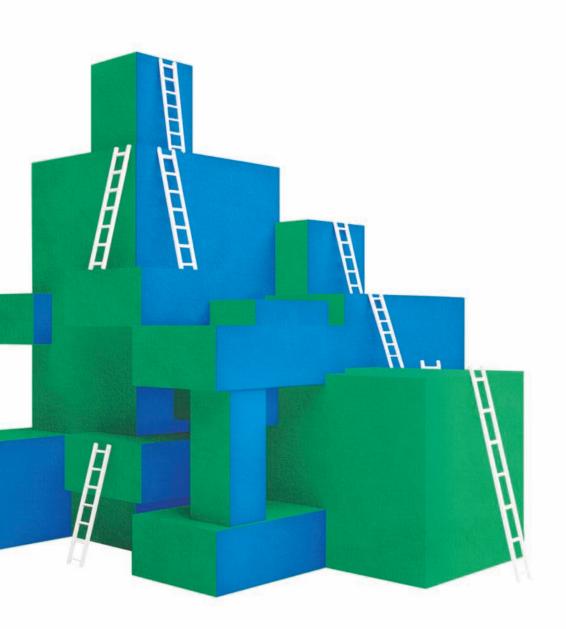


## Partner you can Trust

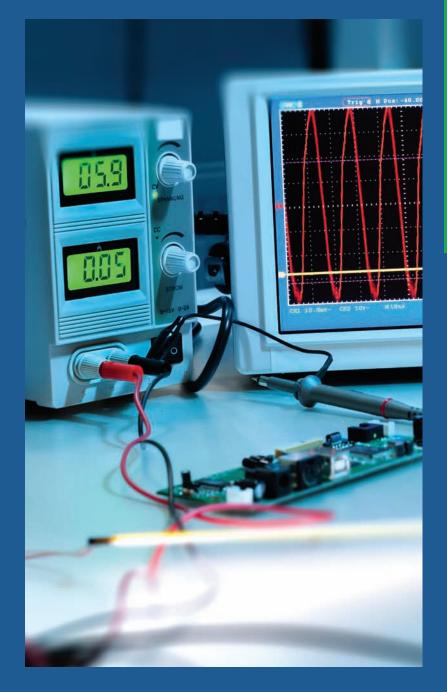




## **Growth** by Innovation

P2 Power Solutions was founded in 2006 with a vision to develop and provide avant-garde technical solutions to the Indian Industry. The core vision was to develop advanced Power Quality solutions indigenously to optimally solve typical industrial challenges with out of the box thinking and deliver maximum value to the end customers. With our single-minded focus on problem-solving, we aspire to become long term partners to our valued patrons and not just product suppliers.

P2 Power envisions the creation of an ecosystem of innovation in India so that we can reduce our reliance on imported technologies and make India a hub of innovation for the world.





# Continuos **R&D** is our focus

P2 Power Solutions was founded by and is still promoted by engineers from the Indian Institute of Technology.

We have always given our highest priority to R&D and have focused on becoming a leader in Power Electronics technologies in India and abroad. We have all the relevant certifications from CE, CPRI, TUV, and KEMA for our products. Also, our R&D facility has been accredited as a DSIR recognized lab by the Ministry of Science and Technology as a testimony to our continuous efforts towards indigenous Research & Development.

Investing in R&D not only helps us to develop and optimize our products and solutions on a continuous basis, but it also helps us understand problems better and design solutions that can guarantee the desired results.

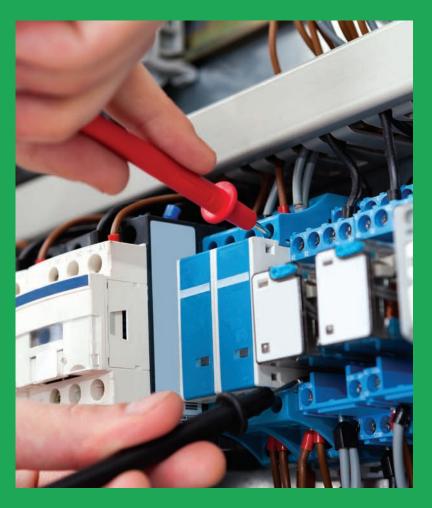


# **Quality** in everything we do

All P2 Power products pass through rigorous quality standards before reaching the end consumer. We are known for our innovative quality engineering and our best in class customer support. Our partners benefit both through leading quality solutions along with assured and localized, on time service support.

