



“eFactory” Solutions

Energy Storage Solutions for industrial applications


eFactory is a turn-key Energy Storage Solution, developed for the industrial applications.

eFactory protects your business from power failures that often result in equipment damages, loss of raw material, loss of productivity & lower production quality.

Factories equipped with E24 eFactory solutions will benefit from 24/7 uninterruptible stable electricity while integrating solar energy and other sources in order to reduce overall energy costs.

S330E

E24TM
BRIDGING THE ENERGY GAP



**“Finally, I can
rely on E24 to
guaranty that
my factory
will never see
a power cut
again.”**

Why eFactory?

With the exponential demographic growth and economical expansion of the planet, the growing use of electricity across all sectors, the time and resources required to upgrade the grid power capacity and the deployment of decentralized renewable energy, it is becoming harder for utilities to stabilize the availability of energy on the grid. This is creating a number of issues on both the power generation and consumption side:

On the power generation side

On the power generation side, and to react to this instability, utilities are resorting to financial measures to either encourage or discourage consumption at given times of the day in order to attempt to keep consumption on the grid as steady as possible. These measures include Time of Use billing (TOU), Capacity billing, and Low Power Factor Surcharges (LPFS). Other measures include the substantial decrease in renewable feed in tariffs in some areas / countries making on-grid renewable energy generation gradually less profitable.

Power demand has outgrown supply in such a large proportion that utilities are sometimes unable to avoid blackouts resulting from grid overloads. In some countries the gap between supply and demand has grown so wide, that utilities are forced to ration the availability of power through regular blackouts.

E24 technology does not only make it easy to retrofit any existing energy system, but also guarantees to bring substantial savings over any fuel based alternative while improving power quality, removing noise, and environment pollution, and limiting human intervention.

On the consumer side

The Time of Use billing (TOU), capacity billing and gradual decrease in feed-in tariffs are making the energy bill grow higher even for those who have invested in on-grid PV and/or Wind energy.

In countries where power is rationed (less than 24 hours of power per day), consumers are resorting to diesel generators that have the following disadvantages:

- Air and Noise Pollution
- Special Space Required that may not be available
- Repetitive Refuelling
- Regular Maintenance



Health Comes First

Installing diesel generators in residential areas has harming effects on health:

- Irritating audible noise resulting from the engine side.
- Toxic Green House Gases (GHG) emissions contributing to global warming, ocean acidification, changes to plant growth and nutrition levels, smog, and ozone layer depletion.
- Toxic smokes rich in CO and CO2 having a direct effect on the respiratory system.
- Fine-particle pollution affecting elderly people and people with emphysema, asthma, and chronic heart and lung disease.



eFactory: A New Concept

eFactory is particularly adapted to applications of Recurrent blackouts and brownouts. It offers customers a turnkey solution to solve in one system the following issues:

- 1) eFactory Regulates Both Voltage and Frequency:
- 3) Integration with Solar or Wind.

