SEACON BANGKAE
A new shopping centre with CIRCUTOR energy management system

Located on the Petchakasam road, the main artery of Bangkok West, Seacon Bangkae is a 6 floor shopping and leisure centre opened to the public in September 2012.

The 300,000 m² centre was built by the company Seacon Bangkae Co., Ltd, and current energy needs in which energy management is essential for any business or company was a major consideration.

With a total rentable area of 170,000 m², divided into 11 major owners and more than 300 shops which consist of:

- Hotel
- Gym
- Restaurants
- Supermarket
- Small clothing, fashion and accessory shops.

In a shopping centre of those dimensions with such a high number of tenants, it is vital to have measuring units and energy management software that provides the partial consumptions of each of the establishments easily and quickly.

The project, which was undertaken by AVERA, used more than 1,000 measuring units consisting of power analyzers and energy meters.

This means that each tenant can know the energy consumption of their establishment at any time.

The information is sent via an Ethernet communications network and Modbus/RTU to a central computer where the PowerStudio SCADA Deluxe management software is located, which centralises all the shopping centre’s energy data.

This centralised energy management not only includes all the various leased premises but also the energy consumption of the whole 130,000 m² that make up the common areas and car parks.
Energy supervision, maintenance, allocation of costs, with CIRCUTOR’s equipment and other equipment with Modbus communications.

As well as all the features offered by PowerStudio SCADA, the DELUXE version aims to cover devices with standard connections. The PowerStudio SCADA Deluxe version, as well as incorporating all the CIRCUTOR drivers, features generic connections, with the aim of being able to communicate with other devices that respond to the Modbus RTU or Modbus TCP protocol through a generic UDP, TCP connection or, in consequence, Modbus TCP.

As well as being able to establish such connections, it can program the memory map of any device on the market with Modbus communications through the generic driver assistant. In other words, the user can define the registers desired from the Modbus equipment one by one, thus defining a new driver adapted to the application’s needs.

Both numerical and binary variables can be configured in the generic Modbus driver.

Once the registers are entered in the Modbus driver, said variables can be registered as historical records and can be used to create SCADA monitoring screens, generate tables and graphics, parameterise alarms and implement customised reports.

Once the variables are integrated in the system, they can be exported to other systems via XML and even through OPC with the additional OPC Server module or the data rate of PowerStudio SCADA Deluxe can be converted to SQL with SQL Data Export.

This complete application draws on the power of the management software and its versatility, as it integrates the SQL Data Export tool for generating a SQL database of all the data recorded by the measuring units, integrating them if required in your management ERP. This allows the user to use the data in the most effective way possible.

A professional company with more than 15 years experience in the Thai electrical market, AVERA Co, Ltd specialises in the distribution of electrical equipment for main and secondary electrical distribution panels (MDB and SMDB), applications in power control, measurement equipment and low voltage protection.

Recognized in the Thai electricity sector as “the best alternative” in the distribution of quality electrical equipment that best meets customer needs, while respecting commitments in a timely manner.

Avera fully appreciates and actively promotes the importance of good energy management, having installed energy management systems for several infrastructure projects for large consumers and major users of electricity.

By employing the latest offerings in measuring equipment and intelligent energy management software, the monitoring and supervision of energy consumption and the detection of consumption abnormalities/wastages is enabled, resulting in substantial energy savings and greater efficiency in the management of plants and facilities.

Consistently providing high quality products and services to customers is the single most important business objective for Avera, achievable through responsibility, dedication, teamwork and commitment of all management and staff at Avera.