We are as ISO 9001 - 2015, ISO 50001 & OHSAS 18001 company with CE & ROHS certified products. At P2 Power, each product quality is everything. Our products are certified through international third party laboratories like KEMA and TUV

We strive to provide highest levels of customer service and support in the industry. Our dedicated customer support team ensures that any request or enquiry is responded to within 24 hrs or less, providing you with world class customer service that will surely exceed your expectations.















CE





## Active Power Filter (APF)

P2 Power Active Power Filter (APF) range is a universal, active current compensation solution which can be used for harmonic mitigation, reactive power compensation, load balancing, and neutral compensation.

## Hybrid Power Factor Correction (HPFC)

P2 Power Integrated Hybrid Power Factor Correction range is the most cost-effective solution for Total Power Quality Management. P2 Power Solutions was the first and the only company to indigeneously develop and deliver the Integrated HPFC solution in 2011 after looking at the need for instantaneous, step-less, and precise reactive power compensation on first priority along with harmonic mitigation, load balancing, and neutral current compensation on lower priority.

## Passive Harmonic Filter (PHF)

P2 Power Passive Harmonic Filters are used to decrease harmonics to an acceptable level in industry with large number of non linear loads with steady load factors. They clean the current wave through passive component Capacitor, shunt reactor, output reactor and input reactor. P2 Power provided Passive Harmonic Filter protects sensitive equipment and improves energy efficiency of the overall system.

## Active VAr Generator (AVG)

P2 Power Active VAr Generator (AVG) is the ideal solution for industries with variable and fast fluctuating leading/lagging reactive demand, load balancing, and neutral compensation.

## Dynamic Voltage Regulation system (DVR)

P2 Power Dynamic Voltage Regulator (DVR) for instantaneous, step-less, precise voltage regulation using revolutionary converter technology. Dual (ip/op) voltage tracking and

converter current tracking with robust control algorithm ensures that sensitive loads are effectively isolated from grid side sag/swell events.

## Smart Thyristor based PFC

P2 Power Thyristor based PFC is a switched capacitor based solution used in industries with fast fluctuating lagging reactive demand. A central controller continuously monitors the power flow and controls the switching of capacitor banks by sending control commands to Thyristor Modules to quickly meet the reactive demand.



## Power Quality Components



## Smart Hybrid PFC Controller

P2 Power Smart Hybrid PFC Controller can control the switching of capacitor banks over RS485 communication channel and comes with an optional, color touch screen interface. Most importantly, it is fully employs proprietary algorithms to communicate with P2 Power APF and AVG solutions a ensure harmonious operation to deliver unmatched results.

## Smart Thyristor Module

P2 Power has developed a completely revolutionary and scalable communication based Smart Thyristor Module solution. Each Smart Thyristor Module will have communication capabilities to accept commands from the P2 Power master relay controller and also send back critical bank wise parameters like temperatures, status, output current etc. The user will have complete view of each and every individual bank status, condition, and health.

## Sine Wave Filters

P2 Power Sine wave filters are used in variable speed drives (VSD) and for protecting a motor against extreme voltage fluctuations and overheating. Installing a sine wave filter between the VFD power source and the motor smoothens the VFD pulse width modulated signal. This allows longer cable layouts, better insulation, and less stress on the motor. Heating and vibration is also reduced, increasing the operating life of the motor.

## **APFC Controller**

P2 Power Automatic Power Factor Controller (APFC Controller) controls and monitors the power factor and the system power quality. It is one of the most advanced and APFC relay currently available in the market with extremely high accuracy and intelligent bank control to ensure long operational life of the capacitors.

## **Detuned Reactors**

Detuned Reactors help eliminate the risk of harmonic amplification caused due to resonance when Power Factor correction capacitors are used in a harmonic rich environment. It helps to avoid the risk of overloading of capacitors, thereby significantly reducing voltage and current harmonic distortion in the network.

## dV/dT Filters

P2 Power dV/dT filters are used to control the voltage spikes generated by Variable Frequency Drives (VFDs) and long motor lead lengths. Dv/dt filters allow longer motor cables.



## EV Charging & E-Mobility Solutions

P2 Power EV infrastructure & E-mobility solutions drive has been aggressively focusing on a comprehensive range of clean mobility solutions from design, planning to final execution backed by the right kind of expertise and technical know-how

We have the entire range of AC and DC Chargers.

