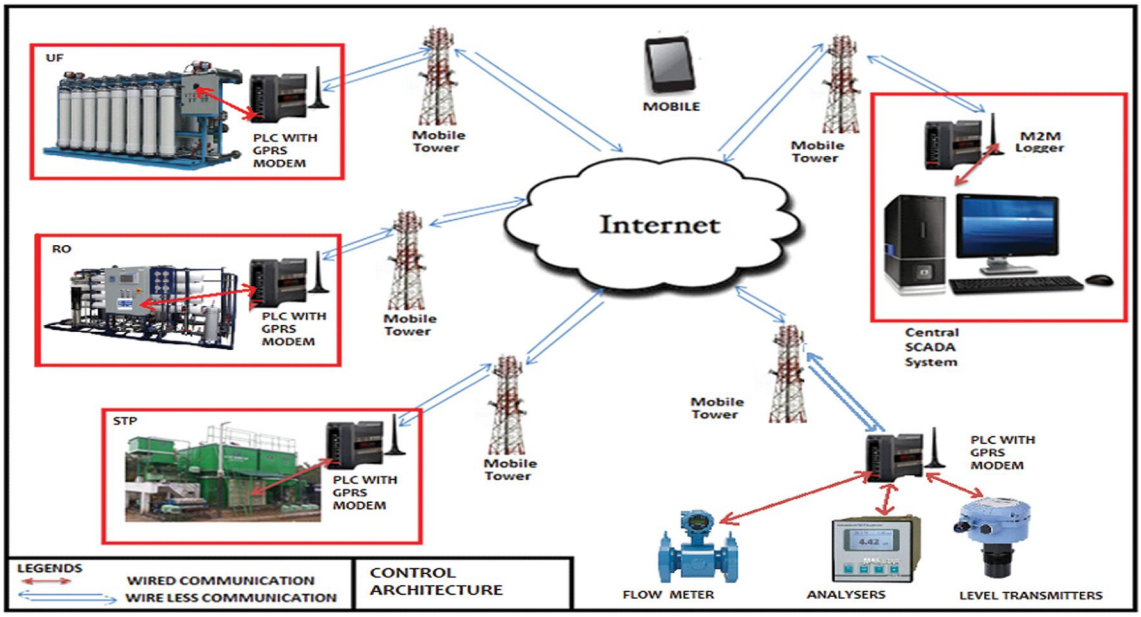
LFIA
Level & Flow Industrial Automation

ISO 9001:2015 CERTIFIED

PLC Automation System



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SCADA, PLC AUTOMATION SYSTEM

SCADA stands for supervisory Control & Data Acquisition but it is term often used for data collection & presentation. Scada is normally a software package designed to display information, log data & show alarms. This can be graphical and tabular and can involve words and pictures. The software would normally be installed on a computer and all the various signals would be worked back to the central point (CPU).
SCADA can be used to monitor and control plant or equipment. The control may be automatic, or initiated by operator commands. The data acquisition is accomplished firstly by the RTU's (remote terminal units). The central host will scan the RTU's will report in data can be of three main types:

- Analogue data (ex – real numbers) will be trended (ex – placed in graphs).
- Digital Data (On/Off) may have alarms attached to one state or the other state.
- Pulse data (ex– counting revolutions of a meter).

