: Jerusalem, Israel
Website: gamatronic.com
Founded: 1970
Presence: Tel Aviv: GAMT
FY10 Revenue: \$35.5M



GAMATRONIC

Our Power, Your Confidence



Priced between \$25,000 and \$50,000

*Prices based on approximately 200KW

Overview

- Founded in 1970 and publicly traded on the Tel Aviv Stock Exchange since 1994, Gamatronic is an Israel-based power electronics company that develops power supplies in-house such as UPS, DC/AC inverters and control & management solutions.

Strengths

- Gamatronic's product portfolio fits the small to mid-sized market by offering a competitive price (average deal size \$35,000) and power modules starting at 10kVA and scaling to 500kVA for future growth.
- The solution offers both transformer and transformerless options to the customer to cater to multiple environments.

Challenges

- Gamatronic lacks in market and mind share in North America, reporting only 13% of revenue from North America. With global offices in UK, China, and Brazil, over 50% of revenues come from EMEA and APAC countries.
- Gamatronic's strong product offering, small size and reported revenue could make this vendor an acquisition target.

Info-Tech Recommends:

Small to midsized organizations outside of North America that do not require advanced management software will benefit from Gamatronic's solution and price point.

Select your product based on your organization's current and future requirements

It's not one size fits all when it comes to UPS. Products come in kVA ranges to accommodate different data center environments.

1 Organizational Size

Small (25kVA – 100 kVA)



2 Efficiency

Medium (100kVA – 500 kVA)



3 Geographical sales & service strength

Large (500+ kVA)



Efficiency is a differentiator in this field, where there are clear innovative leaders

Brands lead the pack in UPS efficiency with flywheel technology and intelligent software that learns the system’s behavior to select the most efficient mode.

1 Organizational Size

2 Efficiency

3 Geographical sales & service strength

.....
Intelligent



.....
Eco-mode



.....
Basic



Appendix

A discussion of Info-Tech's vendor ranking methodologies

Vendor Evaluation Methodology

Info-Tech Research Group's Vendor Landscape market evaluations are a part of a larger program of vendor evaluations which includes Solution Sets that provide both Vendor Landscapes and broader Selection Advice.

From the domain experience of our analysts as well as through consultation with our clients, a vendor/product shortlist is established. Product briefings are requested from each of these vendors, asking for information on the company, products, technology, customers, partners, sales models and pricing.

Our analysts then score each vendor and product across a variety of categories, on a scale of 0-10 points. The raw scores for each vendor are then normalized to the other vendors' scores to provide a sufficient degree of separation for a meaningful comparison. These scores are then weighted according to weighting factors that our analysts believe represent the weight that an average client should apply to each criteria. The weighted scores are then averaged for each of two high level categories: vendor score and product score. A plot of these two resulting scores is generated to place vendors in one of four categories: Champion, Innovator, Market Pillar, and Emerging Player.

For a more granular category by category comparison, analysts convert the individual scores (absolute, non-normalized) for each vendor/product in each evaluated category to a scale of zero to four whereby exceptional performance receives a score of four and poor performance receives a score of zero. These scores are represented with "Harvey Balls", ranging from an open circle for a score of zero to a filled in circle for a score of four. Harvey Ball scores are indicative of absolute performance by category but are not an exact correlation to overall performance.

Individual scorecards are then sent to the vendors for factual review, and to ensure no information is under embargo. We will make corrections where factual errors exist (e.g. pricing, features, technical specifications). We will consider suggestions concerning benefits, functional quality, value, etc; however, these suggestions must be validated by feedback from our customers. We do not accept changes that are not corroborated by actual client experience or wording changes that are purely part of a vendor's market messaging or positioning. Any resulting changes to final scores are then made as needed, before publishing the results to Info-Tech clients.

Vendor Landscapes are refreshed every 12 to 24 months, depending upon the dynamics of each individual market.

Value Index Ranking Methodology

Info-Tech Research Group's Value Index is part of a larger program of vendor evaluations which includes Solution Sets that provide both Vendor Landscapes and broader Selection Advice.

The Value Index is an indexed ranking of value per dollar as determined by the raw scores given to each vendor by analysts. To perform the calculation, Affordability is removed from the Product score and the entire Product category is reweighted to represent the same proportions. The Product and Vendor scores are then summed, and multiplied by the Affordability raw score to come up with Value Score. Vendors are then indexed to the highest performing vendor by dividing their score into that of the highest scorer, resulting in an indexed ranking with a top score of 100 assigned to the leading vendor.

The Value Index calculation is then repeated on the raw score of each category against Affordability, creating a series of indexes for Features, Usability, Viability, Strategy and Support, with each being indexed against the highest score in that category. The results for each vendor are displayed in tandem with the average score in each category to provide an idea of over and under performance.

The Value Index, where applicable, is refreshed every 12 to 24 months, depending upon the dynamics of each individual market.

Product Pricing Scenario & Methodology

Info-Tech Research Group provided each vendor with a common pricing scenario to enable normalized scoring of Affordability, calculation of Value Index rankings, and identification of the appropriate solution pricing tier as displayed on each vendor scorecard.

Vendors were asked to provide *list* costs for SIEM appliances and/or SIEM software licensing to address the needs of a reference organization described in the pricing scenario. For non-appliance solutions (*i.e.*, software-only and virtual appliance architectures), physical or virtual hardware requirements were requested in support of comparing as-installed costs.

Additional consulting, deployment, and training services were explicitly out of scope of the pricing request, as was the cost of *enhanced* support options, though vendors were encouraged to highlight any such items included with the base product acquisition. The annual software/hardware maintenance rate was also requested, along with clarity on whether or not the first year of maintenance was included in the quoted appliance/software costs, allowing a three-year total acquisition cost to be calculated for each vendor's SIEM solution. This three-year total acquisition cost is the basis of the solution pricing tier indicated for each vendor.

Finally, the vendors' three-year total acquisition costs were normalized to produce the Affordability raw scores and calculate Value Index ratings for each solution.

Key elements of the common pricing scenario provided to SIEM vendors included:

- A three-site organization with 2200 employees located at a US head office facility, a second US satellite office, and a European satellite office. IT functions, including 3 dedicated IT security professionals, are located primarily at the US head office, with a small proportion of IT staff and systems located at the European site, which also acts as a DR facility.
- The firm is interested in reducing the effort associated with monitoring, alerting, and responding to security events at the Endpoint, Network, and Datacenter levels:
 - The volume & complexity of ad hoc queries against logged and correlated event data is fairly small, driven primarily by incident response efforts and gaps in canned compliance reports.
 - The SIEM product would be used regularly by four IT staff across the US head office and European satellite site, with additional dashboard-/report-level access for another four users in compliance/audit and IT management/executive roles.
- 200 devices were identified as log data sources for a SIEM solution, including network components, security systems, and both physical and virtual servers. Windows Domain, Oracle databases, MS Exchange and SharePoint, and BES and VOIP environments were explicitly identified in the scenario, and the peak logging volume was specified at 5000 events per second (eps).