

# MOXA SOLUTION FOR POWER METER MONITORING

USING MOXA PROTOCOL GATEWAY FOR POWER METER MONITORING

**APPLICATION:** 

**INDUSTRY:** 

**REGION:** 

EDMI Meter Monitoring for Renewable Energy System

Renewable Energy System

Philippines

# SYSTEM REQUIREMENTS

- Modbus Gateway with RTU Slave Mode capability.
- Industrial Grade and Rugged design to withstand harsh environmental conditions, such as high temperature and humidity.

# WHY MOXA?

- All Moxa Protocol Gateways come with a 5year warranty and long MTBF (Mean time between failures), making them ideal for missioncritical applications such as in Manufacturing plants.
- Moxa provides a complete solution of industrial networking solutions.

### INTRODUCTION

Captured Energy Green Solution Inc. is an engineering and design firm that aims to provide Value–Designed Engineering to make life better. They work towards providing their clients cost–effective solutions without compromising the standards and quality of products and services. Captured Energy Green Solution Inc (CEGSI) started 2016, providing clients with solutions in lighting. After a year in business, the company then ventured into Renewable Energy by using Solar PV Systems, and ESS for Grids.

## **CHALLENGE**

At first, CEGSI tried to connect EDMI MK31 Power Meter to Moxa NPort 5150(serial to ethernet). No data can be polled from the meter to the SCADA software. Manila eTECH technical team tried to check the datasheet of the EDMI MK31 power meter and found out that the communication is based on Modbus RTU protocol. That is the reason why there is no response from the Master query(SCADA) to the slave device(Power Meter).



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## **MOXA SOLUTION**

Manila eTECH offer CEGSI to use Modbus Gateway (Mgate MB3170) for their application. CEGSI tried to replace the NPort 5150 with MGate MB3180 and and after which they can poll modbus data from the slave device (Power Meter). Moxa MGate MB3180 provide the solution with the capability of Modbus RTU Slave Mode that polls data from the EDMI Meter to the SCADA software. Moxa MGate MB3180 also is capable of withstanding high temperature (up to 75 degrees) and humidity. With the Moxa solution, the SCADA software can now obtain data at real time.

**SCADA Software** 

LAN RS 232