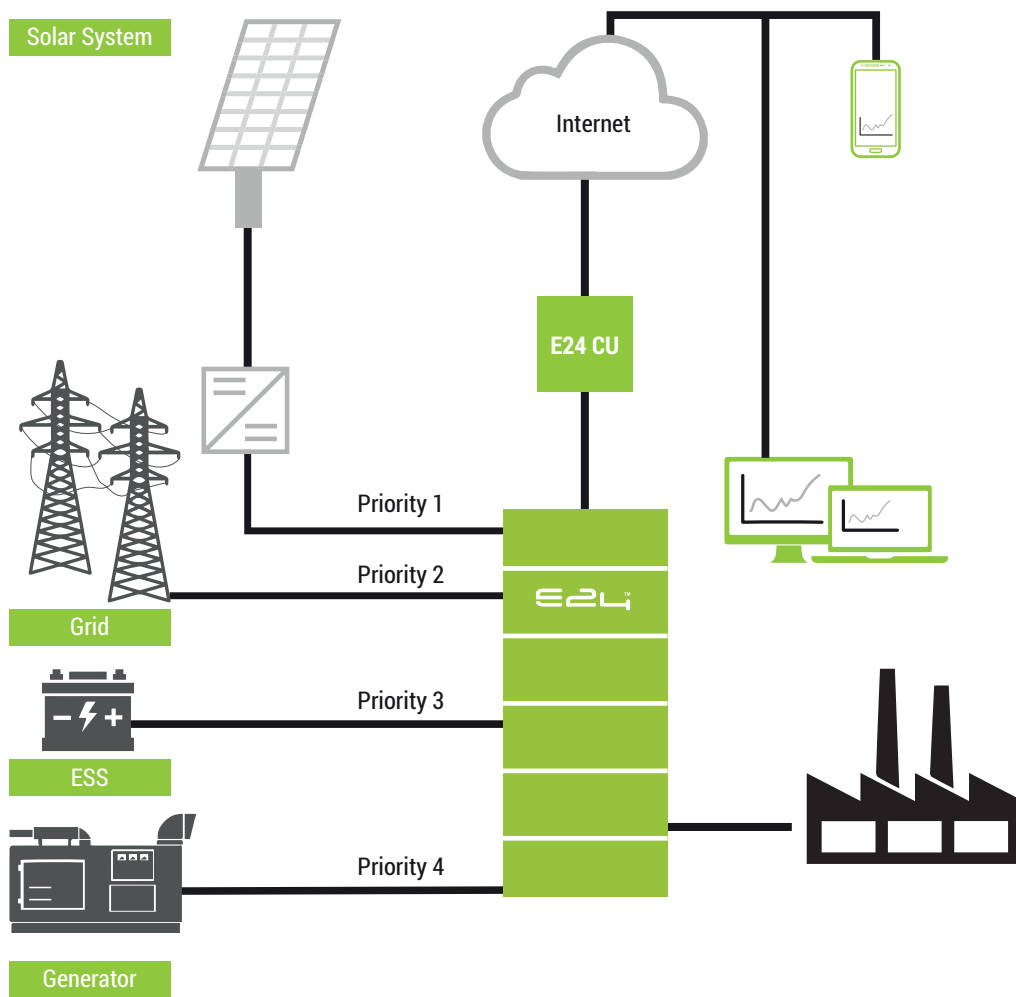
eFactory regulates the input voltage when available from 154Vac to 280Vac while keeping the load at a 220Vac sharp. Similarly, frequency is stabilized to 50Hz sharp from a range of 45Hz to 55Hz.

- 2) No Power Interruption During Blackouts:

Whether the utility is available or during a power cut your factory will always draw its power from the eFactory solution. This allows the load to be always fed with clean stable uninterrupted power. Your generator (if connected) will not start until your batteries are low or when your load exceeds a preset agreed level. In this manner you avoid burning diesel, pollution and the cumbersome of frequent generator maintenance. If available, your generator remains a last resort power source that the eFactory system will start automatically whenever absolutely needed.

eFactory is compatible with your existing solar PV panels. If not already available E24 can of course provide adapted turnkey solar solutions compatible with eFactory. eFactory is capable of sourcing on priority the energy from the sun before using the utility or generator source. When your batteries are full, eFactory will automatically return the portion of unused energy to the grid (if net Metering is available in your country) to reduce your utility bill.

Cost-effective



Comparison with Generators

Generator

- High Operational Cost
- Air & Noise Pollution
- Continuous Maintenance
- Power Cut between utility and Generator
- Minimum 30% load
- Bulky (Fuel tank & Exhaust required)
- Continuous refuelling
- Narrow temperature operation (duration)

eFactory

- Low Operational Cost
- Silent and nonpolluting
- No Maintenance
- Reliable
- Stable Voltage and Frequency
- No power cuts
- Can be installed anywhere
- Install Once - Replace batteries every 6 to 10 years
- Ready to be coupled with Solar PV
- Wide temperature operation

eFactory Key Benefits

eFactory is specifically designed for markets or areas where input power is particularly unstable and intermittent. eFactory can be connected to solar panels when available allowing you to store energy from the sun or the utility and use it later when needed. Key benefits are:

- Lower cost operation than diesel generators
- Static system requiring no maintenance
- Wide Input voltage (180Vac to 280Vac).
- Wide Input Frequency (40 to 70Hz).
- Included technology to automatically start a generator in case of extended blackouts beyond storage capability
- Dynamically grows with your energy needs
- Noise Free
- Pollution Free
- Maintenance Free
- Unattended operation
- Can retrofit any existing solar PV array

Key Competitive Advantages

- **Rugged & Reliable:**
E24 started designing energy storage Solutions since 2011. eFactory Series is built with the highest quality and are designed with large safety margins to operate within the harshest environments.
- **Resilience:**
eFactory Series is conceived in a manner to bypass itself in case of a failure in order to avoid disconnecting the utility supply.
- **Modular & Upgradable:**
eFactory is completely modular allowing you to upgrade power capacity, runtime & size of a solar array.
- **Plug and Play:**
E24 technology is supplied in prepackaged boxes allowing a systematic assembly without using any external components.



Who can Benefit From eFactory?

eFactory is particularly adapted to factories that rely on computers and automation systems where power interruption cannot be tolerated.

Energy Storage Application

E24 eFactory is optimally designed for loads operating in areas or countries where the utility availability is intermittent or unstable or both. It is always recommended to couple the eFactory solution with our solar solutions and a diesel generator in order to guaranty continuous operation.

eFactory applications are ideal for loads between 100KW to 4300KW per system.

eFactory is modular and upgradable.



How Does eFactory Save On Your Energy Bills?

eFactory solution collects energy from multiple energy sources according to their availability and lowest cost. The energy of the sun is typically the cheapest followed by utilities then generators. By actively selecting the cheapest available KWH eFactory is capable of averaging down the cost of energy while delaying the use of expensive diesel generators.

E24™

E24 Quality Pledge



E24 technicians commissioning a new system.

E24 started designing energy storage solutions since 2011. E24 accumulated a substantial experience across diverse market segments giving it a clear market edge, experience and leadership.

E24 designs, engineers, manufactures, assembles, tests and delivers its solutions in modular components that are easy and cost-effective to assemble on customer's premises.

E24 commissions its solutions through a network of affiliates or business partners under strict quality standards and procedures to ensure the highest optimal performance and customer's satisfaction.

E24 continuously invests in R&D and develops its own proprietary

technology. Each part of the energy solution supplied is optimized to bring the highest customer value.

All solutions are designed to bring a fast and headache-less capital recovery and high return on investment.

After Sales Service


E24 provides solutions that meet and exceed customer expectations for performance, reliability and availability. E24's comprehensive service offerings ensure that when you need support, E24 is available and at a phone call or click away. With support centers and knowledgeable personnel, E24 brings an uncompromising commitment to customer satisfaction by providing:

- Comprehensive maintenance programs
- Field service
- Solutions upgrades
- Refurbishments
- E24's certified parts

This commitment ensures customers' maximum productivity, extending equipment life cycle while reducing operating costs.

E24's foundation is its people, and its culture is one where individual contributions are valued and safety is emphasized in all aspects of the business. Quality, Health, Safety and Environmental programs enable E24's employees and customers to comply with their safety system requirements, ensuring no harm to people, assets and the environment. E24 is also comprised of a diverse, dedicated and multitalented workforce working as a team committed to the common goal of delivering complete customer satisfaction. Another valuable member of this team is a group of trusted suppliers, working as business allies to form a supply chain that enhances the quality of E24's products and services. We work closely with our clients to look at all aspects of their energy related costs.

This includes, how the production process utilizes the energy, what opportunities there may be for improvements, what are the operation and maintenance costs, and what are the potential opportunities to lower overall costs. We perform energy analysis for our clients to assist them in making the optimal decisions on how to reduce their energy use and costs through the use of our solutions.



**Our Energy
Consultants are
waiting to answer
all your questions.**

Energy Storage Solutions



eHome



eVilla



eBuilding



eBusiness



eGrid



eVillage



eTelecom



eGrid

Energy Generation Solutions



eSolar



eHybrid



eParking



eAgri

E24 Comprehensive Energy Solutions Offering

While we all agree, solar energy must gradually replace fossil fuel, each one of us has specific needs and applications that must be catered for. E24 has researched extensively different market segments and developed customized and adapted solution for each segment.

