



# A Complete Power Reliability

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Power Supply



DC - UPS

# About us

Since middle of 2018 Apparent Powers Systems FZCO emerged in UAE market as an authorized Representative and Distributor for some of the world's renowned and leading manufacturers of Switch Mode (AC-DC) Power Supplies, (DC-DC) Power Converters, (DC-AC) Inverters, Static Frequency Converters, Ground Power Units (GPU), Uninterruptible Power Supply Systems (UPS), Battery Chargers/DC Systems, Surge Arresters, Solar Panels and Solar Charge Controllers. We also supply Industrial Battery Solutions such as Lithium Ion, NiCd & variety of VRLA batteries.

We are dedicated in providing our clients with relevant support based on our sound technical expertise and commitment to ease client's Projects Procurement Requirements of Power Conversion Products & Solutions. Each project delivered is built as per customer's needs, the perfect power consultancy is provided by all our experts before proposing & delivering a solution.

## Managing Director's Message

Power Conversion Systems has always been my domain of interest ever since I started my professional career in Power Electronics. After working in the industry for more than 3 decades, which has widened my knowledge in this field and decided to take the significant step, and that's how Apparent Powers Systems FZCO started.

A Complete Power Reliability is my tagline to the company. We want to cater to various sectors and provide them With optimized, efficient & economical solutions. We Belong to the niche sector of the market, and we desire to be the best at it.

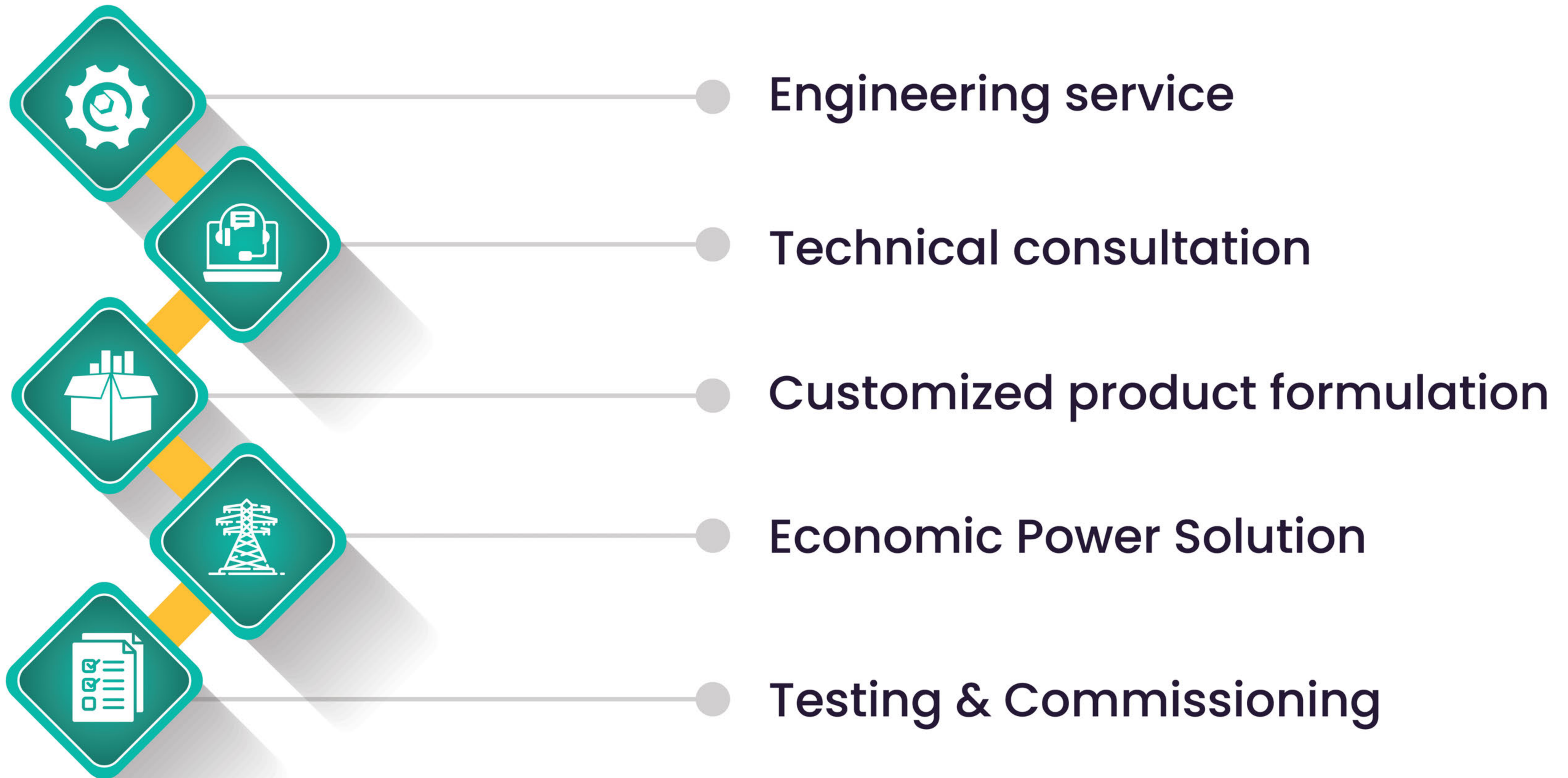
For us supporting our clients and providing them with optimized solutions, has always been the nature of our business. We believe in customer satisfaction ,so we make sure we fill in all the gaps created during a project.

