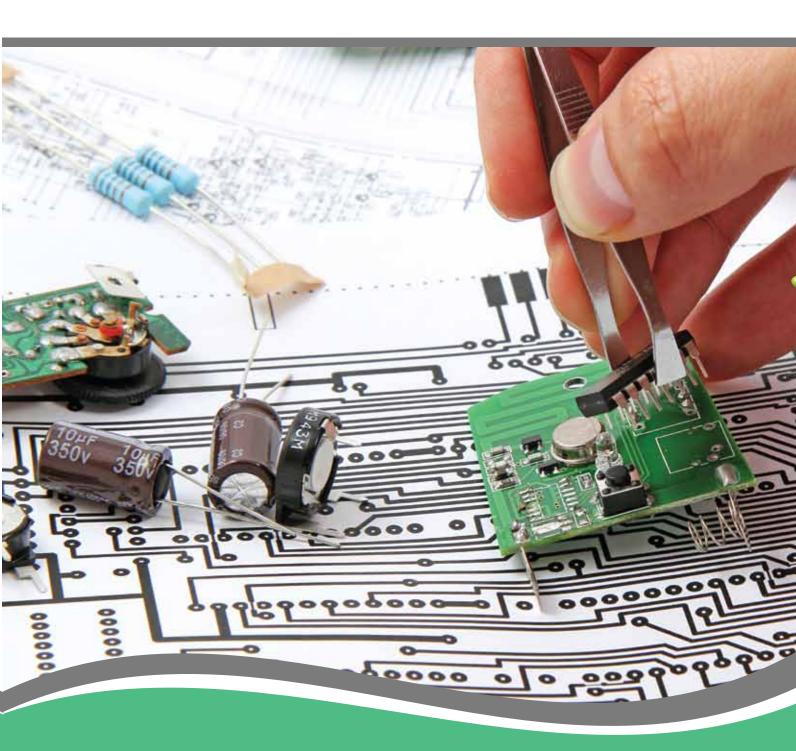


شبركت إلكترونيات الطاقت العربيت Arabian Power Electronics Company

Built to last...





Arabian Power Electronics Company at a glance...

Arabian Power Electronics Company (APEC) is a leading power electronics manufacturer based in Al Khobar, Saudi Arabia. APEC provides comprehensive engineering solutions to secure critical processes with clean and reliable power supply systems.

APEC is established explicitly to localize the technical know-how and to enable the technology transfer of UPS Systems, Battery Chargers, Frequency Converters and Solar Power Systems in the Kingdom of Saudi Arabia.

A full fledged manufacturing plant of approx. $3500 \, \text{M}^2$ with a sophisticated test facility enables APEC to fully and precisely manufacture and test the entire product range of all models of UPS systems up to 200 kVA and Battery chargers up to 800 A. The test facility have both 50 Hz and 60 Hz and we test the units according to the most stringent international standards like IEC.

It must be emphasized that highly experienced engineering team with very profound technical background in the field of power electronics stands behind the success of APEC. This strength allows APEC to offer the best and most optimal in-house customized solutions and designs to customers so as to fulfill their requirements most economically.

APEC has been committed since the very first day to produce only word-class products that meet or exceed the highest quality standards, and thus APEC has made it one of its imperatives and ethical obligation that quality will never whatsoever be compromised at all times and conditions.



Mission, Vision & Values

Our Mission:

To secure critical processes with clean and reliable power supply.

Our Vision:

To be the pioneers of power electronics in the Middle East

Safety Quality Integrity Teamwork Commitment Accountability Environmental Friendliness



Applications

- Oil & Gas Onshore and Offshore Facilities.
- Refineries
- Petrochemicals
- Power Generation
- Transmission & Distribution
- Manufacturing
- Mining Industries
- Telecommunication
- Aviation
- Railways



Products

SINEGATE Industrial UPS Systems

LINEGATE Industrial Battery Chargers/Rectifiers

SWITCHERGATE Telecom SMPS Battery Chargers/Rectifiers

CYCLEGATE Frequency Converters

PULSEGATE Inverters

ARRAYGATE Solar Power Systems



SINEGATE Series is a robust industrial-grade Uninterruptable Power Supply (UPS) system. This system is a true online, double conversion UPS designed and built in accordance with IEC standards, with a product range of 5 kVA to 200 kVA.

SINEGATE Series incorporates state-of-the-art system topology to maximize the system reliability, efficiency and the overall system performance. It features an FGBT Board PWM inverter technology, fully rated static transfer switch and high overload and fault clearing capabilities. The UPS system is carefully engineered and built to last and to operate flawlessly in the harshest operating conditions for more than 5 years with the minimum requirement of maintenance. SINEGATE Series UPS contains de-rated components and amply oversized designs to ensure maximum reliability and to provide a state of "ease of mind" to the end user.