E24 offers solutions that take into consideration the lifestyle or work style of its customers while making sure that security and safety come first. E24 understands that technology must be a problem solver and must integrate our lifestyle seamlessly. It is in this spirit that E24 offers targeted solutions for homes, villas, businesses, buildings, factories & villages. E24 is constantly developing solutions to further enhance the economics and lifestyle of its customers while targeting larger audiences.

Ordering Information

Ref Number	Description
E330-180-001	Energy Storage Solution, eFactory Series, 3x60A @ 0.9 Pf, 24kWh, 220V, 50/60Hz, 15 Min Runtime @ 50% Load
E330-180-011	Energy Storage Solution, eFactory Series, 3x60A @ 0.9 Pf, 38kWh, 220V, 50/60Hz, 1Hrs. Runtime @ 50% Load
E330-180-021	Energy Storage Solution, eFactory Series, 3x60A @ 0.9 Pf, 72kWh, 220V, 50/60Hz, 2Hrs. Runtime @ 50% Load
E330-180-031	Energy Storage Solution, eFactory Series, 3x60A @ 0.9 Pf, 108kWh, 220V, 50/60Hz, 3Hrs. Runtime @ 50% Load
E330-240-001	Energy Storage Solution, eFactory Series, 3x80A @ 0.9 Pf, 29kWh, 220V, 50/60Hz, 15 Min Runtime @ 50% Load
E330-240-011	Energy Storage Solution, eFactory Series, 3x80A @ 0.9 Pf, 72kWh, 220V, 50/60Hz, 1Hrs. Runtime @ 50% Load
E330-240-021	Energy Storage Solution, eFactory Series, 3x80A @ 0.9 Pf, 96kWh, 220V, 50/60Hz, 2Hrs. Runtime @ 50% Load
E330-240-031	Energy Storage Solution, eFactory Series, 3x80A @ 0.9 Pf, 144kWh, 220V, 50/60Hz, 3Hrs. Runtime @ 50% Load
E330-300-001	Energy Storage Solution, eFactory Series, 3x100A @ 0.9 Pf, 29kWh, 220V, 50/60Hz, 15 Min Runtime @ 50% Load
E330-300-011	Energy Storage Solution, eFactory Series, 3x100A @ 0.9 Pf, 96kWh, 220V, 50/60Hz, 1Hrs. Runtime @ 50% Load
E330-300-021	Energy Storage Solution, eFactory Series, 3x100A @ 0.9 Pf, 144kWh, 220V, 50/60Hz, 2Hrs. Runtime @ 50% Load
E330-300-031	Energy Storage Solution, eFactory Series, 3x100A @ 0.9 Pf, 217kWh, 220V, 50/60Hz, 3Hrs. Runtime @ 50% Load
E330-450-001	Energy Storage Solution, eFactory Series, 3x150A @ 0.9 Pf, 48kWh, 220V, 50/60Hz, 15 Min Runtime @ 50% Load
E330-450-011	Energy Storage Solution, eFactory Series, 3x150A @ 0.9 Pf, 144kWh, 220V, 50/60Hz, 1Hrs. Runtime @ 50% Load
E330-450-021	Energy Storage Solution, eFactory Series, 3x150A @ 0.9 Pf, 217kWh, 220V, 50/60Hz, 2Hrs. Runtime @ 50% Load
E330-450-031	Energy Storage Solution, eFactory Series, 3x150A @ 0.9 Pf, 289kWh, 220V, 50/60Hz, 3Hrs. Runtime @ 50% Load
E330-600-001	Energy Storage Solution, eFactory Series, 3x200A @ 0.9 Pf, 72kWh, 220V, 50/60Hz, 15 Min Runtime @ 50% Load