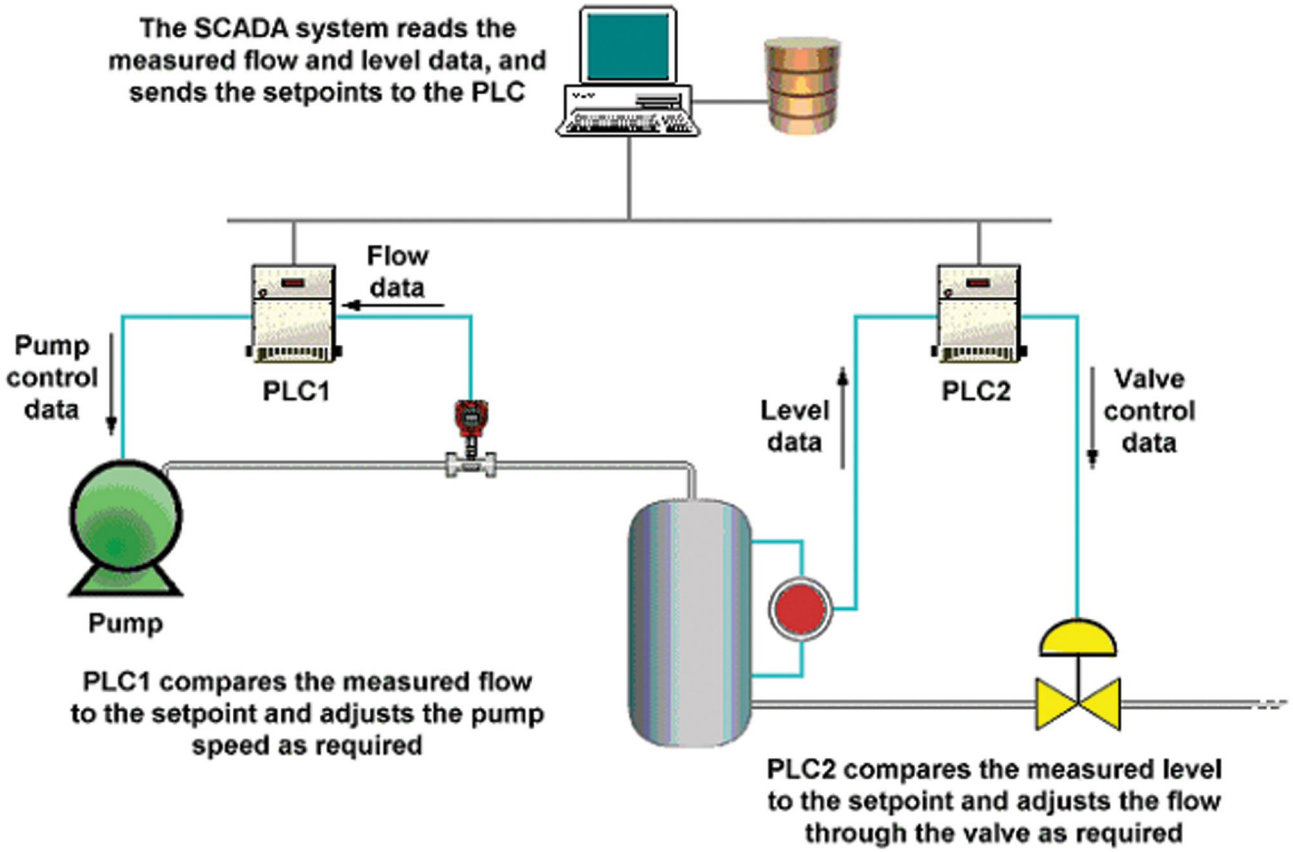
Supervisory Control and data acquisition – SCADA refers to ICS (Industrial Control Systems) used to control infrastructure processes (utilities, water treatments, Waste Water treatment, Gas pipelines, wind farms, etc.) facility based processes (airport, space stations, ships, etc.) or industrial process (production, manufacturing, refining, power generation, etc.)

The following subsystems are usually presents in SCADA systems:

Remote Terminals Units (RTUs) connected to the sensors of the process, which helps to convert the sensor signals to the digital data and send the data to supervisory stream.
Programmable Logic controller (PLCs) used as field devices.
Communication infrastructure connects the Remote Terminals Units to supervisory systems.

GENERALLY, A SCADA SYSTEM DOES NOT CONTROL THE PROCESS IN REAL TIME – IT USUALLY REFERS TO THE SYSTEM THAT COORDINATES THE PROCESSES IN REAL TIME.