At Apparent Powers Systems FZCO , everyone is family. We work, argue and enjoy together.

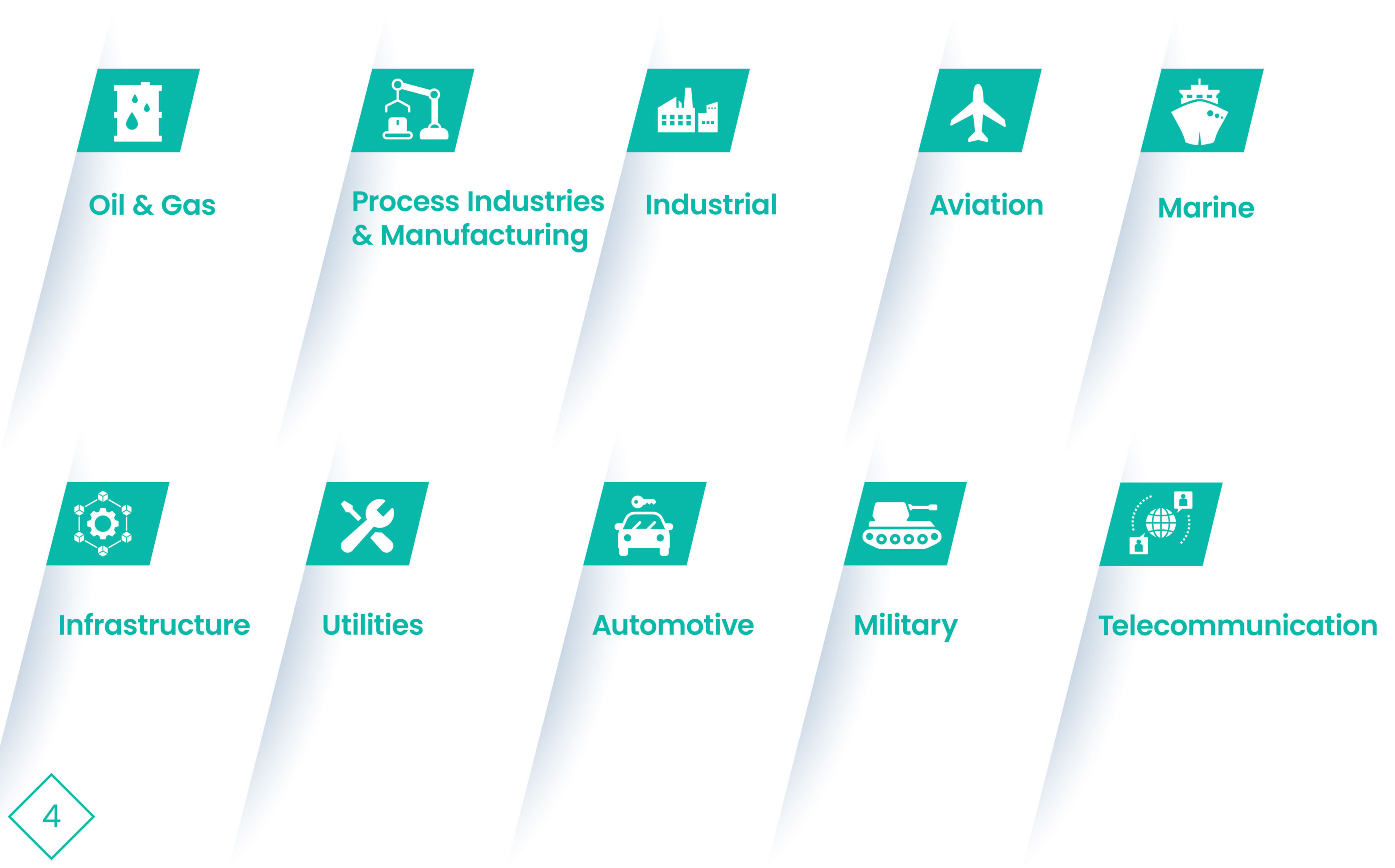
Mr.Jagdish Shambwani

Managing Director

# Our Services



# Our Industries



Reliability is engineered into every ABSOPULSE power supply. This ensures a long operating life with minimum maintenance under exacting field conditions and contributes to low product life-cycle costs.

