



ELECTRICAL SAFETY
POWER QUALITY
ENERGY MANAGEMENT

ABOUT EETARP



YOUR TRUSTED PARTNER

About Eetarp

Eetarp was established in 1999 with operations in Singapore and Malaysia and other countries in South East Asia. Comprising of experienced and well-trained staffs, we endeavor to deliver excellence in electrical safety, power quality and energy management to help our customers to reduce cost and improve reliability.

Through long-term partnership with our principals, one site experience, and continuous training of our engineers, our clients can be assured that we understand their needs better. Our solutions are to help our clients maintain the highest level of electrical safety, reliable power supply and reduce energy consumption.

Our vision of being a customer-focused, technology-driven and service-oriented company has given us the impetus to continuously improve and innovate.

Eetarp has been actively working as a representative for Bender GmbH & Co. KG since it was founded in 1999 and as of February 2019, Eetarp has joined with all Bender companies worldwide to be united under the **Bender Group**. With 17 subsidiaries and over 70 representations, Bender GmbH & Co. KG is present all over the world.

Your Electrical Safety is our Concern

In almost all aspects of our daily life, safety is indispensable. Sadly, even for modern and advanced industries, a safe and reliable power supply is often taken for granted. Hazardous ground faults occur frequently in today's electrical wiring. An isolation breakdown and power failure can jeopardize life and may cause massive financial loss to the company.

There is a huge demand for reliable electrical safety systems which are able to diagnose even a minuscule electrical insulation breakdown before it causes problems to the entire power system.

Our solutions are well suited in sensitive systems like data centers, highly automated manufacturing plants, water fabrication factories, power generation plants, oil rigs, FPSO, petrochemical plants and hospitals.

Benefit

Maximum electrical safety and associated fault-free operating processes are our top priority. Having a reliable and safe electrical system brings several advantages to your organization. We provide early detection of potentially critical plant conditions, giving you greater operational reliability. Our capabilities in providing innovative measuring and monitoring systems have minimized power supply interruption, protect personnel and equipment against electrical hazards and increased productivity.





Solutions

Unearthed Power Supplies (IT-System)

- Patented AMP technology insulation monitoring devices, A-Isometer
- Online insulation fault location systems, EDS

Earthed Power Supplies (TN/TT-System)

- AC/DC sensitive residual current monitor, Type A and B according to IEC60755 and IEC62020
- Residual current monitoring system (RCMS)

Medical System

- Isolated power supply according to IEC60364-7-710
- Switchover and monitoring modules
- Indicator and operator panels
- Distribution switchboards with and without online earth fault location system
- Medical grade isolation transformers





Your Reliable Provider of Power Quality

Power Quality (PQ) is becoming an increasingly important issue in today's world as we depend on reliable and continuous power supply for our daily activities. Poor power quality can cause significant power interruptions resulting in lower productivity and loss in revenue.

"You can't control what you don't measure" is a well-known quote that many organizations apply in quality management. Here at Eetarp, we are dedicated to assist our clients to gain control over their power requirements through online monitoring and analysis of events as well as providing them with solutions to improve power quality.

Benefits

Monitoring is the best way to identify a premature power quality event. Both permanent and temporary monitoring options are available to meet our client's needs. We add value to your company in power quality monitoring through:

- Measurement and analysis of your electrical systems power quality conditions
- Provision of historical data of power quality events
- Reduction of downtime by identifying potential problems
- Root cause analysis of power quality events
- Pre-emptive solutions to overcome power quality events



Solutions

With more than a decade of experience, we can provide you with the right tools and solutions for your power quality needs. We offer a wide range of products and services ranging from portable PQ analyzers to permanent PQ monitoring systems according to IEC61000-4-30 standards.