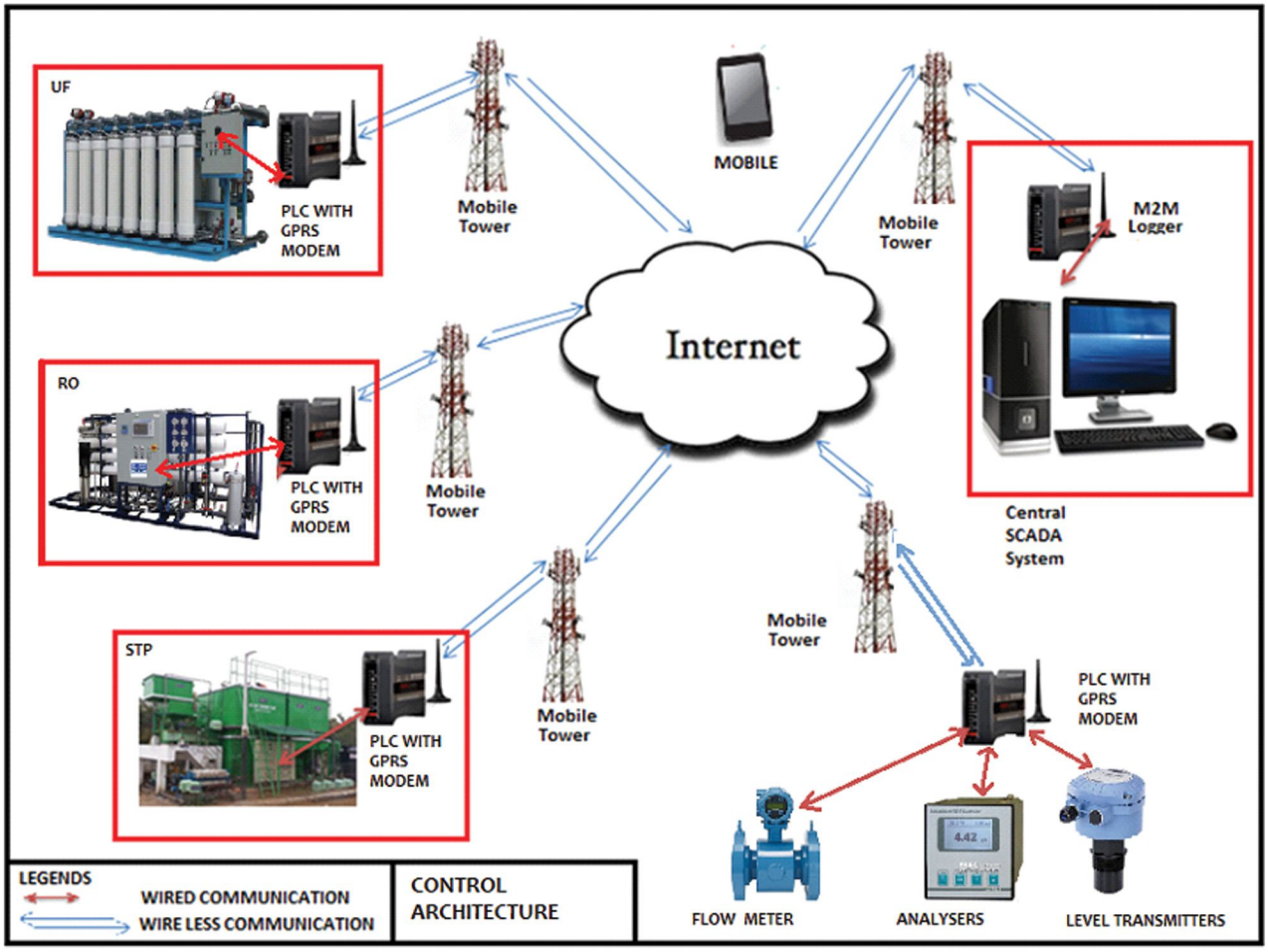
SCADA SYSTEMS CONCEPTS



SCADA refers to the centralized systems that control and monitor the entire sites, or are the complex systems spread out over large areas. Nearly all the control actions are automatically performed by the remote terminal units)RTSs) or by the programmable logic controllers(PLCs). The restrictions to the host control functions are supervisory level intervention or basic overriding. Example, the PLC(in an industrial process) control the flow of water, the SCADA system allows any changes related to the alarm conditions and set points for the flow)such as high temperature, loss of flow, etc.) to be recorded and displayed.

GPRS Based Industrial Remote Monitoring & Control System

Machines and plants are increasingly operated in places which are far away from the place of manufacture. Manufacturers of plants must nevertheless be able to provide support in the event of a fault. Especially during the warranty period this can result in high costs. Tele Service helps to reduce this risk.



