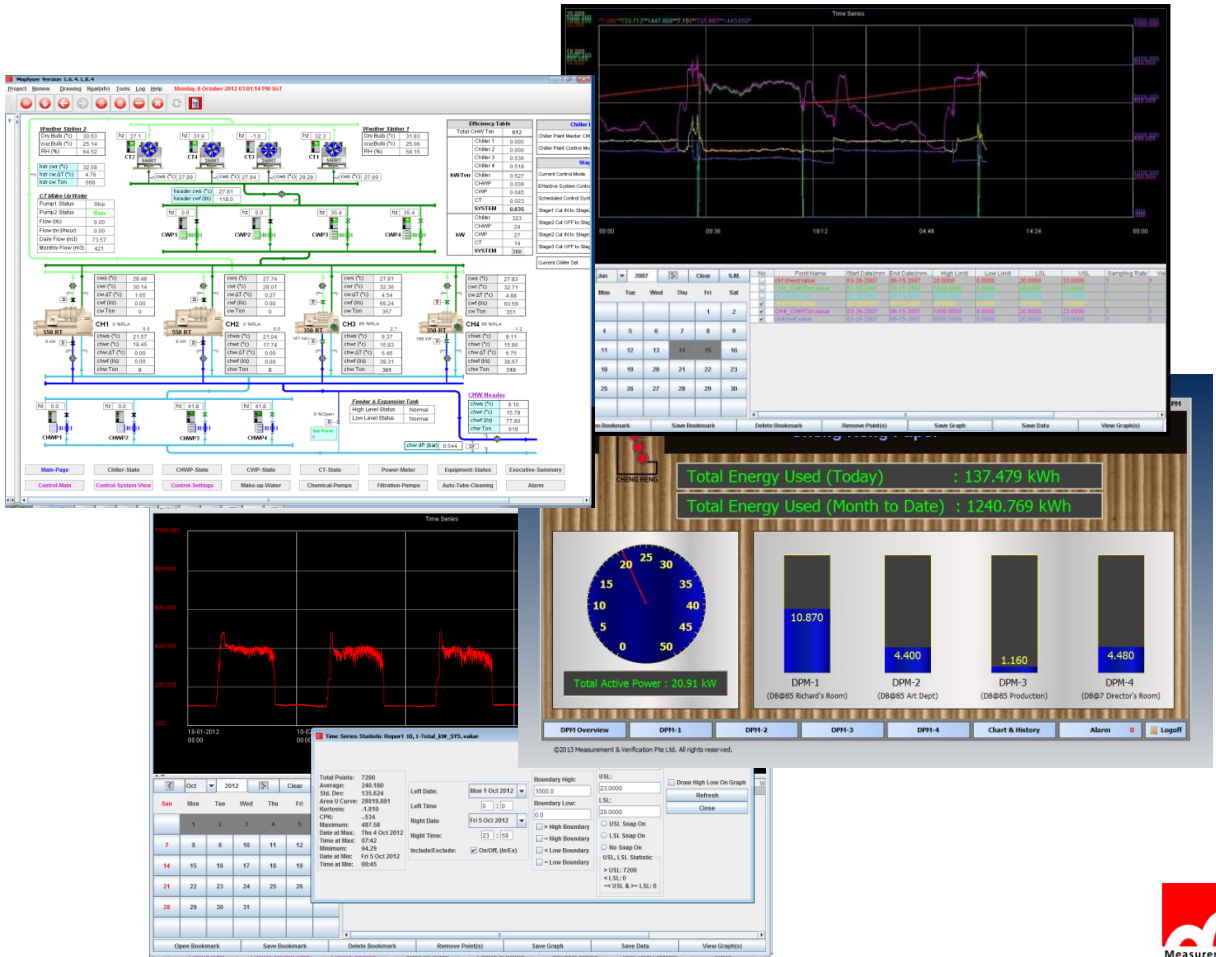


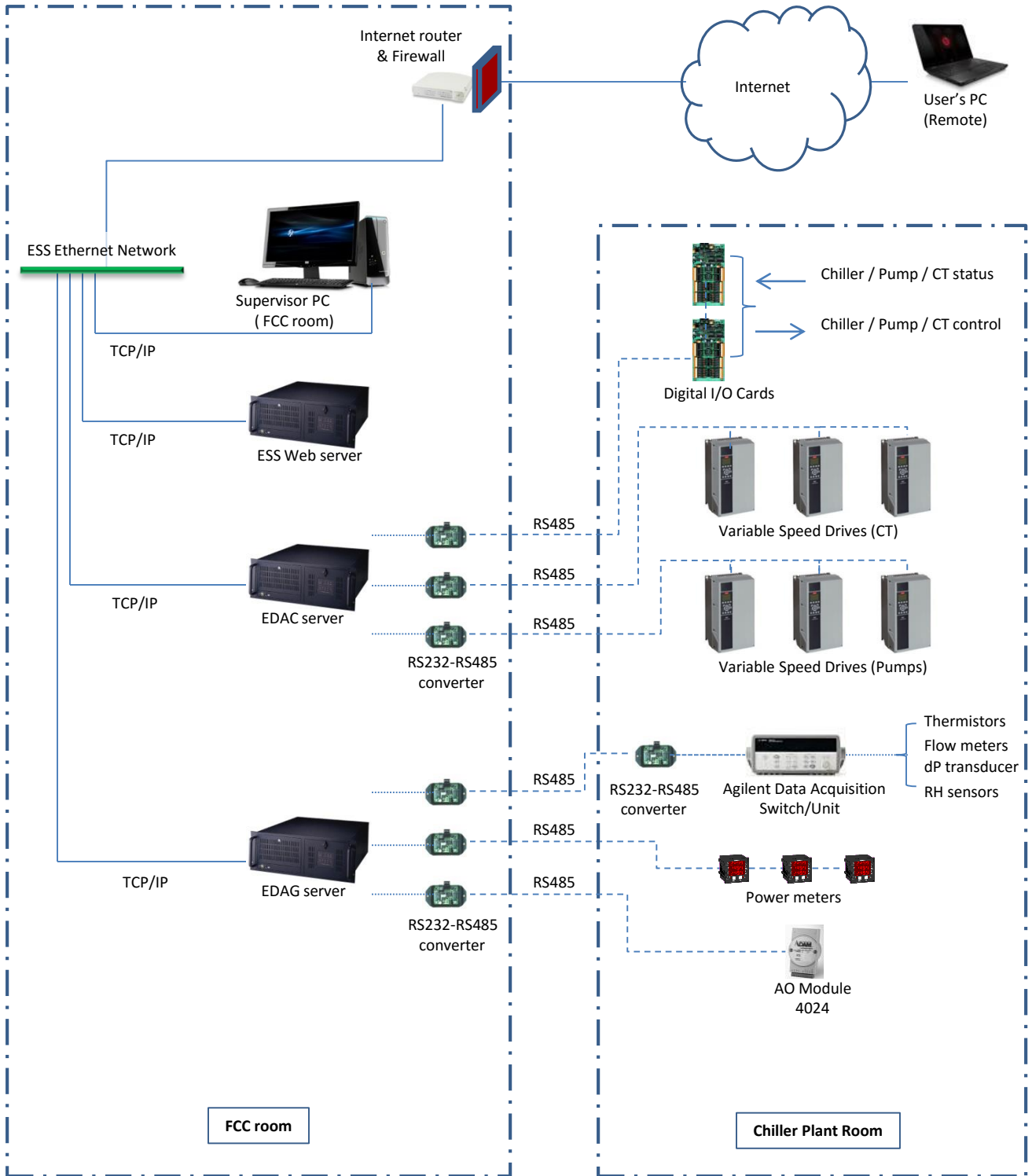
Energy Efficiency Management System (Chiller Plant)

ESS (Chiller Plant) is a Facility Monitoring and Control System with Energy Optimization concepts and features. It provides a user interface tool to manage gigabyte-sized time series data sets, and transform them into information to produce an easy-to-use data visualization package we call Maplyser. The following are highlighted features from ESS(Chiller Plant).

- Online Monitoring, Control and Analyze through LAN or WAN connections.
- Automatic Data logging and archiving (in one minute interval resolution) for several years.
- Collect data from data acquisition system that use very accurate sensors and Agilent Data Acquisition System
- Translate large quantities data into usable information data
- Visual Human Machine Interface (HMI) – mapping points to machine and schematic layout.
- Real time data update (5, 15, 30, 60 second interval)
- Real time statistical analysis
- Historical Data Access and Analysis via four type of graph (Time series, XY, XBar/RBar, Psychrometric)
- Weekly based Scheduling
- Set-point changes and Control Logic sequencing.
- Automatic Optimization control feature (e.g. Cooling tower optimized to wet bulb temperature).
- Powerful control programming facilities can handle very complicated control logic.
- Latching to last value on control equipment's failure (e.g. power trip)
- Trust worthy data because of high accuracy sensors and high A/D bit data acquisition system (e.g. Temperature of branches from common header should have the same temperature).
- Alarm on screen, via SMS, by Email. Alarm acknowledged by local terminal, SMS or web.
- Alarm and event log



Typical EEMS (Chiller Plant) Structure



Legend

- Ethernet
- - - RS-232
- . . . RS-485