Chloride’s commitment to pioneering innovation and research, combined with the experience and knowledge of our expert people, has led us to launch a truly revolutionary new high power UPS: the 97.9% efficient Chloride Trinergy UPS.

**Trinergy**, the ultimate UPS in the history of power protection, is designed to continually monitor the electrical environment of the input utility power, and logically choose the most efficient operating mode to ensure that the supply to the load remains in optimum condition at all times, delivering maximum energy savings and outstanding performance.

The revolutionary capability of Trinergy makes it the first in the industry to combine all available leading edge technologies in a single UPS with three functioning modes*.

1. **Maximum Power Control (Double Conversion/VFI)**
   allows the best power to be supplied to the load whenever the system detects that the electrical environment requires conditioning.

2. **Maximum Energy Saving (Digital Interactive/VFD)**
detects when the input power supplied to the unit is of an ideal quality and the need for conditioning is non-existent.

3. **High Efficiency & Power Conditioning (Linear Interactive/VI)**
enables the system to condition the input power sufficiently without having to switch to the maximum power control configuration.

This state-of-the-art UPS is the first to offer such sophisticated, intelligent power protection technology in one unit. With the highest levels of efficiency and performance on the market Trinergy has all of the characteristics of marking another milestone in the history of Chloride innovation—and that of the entire industry.

*The Trinergy Algorithm is based on the three functioning modes of static UPSs offered by Chloride: Double Conversion, Line Interactive, and Digital Interactive. In double conversion mode (VFI, or voltage and frequency independent), the output voltage and frequency are totally controlled by the UPS regardless of input conditions. In line interactive mode, (VI, or voltage independent), the UPS conditions output voltage level (but not frequency) to compensate for input voltage variations. In Digital Interactive (VFD, or voltage and frequency dependent) mode, the UPS is ready at any time to take the load but is not actively modifying the voltage amplitude or frequency if there is no need. VFI, VI, and VFD are definitions used in IEC standard 62040-3.

**Pioneering sustainability**

At Chloride pioneering innovation is partnered with sustainability.

Chloride has the same level of importance to environmental awareness and sustainability as it does to innovation, ensuring that all products meet environmental regulations in the countries where they are installed and that new products are progressively more energy efficient.

Chloride North America is an ISO14000 certified organization and the Chloride Group has made significant commitments worldwide to ensure sustainability.

Chloride was the first to sign the Evergreen Code of Conduct on Energy Efficiency and quality of AC UPS Systems, with the aim of minimizing UPS energy consumption while increasing efficiency levels. As a result Chloride undergoes periodical audits conducted by the European Commission. In order to confirm that the Code energy target levels are being met, Chloride has installed a “zero waste” testing system in main production sites. This system recycles all electrical energy used during system testing, enhancing the environmental aspects of Chloride’s UPS.

Although UPSs are not referred to in the European Union RoHS Directive (2002/95/EC “Restriction of the use of certain Hazardous Substances in Electronic Equipment”), Chloride voluntarily and actively commits to avoiding the usage of the substances specified in this directive. Chloride also voluntarily meets and anticipates the standards, relating to waste collection and recycling, that are specified in the WEEE Directive (2002/96/EC “Waste of Electrical & Electronic Equipment”).

Furthermore Chloride is actively involved in various industry associations in the many markets in which Chloride operates.

Chloride’s active involvement with The Green Grid, a global consortium dedicated to providing industry-wide recommendations on best practices, metrics and technologies that improve energy efficiency in data centers and business computing ecosystems, further reinforces the company’s commitment to the development and advancement of energy efficient standards, processes and technologies.
A history of pioneering innovation

Pioneering innovation is deeply rooted in a successful company’s history

Chloride’s decades of investment in the research and development of new technologies has made it one of today’s strongest leaders in power protection innovation.

The expertise, knowledge, and experience derived from Chloride’s R&D centers and the organization as a whole has enabled the company to understand, track and anticipate market needs. The result is a number of benchmark solutions, incorporating some of the most forward-looking technologies in the market.

For many years Chloride has been acknowledged as a noted leader in the power protection industry, responsible for developing some of the most cutting edge innovations in UPS technology, energy efficiency, and maximum reliability. These innovations mark the evolution of Chloride’s product portfolio and that of the UPS industry as a whole.

Milestones in Chloride’s innovation:

1980
The first isolated transistor in Europe is introduced by Chloride to replace traditional inverter technology.

1987
Chloride releases the world’s first three-phase microprocessor controlled UPS. The first digitally controlled UPS with microprocessor enabled excellent performance and higher efficiency, as well as the possibility of Human Machine Interface (HMI).

1992
Chloride launches the first remote diagnostic and monitoring system for UPS, with added capability for reporting analog measurements, trends and added diagnostic capabilities.

1996
Anticipating future trends, Chloride sets a breakthrough in innovation by launching the first UPS equipped with “Digital Interactive Mode” (DIM), a very high efficiency mode which preserves all reliability attributes of the double conversion.

Chloride introduces the first transformer free technology to the market. A new generation of IGBTs, combined with Chloride’s expertise in the field makes it possible to develop a highly efficient, robust UPS without the need for an inverter output transformer.

2000
To increase the performance of power converters and enable active conditioning of the load, Chloride develops Vector Control technology. Vector Control allows for the digital management of the UPS, making it possible to control output power quality in real time. This technology saw improved performances for specific unbalanced load conditions and fault clearing, as well as proving to fine-tune load sharing between parallel connected UPS systems.

2007
A breakthrough in UPS technology sees Chloride further optimize UPS efficiency, lower harmonic pollution and provide unit input power factor as a consequence of the complete power conditioning offered by full IGBT technology.

2009
A revolutionary new concept in the UPS industry is born. Chloride releases a unique UPS combining high efficiency, power conditioning, modularity, scalability, and real time field support in one single unit: Trinergy is launched.

for more information please visit our website
www.chloridepower.com/usa