Permanent Monitoring Solution

- Disturbance fault recorder (fully compliant with EMA's transmission code)
- Traveling wave fault locator (highly accurate)
- Integrated power quality monitoring systems with intelligent digital power meter

Portable Monitoring Solution

- Power Quality recorder/analyzer

Mitigation Solution

- Reactive power compensation
- Active harmonic filter, real time response
- Active voltage conditioner, ride to dips and swells



Your complete Energy Management Service

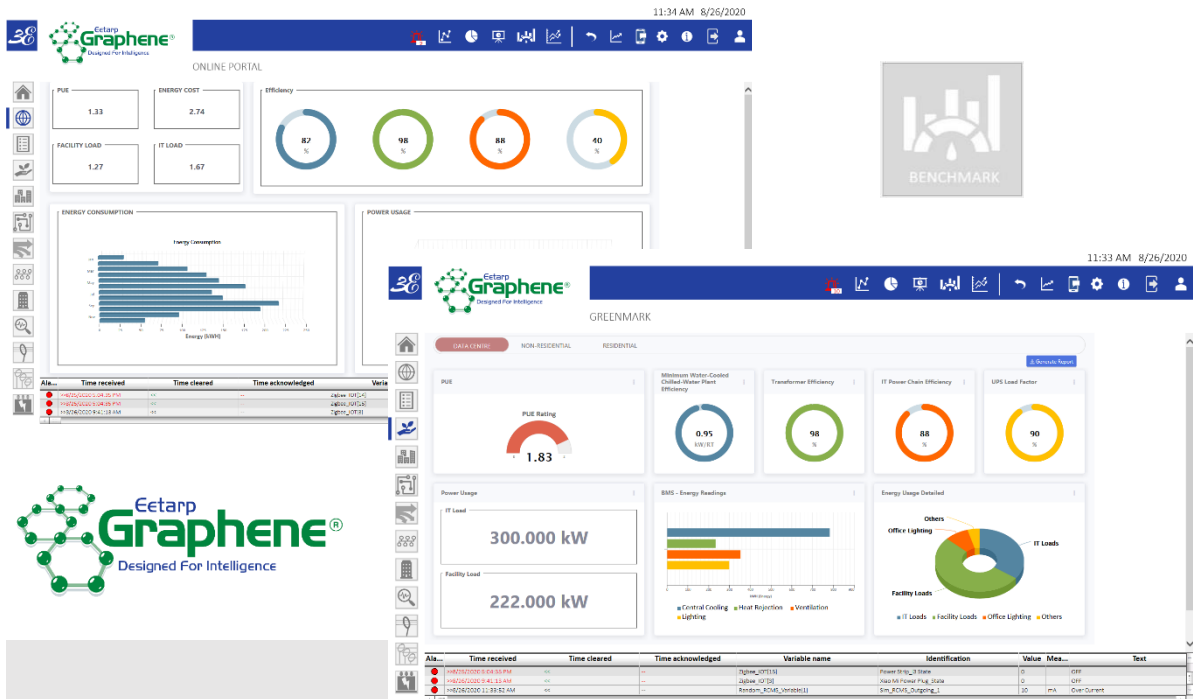
Eetarp provides you with an Energy Management System which uses digital measurement technology consisting of an accurate energy meter with a powerful monitoring software and an automated reporting system. Our system collects real-time information on energy consumption, shows you detailed energy allocation and assist you in identifying inefficiencies in energy utilization in your company. It provides you a report to inform you when and which area in your site is using the highest power.

Benefits

With the help of our team of experts, we will ensure that your company is making progress towards energy-saving targets and becoming more energy-efficient. We are committed to assist your company in the following:

- Allocation of energy resources
- Detection of abnormal energy consumption that may be due to fault equipment
- Maximal utilization of the existing design
- Reduction of maximum energy demand
- Avoidance of over design in case of expansion
- Extension of equipment life through understanding the energy load
- Provision of automatic meter reading for sub-meter billing

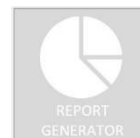
ENERGY MANAGEMENT



Solutions

Graphene is a modular and scalable management system for various applications. It not only assists in detecting potential failure but also enables to diagnose and analyze the potential issue in order to increase the overall system reliability and efficiency. At the same time, it presents meaningful information with a highly customizable report function. This gives you an in-depth insight into your system's entire data at any time, with real-time monitoring, alarming, and analysis. Whenever and wherever needed.

It is optimized to provide the fastest turnaround time for the project implementation and allows you to customize the system based on personal needs by selecting the required modules.