Technical Feature of PLC with GPRS Modem

1. Real time data collection from connected equipment's.
2. Controlling and monitoring of STP, ETP, WTP, RO and UF plant from central scada Via GPRS gateway.
3. User can remotely configure the PLC with the help of web graphics at central scada.
4. User can remotely calibrate the analyser with the help of web graphics at central scada.
5. User can monitor the parameter locally through HMI and remotely through central web scada.
6. User can control and monitor through mobile based application on mobile.
7. User can view the reports as per requirement.

PLC PANELS

Programmable logic controller (PLC) control panels or also known as PLC Automation Panel are one of the most important and efficient kinds of control panels. High quality raw material such as stainless steel and mild sheet is used for manufacturing our range of PLC Panels. Our range is tested on various parameters to ensure high quality, before delivering to the clients.

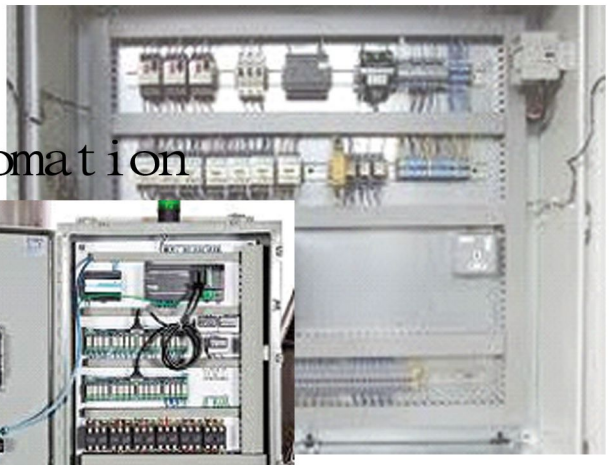
Which are generally used in variety of electronic and electrical circuit fittings. PLC Control Panels we manufacture are highly capable of giving higher output at less power consumption. Integrated with solid PLC logic and flawless PLC hardware programming.

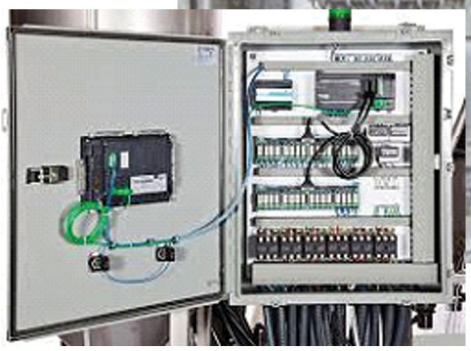
Control panel consist of a controller. Controller may be PLC, DCS, relay or some other type. It gives digital signal input signal to the MCC panel to start the motor. Control panel works based on the PLC /DCS program or the relay logic. Instruments are normally connected to control panel. Indications for the interlocks also will be there in control panel. Nowadays single panel is used of using separate control and MCC panel.

Ease in modification of logic, reduced size, means of remote communications and advances in the technology have made PLC Automation Control Panels an edge over conventional relay based systems. Control Systems Engineers has provided PLC based Panels from PLC of Allen Bradley, Siemens. From small I/O application to the complex I/O systems are provided by the Control Systems Engineers. Control Systems Engineers have developed communication software's for remote communication of the PLC Panels in various different protocols. With PLC based Panels HMI/MMI are provided to provide the operator various messages and controls of the process plants touch screen MMI are provided.

OUR RANGES OF PLC PANELS ARE USED IN FOLLOWING AREAS:

1. Processing units
2. Machine automation
3. Water and waste water automation
4. Factory automation
5. Site supervision
6. Pumping application
7. Commissioning





DESCRIPTION

MCC stands for motor control centre. We provide wide range of Motor Control Panels. Easy to install and operate our panels are extensively recommended by clients owing to its longer service life and robustness. These are compact in size and ensure uninterrupted performance and robustness. These panels are acclaimed for their consistent performance.

It consists of feeders for motors and blowers. Feeders are designed according to the motor rating. In most of the MCCs, auto/manual provision will be there. With manual provision motors can be operated manually. In auto provision external signal is required to start the motor. The signal is given by the control panel. Indicators for the motor operation also will be present in control panel.

FEATURE OF MCC PANELS

1. Optimum quality
2. Rugged construction
3. Durable
4. Easy installation

* (All models may differ in looks & all specification may not be part of every verison)
* (Specification may vary as per different model selected. Some feature may not be there in model selected.)