## Our stringent standards and processes encompass:

- ▶ High quality designs with large design headroom
- ▶ Optimal thermal performance – all heat generating components are conduction cooled by heat-sink blocks connected to the base-plate
- ▶ Full electronic protection including surge and transient protection
- ▶ High efficiency
- ▶ High quality components with reliability established over many years
- ▶ Very high MTBF ratings supported by field data
- ▶ Robust mechanical construction
- ▶ Chassis-mountable units in vented conduction/convection or fan-cooled enclosures
- ▶ DIN-rail and open-frame format available for many designs
- ▶ Plug-in (Eurocard) format for modular power systems in 19 inch or 23-inch racks
- ▶ Conformal coating and heavy ruggedizing
- ▶ Full encapsulation (potting) in a thermally conductive MIL-grade silicon rubber compound with
- ▶ UL94V-0 flammability rating where immunity to very high levels of shock and vibration, humidity, moisture, dust, oil, fog, insects and other contaminants is required
- ▶ Enclosure in rugged IP-rated packages

### 1. AC-DC Power Supplies

APPLICATION- Industrial, Railway, Power Utilities, Military, Marine, Telecom and other Harsh Environments.



### 2. DC-DC Converters.

APPLICATION- Railway, Transportation, Heavy Industry, industrial Automation, Power Utilities, Telecommunications, Mining, Marine and many others.

