Largest Philippine Transformer and Switchgear Manufacturer Meets Customer Demand With EIG Shark® Series Meters

BACKGROUND
First Philippine Electric Corporation (First Philec) is the intermediate holding company for all manufacturing investments of First Philippine Holdings Corporation (First Holdings). They are a leading manufacturer of distribution transformers, switchgears and panel boards in the Philippines.

Through First Philec, First Holdings intends to grow its investments in manufacturing by providing a more robust infrastructure to the country’s economy. Their goal is to be technologically competitive and add value to products and manufacturing services in their market.

THE CHALLENGE
First Philec wanted to grow their market share by building on their core strength in manufacturing operations excellence. The subsidiaries under the electrical and electronics divisions have consistently been the leaders in their industries.

To meet this goal the Quality Assurance Supervisor, Engineer William Bolaños, formed a group to review metering specification requirements. They found that their existing meters were not up to industry standards. They needed to upgrade to present metering standards and provide open protocol communication for a seamless SCADA integration. These were the criteria for First Philec:

- 0.2% accuracy
- Open protocol
- SCADA Ready
- Grid compliant
- Communication Ready
- Reliable
- Competitively priced

Project Thumbnail

Application
Shark®100 Power Meters

System
RS485 allows communication using MODBUS protocols

Benefits
Updated the infrastructure to meet industry standards without going over their budget
**SCADA READY SOLUTION**

After a thorough evaluation, First Philec chose Electro Industries’ Shark®100 Series meters to be their standard meter for switchgear and panel metering applications.

First Philec chose the Shark®100 meter for these features:
- 0.2% Class Revenue Certifiable Energy and Demand metering
- Meets ANSI C12.20 (0.2%) and IEC 687 (0.2%) Classes
- Multifunction Measurement Capabilities
- Power Quality Measurements (%THD and Alarm Limits)
- Large LED Display
- % of Load Bar
- RS485 MODBUS and DNP 3.0 protocol
- Ultra compact and easy to install
- Fit both ANSI and DIN cut-outs

The Shark®100 meter interfaces seamlessly with most Building Management Systems (BMS) and SCADA via MODBUS TCP/IP and MODBUS RTU. In this installation, EIG’s simple-to-use RS485 MODBUS protocol allowed First Philec to integrate the Shark®100 meters into existing building automation systems for real-time telemetry to their central control center.

Other important advantages of the Shark®100 meter included the meter’s V-Switch™ Technology which allows users to upgrade and add features with communication commands, even after the meter is installed.

The economically priced Shark®100 meter provided First Philec with the perfect solution for comprehensive power quality monitoring and system events recording needs. The meter’s retrofit capability enabled their team to take advantage of existing panel footprints.

**SATISFIED RESULTS**

First Philec was very satisfied with the performance of the Shark®100 meters. The meters exceeded their expectations in meeting industry standards. The integration went seamlessly, even in third-party installations, via MODBUS open protocols. The Shark®100 meter’s exclusive design and high performance features made the integration and project realization a cost-effective success.