EMS

Monitoring distribution of substations
(remote Data Gathering of 20 KV feeders and transformators)
With advanced electricity market module and dispatching module or by Webservices

Overview

Web-based Distribution Monitoring Software (EMS) designed and manufactured for reading, remote control and information management of Distributed Post Meters. In this system, by communicating bilaterally with the power meters and using the DCU module, information about the meters is received and stored in the software database, the necessary steps are taken to manage the read data. The software also has the capability to collect and monitor the meters installed at the outlet of the medium voltage feeders and the meters installed at the outlet of the transformer substations.
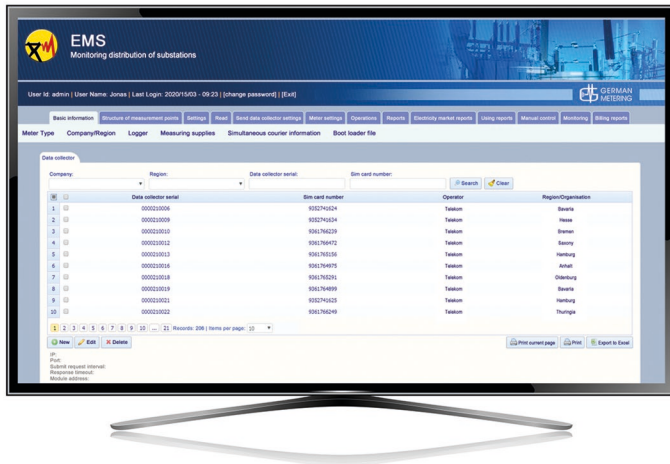
Basic software

▶ No need for physical presence of individuals on various sites, especially far sites
▶ Real-time data collection, information management and display, and alarms detection
▶ Receive information from meters simultaneously and in a short time
▶ Speed, accuracy and efficiency in reading feeders and transformators
▶ Ability to link to other softwares

Advanced Electricity Market Module

▶ Ability to calculate post error based on feeders and transformators energy
▶ Calculate the consumption requirement based on the energy received from the blackout system
▶ Ability to archive and report data in a database
▶ Ability to report and interact with other software through web service
▶ Send specified commands to the device through the software to enable outputs such as connect and disconnect power outage

Dispatching Module

▶ Monitoring feeders and transformators load on single line map
▶ Ability to archive and report information in a database
▶ Determine the connection status of modems to the communication service graphically and report
▶ Ability to report and interact with other software through web service

WEB-BASE
ACCESS LEVELS
DATABASE DEVELOPMENT
REPORT GENERATOR

GM-0837-2003-PB-00

ROHS CE

Basic Software Features

Automatic and simultaneous reading of meter parameters every hour of the day

Ability to define specialized information and hierarchy of electricity market module (company / region / post / feeder / transformator / exchange points)

Connection to DCU with LAN and GPRS communication platforms

Ability to read performance values, load behavior 1 and 2

Advanced Electricity Market Module Features

Ability to receive electricity bills from the office of the network manager and compare it with the calculated energy

Ability to calculate and adjust different types of alarms

Instantaneous data readability

Ability to receive reports	Transformator feeder energy
	Post
	Exchange points
	Region
	Company
Ability to calculate	Post utilization factor
	Feeder load factor
	Courier feeder
	Post courier
	Simultaneous courier

Dispatching Module Features

Ability to design single line map based on standard elements

Ability to display single line map and display read values

Ability to display the status of posts based on feeder disconnect alarms or decrease and increase current and voltage

Ability to send and receive information from software based on DNP3 protocol

Technical Specification

System Architecture	Layered with Logical Sub Systems & SOA
Database	Microsoft SQL Server
Programming language	C#
Framework	.Net Framework 4.5

Software Environment