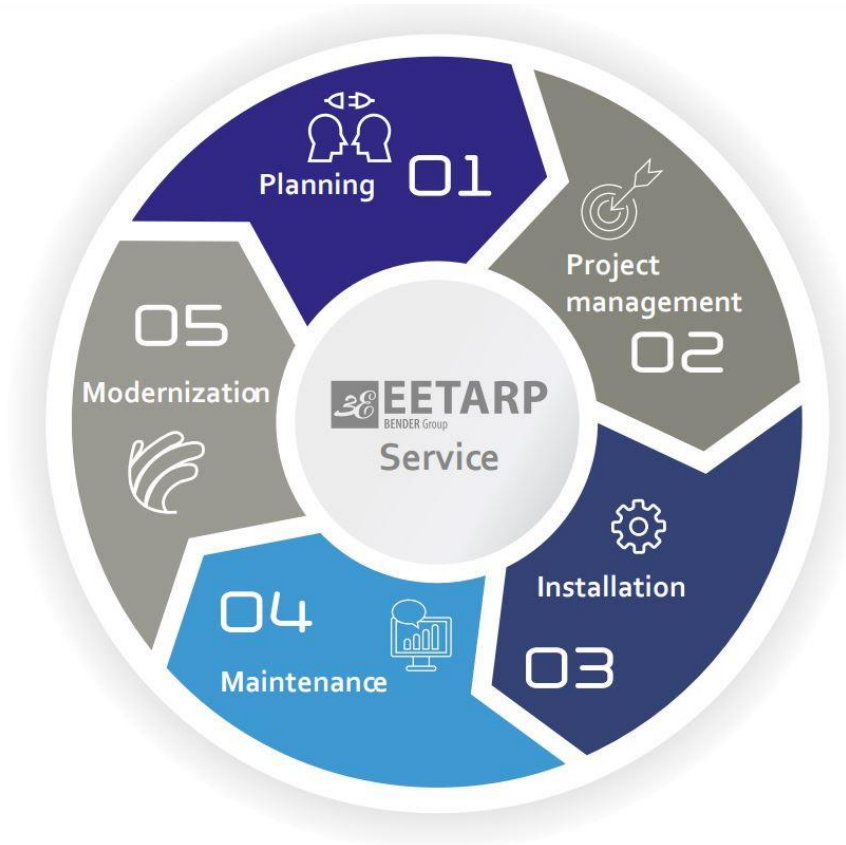
First Class Service

We at Eetarp believe that Quality start at the planning and continues with the maintenance after the implementation. Therefore, we not only focus on high quality solutions we also want to serve you for the other challenging areas like the planning, project management or modernization.

In all phases of your undertaking we assist you with our extensive know-how and ensure flexible and first-class service.

Our promise:

- Easy selectable and flexible service contract which perfectly fits your needs
- High availability of your system thanks to a quick and competent response
- High Quality support in all levels – from the planning stage to the implementation
- Best Consultation – Our focus is to provide you the best solution



We offer a wide array of **services and trainings** to our clients.



Voltage Dip

Voltage dip simulation test according to SEMI F-47 test



PQ Monitoring

Onsite power quality and inrush current measurement.



Troubleshooting

Root cause analysis and mitigation solution



Earth Fault Detection

Online earth fault detection and location.



Maintenance

Comprehensive and non-comprehensive maintenance



Safety Test

Electrical safety test in accordance to IEC60601-1/IEC62353/DIN VDE 0751



Power Compensation

Reactive power compensation and harmonics filter sizing.



Preventive Survey

Infrared thermographic scanning for preventive maintenance and energy saving.



Testing & Commissioning



Industrial Training

Industrial stand communication and software design and application



Electrical Safety Training

Theory, design and protection of IT (Ungrounded System) and TN/TT (Grounded System)



Power Quality Training

Power Quality problems and the mitigation solutions



YOUR RIGHT SOLUTION



Eetarp Engineering Pte Ltd

11 Woodlands Close, #08-13 | Woodlands 11
Singapore 737853
Tel: +65 6339 3651 | Fax: +65 6339 3667
Email: contact@eetarp.com
CRN: 200001617K

Eetarp Power (M) Sdn Bhd

A-5-11, Blk Allamanda
10 Boulevard, Lebuhraya Sprint
PJU 6A 47400, PJ | Selangor, Malaysia
Tel: +603 7729 3973 | Fax: +603 7729 8973
E-Mail: contact@eetarp.com
CRN: 1205228 P

www.eetarp.com