AC001, AC Type 2 (3.7kW to 44kW)

DC001, DC Chargers (15kW to 150kW) with all prevalent topologies i.e. GB/T, CHAdeMO, and CCS



**Growth by Innovation -**We Focus on developing and introducing

innovative solutions For the EV Market.



#### User Friendly Interface -

Our EV Charging Station comes with ease to use interface, thus simplifying charging process.



#### Low Maintenance -

Due to its modular design, remote diagnostics and upgrade through air allows low maintenance.



#### Intelligent & EFFicient Charging -

Our EV Chargers has the Functions of grid peak adjustment, Frequency modulation, voltage regulation, load fluctuation restraining and power system loss reduction, thus improving efficiency



#### **Central Monitoring Application -**

We offer back office payment platform and allow remote control and configuration of the EV Chargers.



#### Cost EFFicient -

Pay as you go pricing model optimizes running cost For the EV owners at the same time providing reliability and acceptability.





## **Energy Management Solutions**

## "Cloud based" Energy monitoring software

Our energy monitoring software allows users to access energy data in a central system, perform complex analysis and produce automated reports. Our software is highly modular, scalable and can therefore be applied in organisations of any size in any sector.



Besides the automated energy data analytics inbuilt in our software, we have a team of expert data scientists, who will develop actionable reports to identify leakages and help reduce operational cost.



## **Energy Management Services**

We provide total energy management in industrial and commercial facilities along with consultancy services to identify leakages and optimize energy consumption. Our team of experts carries out detailed audit of the facility, identify sources of wastage and suggest remedial solutions.

- Power Quality study
- Energy Audit
- Thermography
- Electrical Safety Audit
- Fire Safety Audit



## Our partners in growth

एम एम आर डी ए MMRDA		DELHI METRO	AIRPORTS AUTHORITY OF INDIA
बैंक ऑफ़ बड़ौदा Bank of Baroda	<mark>BSES</mark> DA IDUANI.	Castbury)	Chennai Metro Rail Limited
Coca:Cola.	🦰 दॅनिक जागरण	ESSAR	Hero
	इंडियनऑयल IndianOil	GREENSHIELDS JCB	LARSEN & TOUBRO
<b>BSNL</b> Connecting India	PIAGGIO*	Radisson	SAMSUNG ELECTRONICS
Supreme © People who know plastics best	Vardhmän	Emami cement limited	asianpaints

## Our customised solutions caters to all markets

#### Industrial

- Cement
- Iron & Steel
- Sugar
- Printing
- Generators
- Textile
- Automotive

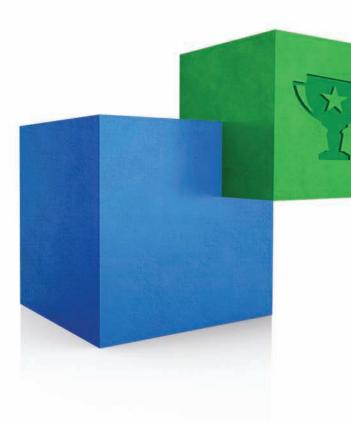
- Automotive
- FMCG
- Process
  (Paints, Cables, Beverages)
- Plastics
- Oil & Gas

#### Commercial / IT

- Hotels
- Hospitals
- Retail Stores
- Housing Societies
- ITES
- Data Centres

#### Infrastructure

- Railways
- Ports
- Airports
- Metro
- Construction



# **Reliability** is our key virtue

From R&D and testing to long-term suppliers, service and support, we ensure quality in everything we do.

Our clients are testimony to that!

## Awards and Recognitions



## Government recognised R&D lab

- Continuous innovation and R&D has finally been recognized with official accreditation by the Department of Scientific and Industrial Research (DSIR) under the Ministry of Science & Technology
- Associated with IIT Kharagpur for research and development and Make in India



## **Topmost Techno-innovation in India**

- i3 Innovation Awards 2010 sponsored by DST, CII and Agilent Technologies
- Inency awards organised by IndiaCo ventures
- WINNER at 3rd CII National Energy Efficiency Circle Competition 2019" in the "Energy Efficient Technology & Impact Created" category
- Presenting P2 Power on Power Quality and Emerging Technologies at the 15th Green Cementech conference organized by CII
- Presenting technology "Static VAr Compensation & Electrical Distribution Systems" at CEEAMATECH-2019.



Dubai Qatar