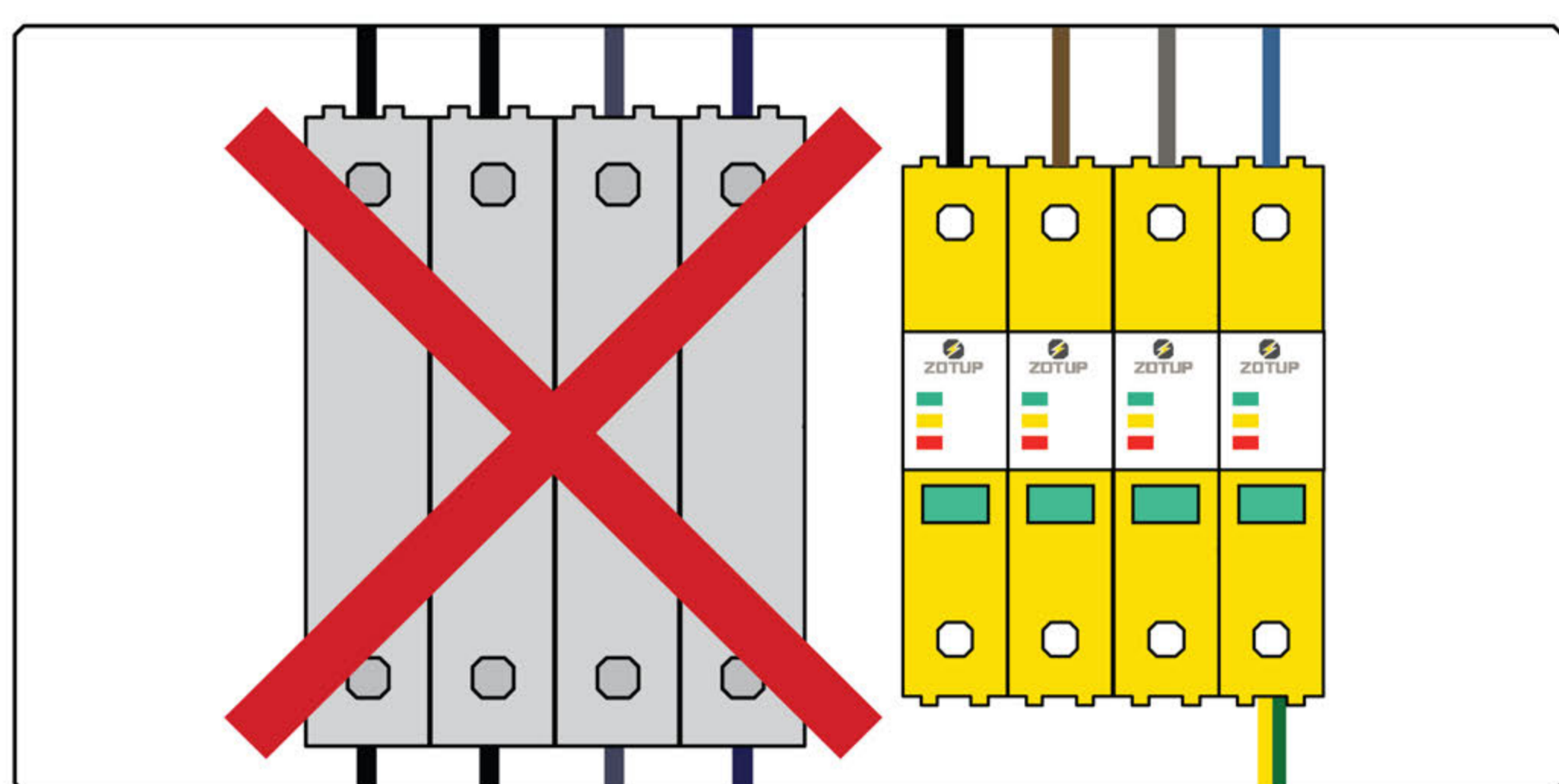
### 3. Inverters

APPLICATION- industrial automation, railway, military, marine, mining, utility, telecom, aviation ground support equipment and airborne applications.



ZOTUP brings to the market a new technology after 4,5 years of intensive research and development activities. These new products are supported by more than 330 laboratory tests and the technology behind is protected by four international patents. Herewith ZOTUP is standing for new state of the art surge protection for low voltage power systems. ZOTUP products represent an outstanding innovation on the market of surge protection with regard to performance, safety, easiness of installation and reliability. All these quality attributes are now available in a single product.

The unique technical features putting our products to the top are:



- **Integrated Fuse Function (ff)**

in case the SPD reaches its end of life in a short circuit state.

According to the product standard EN 61643-11 SPDs are classified according to their behavior when reaching end of life.

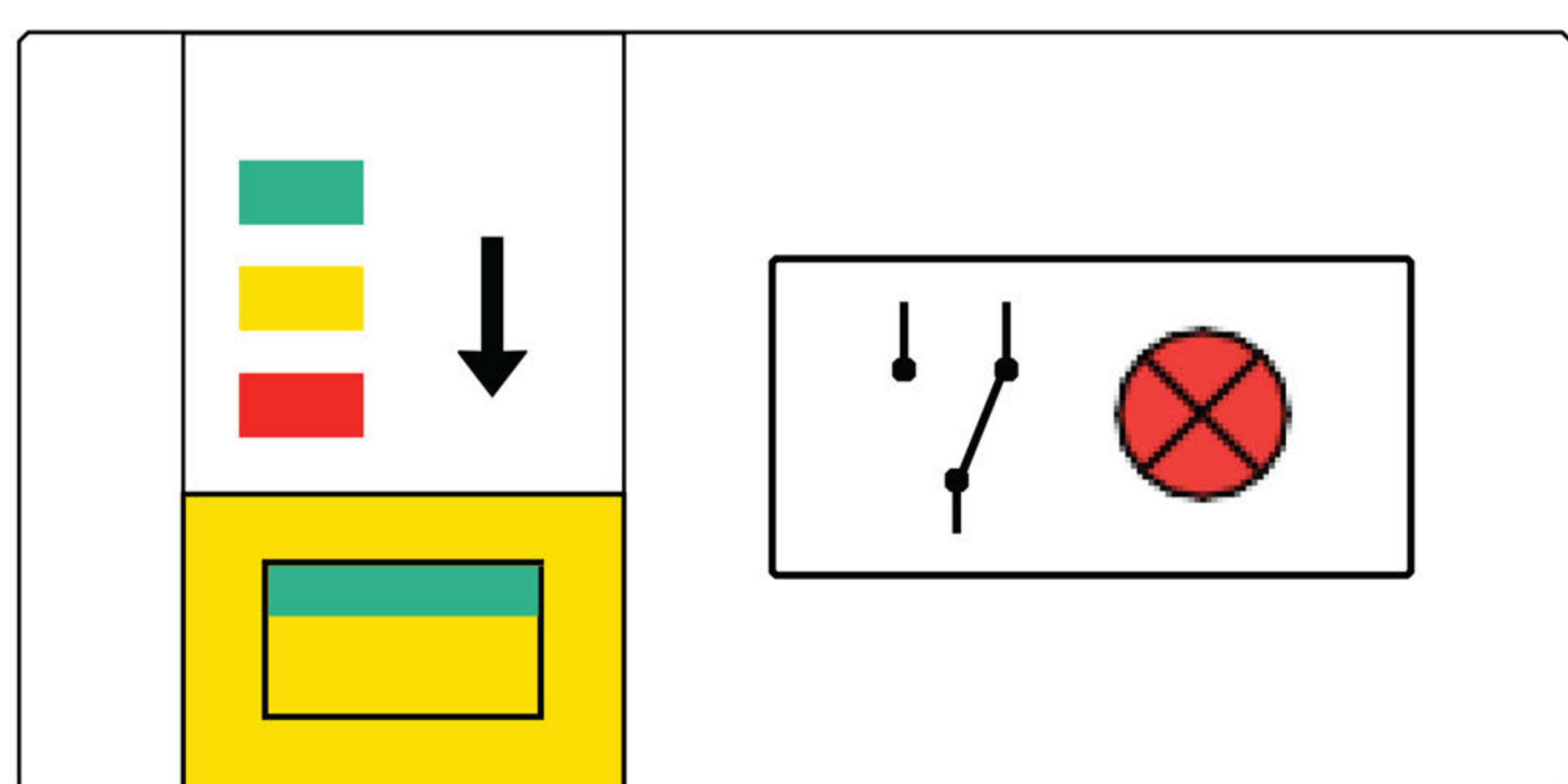
There are two types of failure modes:

- OCFM (Open Circuit Failure Mode);
- SCFM (Short Circuit Failure Mode).



**Advantages:**

- Maintaining the full discharge capability of the SPD. An external fuse or disconnector may influence/limit this capability;
- The overall voltage drop across the SPD branch circuit and therefore the effective voltage protection level for the installation and equipment is kept to a minimum, as there are no additional devices and the wiring can be kept very short;
- No additional costs for external disconnectors, less time for cabling and a smaller ecologic footprint



- **Progressive performance indication**

The new design of ZOTUP makes regular checks of the SPDs status and system verification very easy. Periodic verification is generally required by regulations on national level. The new ZOTUP SPD range displays its performance status by a change of color in the Status Indicator window. The transition from the initial green color (full performance) to the totally yellow (minimum performance) is progressive/analog. The colour in the window indicates the actual remaining performance of the SPD, thus providing comprehensive information rather than a simple good versus out of order message for attention.

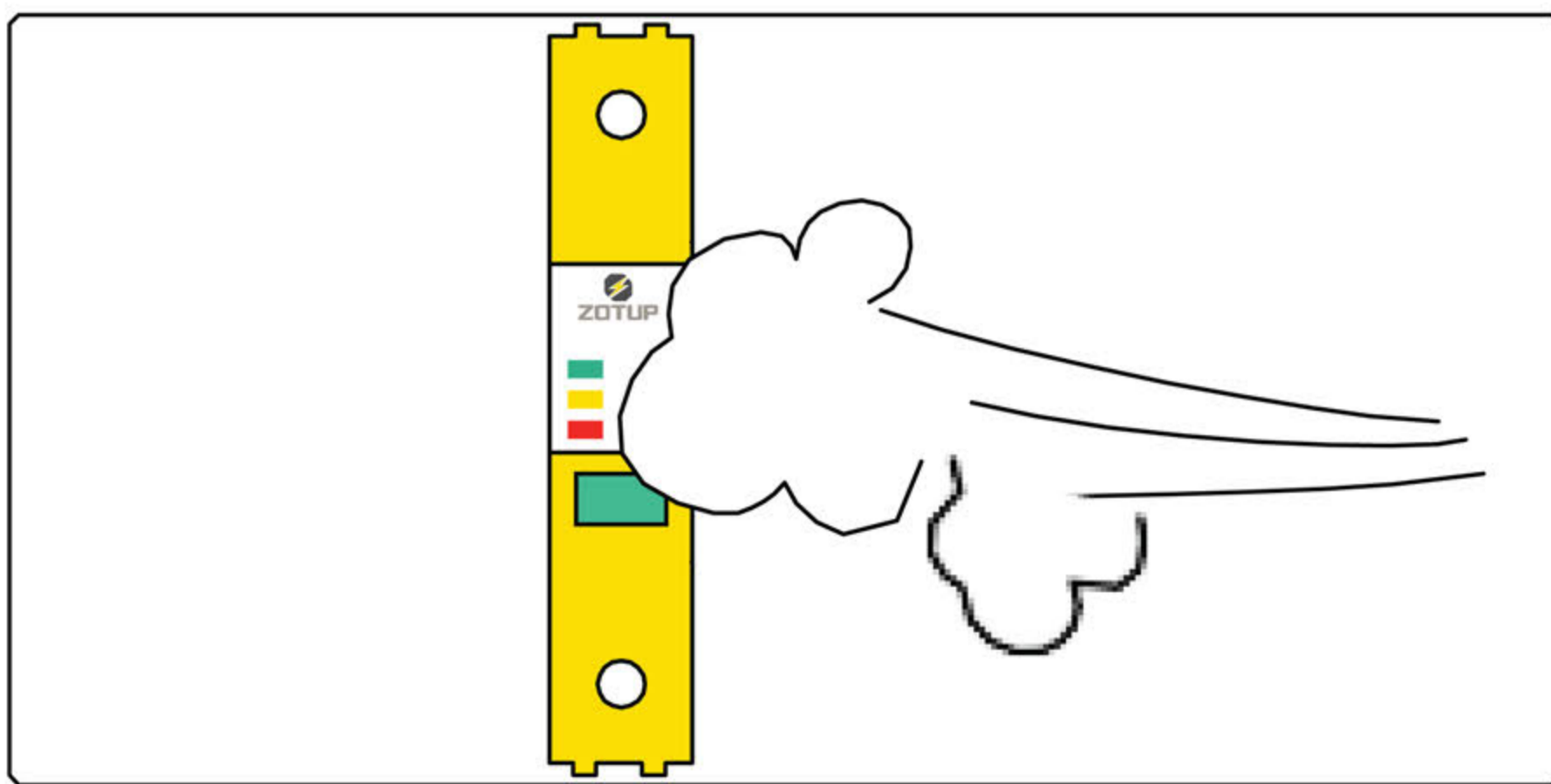
After that a red indication follows, showing the SPD has reached its end of life.



