



archvolt
new energy



High-capacity electric generator with continuous production, fuel-free patented

Innovation for autonomous, efficient, and sustainable energy generation



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What is Archvolt?

Archvolt® is the brand that represents an innovation in energy production from non-conventional sources. Specifically, it is a “High-Capacity and continuous production electric generator, fuel-free”, represented by a revolutionary technology that converts mechanical energy into electrical energy without requiring fossil fuels or external power sources. Its optimized design and high efficiency make it a versatile solution for a wide range of residential, industrial, and energy applications – from powering household or industrial systems, to serving as a backup for critical infrastructure, or being integrated into hybrid renewable energy parks. This technology marks a major advancement over conventional energy generation methods, eliminating the dependence on fuels, reducing operational costs, and ensuring a continuous source of power with minimal maintenance requirements.

How does it work?

The Archvolt® generator operates through an optimized process of mechanical and electrical conversion, maximizing efficiency and minimizing losses:

- Advanced mechanical conversion - A three-phase motor initiates the movement of the main shaft. Mechanical energy is transferred through a 10:1 speed reducer, optimizing torque and ensuring operational stability.
- Stable and continuous power generation - The main generator, designed to operate at low speeds (300 rpm), converts mechanical movement into stable, high-capacity electrical energy, with efficiency superior to conventional systems. The energy produced is stabilized and prepared for integration into any type of infrastructure.
- Intelligent storage and backup power - An auxiliary generator, connected to the system's shaft via a belt and pulley mechanism, generates additional energy for storage. This energy is managed by a charge controller that feeds high-capacity batteries, ensuring energy continuity even when the main generator is not active.
- Flexibility in distribution and consumption - The produced energy can be used immediately or integrated into larger energy infrastructures, including industrial grids or hybrid generation systems.



Where can it be used?

- The Archvolt® generator can be used across a wide range of industries, offering significant advantages in terms of efficiency, cost, and sustainability. It provides continuous production, regardless of weather conditions and without fuels.
- Residential and industrial – Ensures continuous power supply for residential consumption, warehouses, and production lines. Reduces dependence on external grids and operational costs. Increases energy stability in high-consumption industrial environments.
- Critical infrastructures and backup systems – Applicable in hospitals, airports, telecommunications, and data centers, where energy continuity is essential. Operates independently of the grid, offering a safe and reliable solution. Compatible with energy storage systems, ensuring constant power supply in case of emergency.
- Integration with renewable energies – A complementary solution for solar and wind farms, providing backup energy during periods of low production. Reduces the need for costly storage systems, offering a stable and continuous energy source. Enables greater stability in hybrid grids, optimizing the distribution and use of generated energy.
- Use in remote and Off-Grid areas – Provides energy without the need for conventional electrical infrastructure. Facilitates access to reliable energy in isolated communities or infrastructure projects without a grid. Can be installed in strategic locations without complex logistical requirements.

What are the benefits?

The benefits of the Archvolt® Generator are multiple, including financial, strategic, and environmental advantages. They apply both on a small scale (residential) and on a large scale (mass electricity production). These benefits include:



- 1 Total energy autonomy – Eliminates the need for fossil fuels or external sources, ensuring continuous and independent operation.
- 2 Cost optimization – Significantly lower operational costs compared to thermal power plants or diesel generators, without fuel expenses and with minimal maintenance.
- 3 High reliability and availability – Operates stably and without interruptions, providing real-time energy.
- 4 Reduced environmental impact – Clean technology, without polluting emissions or toxic waste.
- 5 Compatibility with existing grids – Easily integrates into current energy infrastructures, facilitating implementation in industrial sectors and large-scale energy production.

What is the cost of a system?

The Archvolt® Generator types come in various power levels and configurations, as does their cost. The price can be determined at a later stage, depending on the Client type (Distributor, Integrator/Contractor, End User, Utility Company), quantity, and period.



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