LINEGATE Series is a heavy-duty industrial battery charger/rectifier designed to provide secured DC power for critical loads. These chargers are designed to charge all types of batteries, such as Ni-Cd, Vented Lead Acid, Valve-Regulated Lead Acid types etc. LINEGATE chargers are constant voltage devices with built in current limiting features and accurate voltage regulation for optimized performance. These chargers are designed and tested in accordance with IEC standards and are available from 25 to 800 A with 24, 48, 110, 125 and 220 VDC.

LINEGATE chargers are thyristor-based, phase controlled units designed for harsh operating conditions as components are selected with high de-rating factor to assure maximum reliability. Ease of access and ease of maintenance are key design features for LINEGATE Series. Most power and control modules are provided in sub-assembled chasse with plug and socket connections for easy serviceability and minimized spare part inventory.



SWITCHERGATE SMPS Battery Chargers/Rectifiers

SWITCHERGATE Series is offered in N+1 redundant modular configuration. These battery chargers/rectifiers are designed to deliver power in constant voltage and constant current via Switch Mode Power Supply conversion technology. They are available in a sleek 1U high cabinets and in a 19"rack construction. It comprise power factor correction circuitry, which shapes the input current to follow the voltage to maintain almost unity power factor at full load and limits the current harmonics in the input line.

This model design provides modularity and expandability to allow for flexible configuration and future expansion. The system can be configured in multiple units ranging from single module of 50 A to 8-module units of 400 A. The vents in the front and rear enable the absolutely zero stacking. Each module can be switched on/off from the front panel.

Swithchergate Series are mostly used in Telecommunication and other communication applications.



CYCLEGATE Series is static frequency conversion in which the utility operating frequency is converted into another utility grade frequency or into another application-specific frequency such as 50 Hz, 60 Hz or 400 Hz. These frequency converters incorporate the latest PWM technology using IGB inverters to optimize the reliability and efficiency of frequency conversion to produce very much pure sinewave output. As well, CYCLEGATE Series is designed with total flexibility in terms of input voltage and output voltage for both single phase and three phase models.

CYCLEGATE Series is offered over a wide-range of kVA ratings from 5 kVA to 200 kVA. For heat dissipation, the exclusively special design of spot cooling is a key design feature for in CYCLEGATE Series in particular and in all APEC products in general. This is a key factor that allows a system layout with exceptionally compact design and small footprint.

This product is offered as an effective and economic solution for various applications such as civil and military aircrafts and ground radars using mobile or stationary units of 50/60-400 Hz. Also, industrial CYCLEGATE units are available as a solution for incompatible frequency utility power supply by which 50-60 Hz, or 60-50 Hz frequency conversions are achieved.



PULSEGATE Series inverters is a versatile series specifically designed for telecommunication, emergency lighting systems and other applications. The series incorporates state-of-the-art PWM technology to provide distortion-free and pure sinewave output, which makes it good option for sensitive and critical loads. The series is offered in single phase and three phase units for wide range of power ratings from 5 kVA to 200 kVA and with capability to design higher capacity with any input voltages on request.

PULSEGATE inverters provide effective solution with increased efficiency and reliability for all applications where where DC power needs to be inverted to AC. Due to the robust design of this series, it is ideal to operate in extremely harsh environmental conditions.



In addition to manufacturing power electronics equipment associated with the solar power systems such as inverters, traditional charge controllers and MPPT controllers, APEC is also a leading system integrator that can offer a complete solar power generation solution including engineering, design, assembly, installation, commissioning, operation and maintenance.

APEC provides high class solar power system components utilizing the latest technologies in the field of photovoltaics with broad design and manufacturing capabilities ranging from small standalone power system for street lighting or navigation aids to a large-scale grid connected solar farm. APEC offers rugged solutions to various industrial and commercial applications of photovoltaic solar power systems such as:

- Onshore and offshore well sites control and monitoring
- Pipelines supervisory and data acquisition
- Communication sites
- Telecommunication towers
- Cathodic protection

- Security and surveillance systems
- Roof-top PV systems
- Off-grid rural electrification
- Grid-connected solar farms
- Commercial and advertisement



APEC Services

- Installation and Commissioning
- Preventive and Corrective Maintenance
- 24 Hr Service Support
- Service Contracts
- Battery Maintenance Services
- Spare Parts Inventory
- Custom Training Classroom and Site



Why APEC?

Not only APEC is the first power electronics manufacturer in the Kingdom of Saudi Arabia, but also in the Arabian Gulf region, and most probably in the entire Arab countries.

Being local manufacturer, APEC offers the following competitive advantages:

- Strong local technical support
- Sufficient stock of spare parts
- Prompt and comprehensive after-sale services
- Classroom and hands-on training
- Convenient and economical FAT
- Fast delivery of products
- Continuity of presence with full commitment and responsibility
- Better understanding of regional clients requirements



Industry Localization







Global Network

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