**Advantages:**

- Progressive indication of the reduction in performance of the SPD allows preventive maintenance and optimization of replacement decisions;
- Remote indication for SPDs incorporating a changeover contact is activated when the performance reaches its minimum state (totally yellow). Therefore the remote alarm is preventive, because the SPD is still operational and still able to protect at minimum performance level.

- **For applications with high pollution (PD 3) and for extended temperature range (-40°/+80°C)**



ZOTUP deals with the issue of pollution and uses firm materials and applies adequate design features to achieve Pollution Degree 3 for all internal and external creepage distances and clearances. Keeping an emphasis on environmental aspects our products are designed and classified for the highest level of temperature range, which goes even beyond the so called extended range in the product standard.



**Advantages:**

- Improved reliability when installed in "heavy" environments;
- Enabling applications that cannot be covered with a lower pollution degree or normal temperature range.



Adel System aim is to provide designers and users with a complete range of solutions in power supplies and power continuity products, focusing on both standard and special applications. Our target is to deliver problem-free solutions so that you can safely dedicate your attention to the rest of the automation project.



### AC-DC Power Supplies

The wide range of input voltages enables them to operate in any part of the world. The industrial power supply Flex Line is DIN Rail mountable, safe, and offers IP20 protection

APPLICATION- Industrial Machinery Construction, Video surveillance, fire system, sprinkler, access control, traffic monitoring and different fields in the security sector

### Battery Charger

The CB battery charges a range of microprocessor power supplies that charge the sealed lead battery to optimize performance and durability. Based on switching technology, they obtain a voltage stabilized at the set value, even in the absence of load.

APPLICATION- Cogeneration, transport, telecommunication, data center, smart grid, Video surveillance, fire system, sprinkler, access control, traffic monitoring and different fields in the security sector, Elevators, Hospitals



### DC UPS

The DC UPS- CBIs combine the functions of Power Supply with those of Back Up Module and Battery Charger. This is a revolutionary line designed to provide uninterruptible power, whatever the system conditions are, through a sophisticated and completely automatic management of any type of industrial battery.

APPLICATION- Industrial Machinery Construction, Oil & Gas, water purification, water level control, remote control and pollution sector, Video surveillance, fire system, sprinkler, access control, traffic monitoring and different fields in the security sector, Renewable energy, Fire protection system, Elevators, Hospitals, Remote Terminal Uni, Telecommunication.

AGM VRLA Battery First in the market to offer standard solutions with 12 Years design life and 4 Years warranty. EnerRocket's features are uniquely designed and highly compatible to support your critical applications, making it the industry's most cost effective and efficient solution.

A fully comprehensive range of AGM VRLA battery products ES, ESC and ESH battery series have been designed with an electrochemistry that delivers longer service life and exceptional performance at high rates of discharge, with fast recharge time.

EnerRocket offers solutions to measure, monitor and record key parameters as outlined in IEEE and NERC recommendations for battery monitoring: string voltage, cell voltage, cell resistance, terminal & connection resistance, negative post temperature, ground fault and ambient temperature.

## Main features:

- ▶ 12 years design life
- ▶ Quick charging features
- ▶ Flame retardant FR-V0
- ▶ LONG LIFE and HIGH RATE 12V batteries for all commercial and industrial applications
- ▶ High-rate discharge terminal posts
- ▶ Optimized for ups applications

APPLICATION- Race -Highway Trucking, Performance Cars and Off-Road Vehicles, Diesel Starting and Light Trucks, Start-Stop Systems, Emergency Lighting, Computer Backup, Frequency Regulation (Solar, Wind), Telephone Switching, Marine Trolling and Electronics, Sailboats and Electric Vehicles, Wheelchairs / Scooters and Golf Cars, Portable Power and Floor Scrubbers, Personnel Carriers and Renewable Energy, Village Power (Solar-wind), Marine & RV, House Power Cycle Applications



GAZ Ni-Cd cells and batteries with pocket plate electrodes have a proven design and reliability to give maximum service life. With more than 100 years of experience in the design, manufacturing and continuously improving and further developments in techniques will provide maximum performance and security independent of the mains electricity supply. Its outstanding features make the GAZ Ni-Cd battery range one of the most reliable and adequate systems available in the market. It is a most effective durable and safe solution. GAZ prides itself on the high standards of quality for which it is renowned.