E330-600-011	Energy Storage Solution, eFactory Series, 3x200A @ 0.9 Pf, 144kWh, 220V, 50/60Hz, 1Hrs. Runtime @ 50% Load
E330-600-021	Energy Storage Solution, eFactory Series, 3x200A @ 0.9 Pf, 217kWh, 220V, 50/60Hz, 2Hrs. Runtime @ 50% Load
E330-600-031	Energy Storage Solution, eFactory Series, 3x200A @ 0.9 Pf, 289kWh, 220V, 50/60Hz, 3Hrs. Runtime @ 50% Load
E330-750-001	Energy Storage Solution, eFactory Series, 3x250A @ 0.9 Pf, 72kWh, 220V, 50/60Hz, 15 Min Runtime @ 50% Load
E330-750-011	Energy Storage Solution, eFactory Series, 3x250A @ 0.9 Pf, 217kWh, 220V, 50/60Hz, 1Hrs. Runtime @ 50% Load
E330-750-021	Energy Storage Solution, eFactory Series, 3x250A @ 0.9 Pf, 289kWh, 220V, 50/60Hz, 2Hrs. Runtime @ 50% Load
E330-750-031	Energy Storage Solution, eFactory Series, 3x250A @ 0.9 Pf, 361kWh, 220V, 50/60Hz, 3Hrs. Runtime @ 50% Load
E330-900-001	Energy Storage Solution, eFactory Series, 3x300A @ 0.9 Pf, 96kWh, 220V, 50/60Hz, 15 Min Runtime @ 50% Load
E330-900-011	Energy Storage Solution, eFactory Series, 3x300A @ 0.9 Pf, 217kWh, 220V, 50/60Hz, 1Hrs. Runtime @ 50% Load
E330-900-021	Energy Storage Solution, eFactory Series, 3x300A @ 0.9 Pf, 361kWh, 220V, 50/60Hz, 2Hrs. Runtime @ 50% Load
E330-900-031	Energy Storage Solution, eFactory Series, 3x300A @ 0.9 Pf, 433kWh, 220V, 50/60Hz, 3Hrs. Runtime @ 50% Load
E330-1K2-001	Energy Storage Solution, eFactory Series, 3x400A @ 0.9 Pf, 144kWh, 220V, 50/60Hz, 15 Min Runtime @ 50% Load
E330-1K2-011	Energy Storage Solution, eFactory Series, 3x400A @ 0.9 Pf, 289kWh, 220V, 50/60Hz, 1Hrs. Runtime @ 50% Load
E330-1K2-021	Energy Storage Solution, eFactory Series, 3x400A @ 0.9 Pf, 433kWh, 220V, 50/60Hz, 2Hrs. Runtime @ 50% Load
E330-1K2-031	Energy Storage Solution, eFactory Series, 3x400A @ 0.9 Pf, 578kWh, 220V, 50/60Hz, 3Hrs. Runtime @ 50% Load
E330-1K8-001	Energy Storage Solution, eFactory Series, 3x600A @ 0.9 Pf, 217kWh, 220V, 50/60Hz, 15 Min Runtime @ 50% Load
E330-1K8-011	Energy Storage Solution, eFactory Series, 3x600A @ 0.9 Pf, 433kWh, 220V, 50/60Hz, 1Hrs. Runtime @ 50% Load
E330-1K8-021	Energy Storage Solution, eFactory Series, 3x600A @ 0.9 Pf, 578kWh, 220V, 50/60Hz, 2Hrs. Runtime @ 50% Load
E330-1K8-031	Energy Storage Solution, eFactory Series, 3x600A @ 0.9 Pf, 867kWh, 220V, 50/60Hz, 3Hrs. Runtime @ 50% Load



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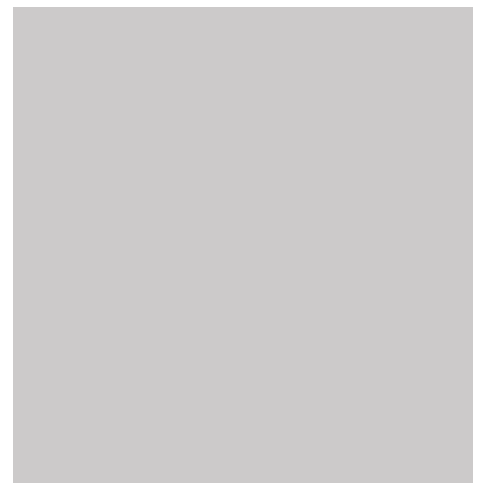
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AUTHORIZED RESELLER



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