Remote Monitoring system for solar photoelectric generator system by IoT utilization

**Realization contents**
Data collection and operation status of each of the solar panels installed are collected on each local control panel. Information on all the local control panels is collectively collected from the main control panel, and the power generation amount and operation status of all the solar panels are displayed on the HMI. At the same time, it was possible to monitor the status of the entire photovoltaic power generation system in real time from remote information collecting terminals (PC etc.) at remote locations via the Internet.

**Effect and merit**
Since the solar power generation system has various diversity, such as the number of installed solar panel devices and the configuration of the solar panel, in this system, the system construction is realized flexibly by configuring the network system by distributing it to the main control and the local control. It is possible to do. In addition, our PLC is equipped with various communication ports (RS485/RS232C serial port, Ethernet port) as standard and program tools for sending and receiving data to and from PLC and touch panel from the PC side (upper information collecting terminal) are prepared free of charge, it is possible to construct a network system without generating special additional expenses.

- Data logging for FC6A Master PLC and PC read periodic these data.
- Web server function via IE browser.

[Diagram showing network system and solar panels connected to control panels and HUB via Modbus-TCP and FC6A.]