Application- UPS System, railway, power, substations, renewable energy stations, ship equipment, telecommunications, emergency lighting, process control, power and substations, oil and gas refineries, railroad signalling, Fire Alarm & Security System, Medical Equipment

- ▶ Less maintenance cost
- ▶ More cost savings
- ▶ More durability
- ▶ Less performance loss at high temperatures and during aging
- ▶ Less recharge time
- ▶ More safety
- ▶ Less life cycle costs
- ▶ Long shelf life of several years in a discharged state under correct conditions
- ▶ More cost effectiveness
- ▶ Insensitive against deep discharge
- ▶ Operational temperature range between - 40 °C to + 50 °C
- ▶ Construction – insensitive against faulty maintenance

i) GAZ Vented Ni-Cd Batteries- GAZ Vented Baseline for all battery applications, designed with the best of Ni-Cd provide a 20 year service lifetime.

ii) GAZ LOMAIN Ni-Cd Batteries- extreme low maintenance with a 20 year service lifetime. The special single cell design and the valve regulated venting system eliminate the need for topping-up during a normal service life de-

iii) GAZ SOL G Ni-Cd Batteries are specifically developed for renewable energy applications and in particular solar energy systems. The long cycle life based on more than 100 years experiences with design and manufacturing of NiCd pocket plates and continuous improvement of this technology.



La Marche is a development and production of innovative and quality products to meet the customers electrical power requirements, provide them on time and continually improve products, processes and services.

Since 1945, La Marche has been providing reliable power conversion products. La Marche products include industrial Battery Chargers, Rectifiers, Power Supplies, Inverters and many more. They have built their reputation by controlling all aspects of the development process including design, in-house manufacturing and testing.



### AC UPS

Modular online UPS system offers a versatile and cost-effective solution for critical power applications. This configurable cabinet includes 4 or 6 slots that can accommodate UPS modules or battery packs. The standard configurations for the MUPS include 1 UPS Module/3 Battery packs, 2 UPS Modules/2 Battery packs, 4 UPS module or 4 UPS modules /2 Battery Packs

Applications: Network Closets, Security Systems, Telecom Equipment, Data Centres, Fire Alarm Systems, Office buildings, Industrial Power Systems, Oil & Gas Applications, Hospitals, Commercial Buildings, Mission Critical Load

### Battery Chargers

APPLICATIONS : Utility, Switchgear, Process Control, Oil Exploration, Generators, Compressors and Engine Starting, Process Control.



Layer currently produces and markets many different electro-technical and electronic support systems for its large clientele. "NO-BREAK" and "ON-LINE" double conversion type 1-Ph and 3-Ph UPS, Emergency converters, A.V.R. (Stabilizers), Ferro saturated stabilizers, Electronic line conductors, DC/AC Static and grid connected inverters, Wind generators, Charge regulators, Cathodic protection power supplies, Frequency converters, DC/DC Regulated converters, Regulated power supplies, Automatic battery chargers, Automatic low voltage power factor correction equipment, Isoltest (Earth fault detection for hospital, industrial and naval equipment), Transformers and any other custom built product.

**AC UPS**

- CS series: no-break double conversion U.P.S., on request with old thyristor technology
- Erix series: small line interactive U.P.S. with 40 min. backup time
- Mizar series: small online double conversion U.P.S. with 20 min.backup time
- Futura series: online double conversion U.P.S., backup time on request

APPLICATION- Local Area Network (LAN), Shopping centres, Telecommunication applications, Electromedical equipment, Power generation, Transmission & Distribution, Oil & Gas, Infrastructure, Industry, Hospitals, Telecommunication



**DC UPS**

DC UPS using Thyristor technology, providing high reliability under the most difficult operating conditions, such as lightning and sudden temperature changes.

APPLICATION- Oil & Gas, Power generation, Transmission & Distribution, Infrastructure, Transportation

**Frequency converters**

The CF series of frequency converters offers the ultimate in terms of quality and reliability. We recommend the CF series of frequency converters to all those driven by professional needs who therefore need very high-performance products

APPLICATION- Military, Transmission & Distribution, Power generation, Oil & Gas



## Inverters

The IS series of static inverters provides an uninterrupted 1-Ph AC voltage of 230 V 50Hz designed to supply a wide range of loads. The ISC series of static inverters offers the ultimate in terms of quality and reliability. These are the ideal solutions to protect electrical, electronic and computer systems in areas where only direct current is available.

ISLAND series of inverters, which is a high technology product, to anyone who needs AC where the public grid is not present. Designed to be fed by different input voltages on customer's request, the ISLAND series of inverters supplies a sine wave output voltage with very low distortion. The high frequency-based conversion

APPLICATION- Telephonic power stations, Hydroelectric and thermoelectric power stations, Radio links, Ambulances, Power generation, Transmission & Distribution, Oil & Gas Industry, Infrastructure, Industry, Hospitals, Railway, Telecommunication, Solar and wind-power plants, Fuel cells, Marine vessels



## Solar Charge controller

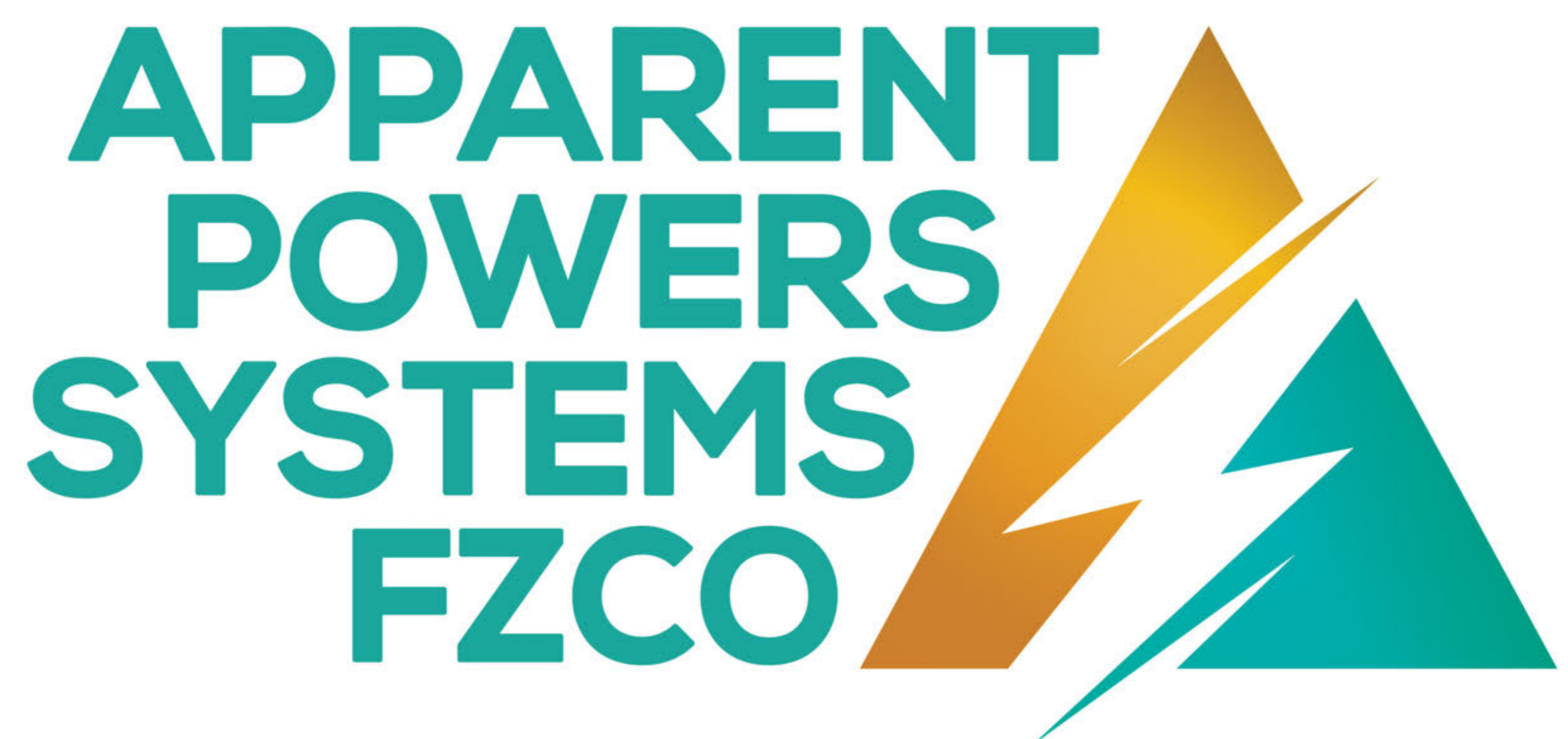
Also known as a solar regulator, is essentially a solar battery charger connected between the solar panels and battery. Its job is to regulate the battery charging process and ensure the battery is charged correctly, or more importantly, not over-charged.

Application- Street lights, Home systems, Hybrid solar system



# Our Client's







# A Complete Power Reliability



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