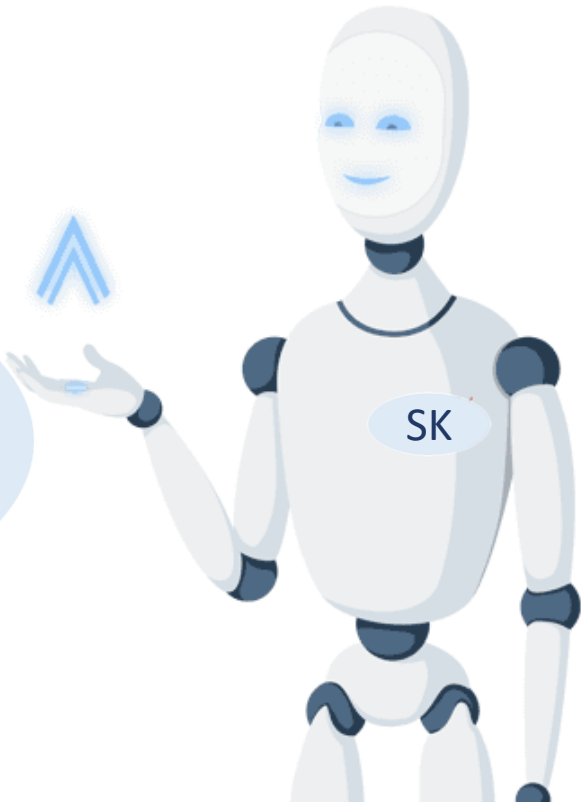
IDACS

Next generation Smart Manufacturing suite commensurate with industry 4.0



IDACS

- Open to easy H/W, ERP and 3rd Party S/W Integration
- Module Based and Multilingual Platform
- Web Based Solution
- IoT Enabled , Cloud Ready and Hybrid Architecture
- Tenant and Entity Based Solution
- In built data Analytics and Reports

- Scheduled and Predictive Maintenance
- Real -Time Reporting and Pictorial Representation on for Analysis
- Condition Based Critical Events Alerts
- RFID or Barcode Based End - to -End Traceability
- Real -Time Dashboards for Shop Floor Visibility
- Real -Time Inventory, Stock, Material Movement Status
- OEE Visibility for Assets Utilization
- Error Proofing and Production Process Interlocking
- Effective Decision Making

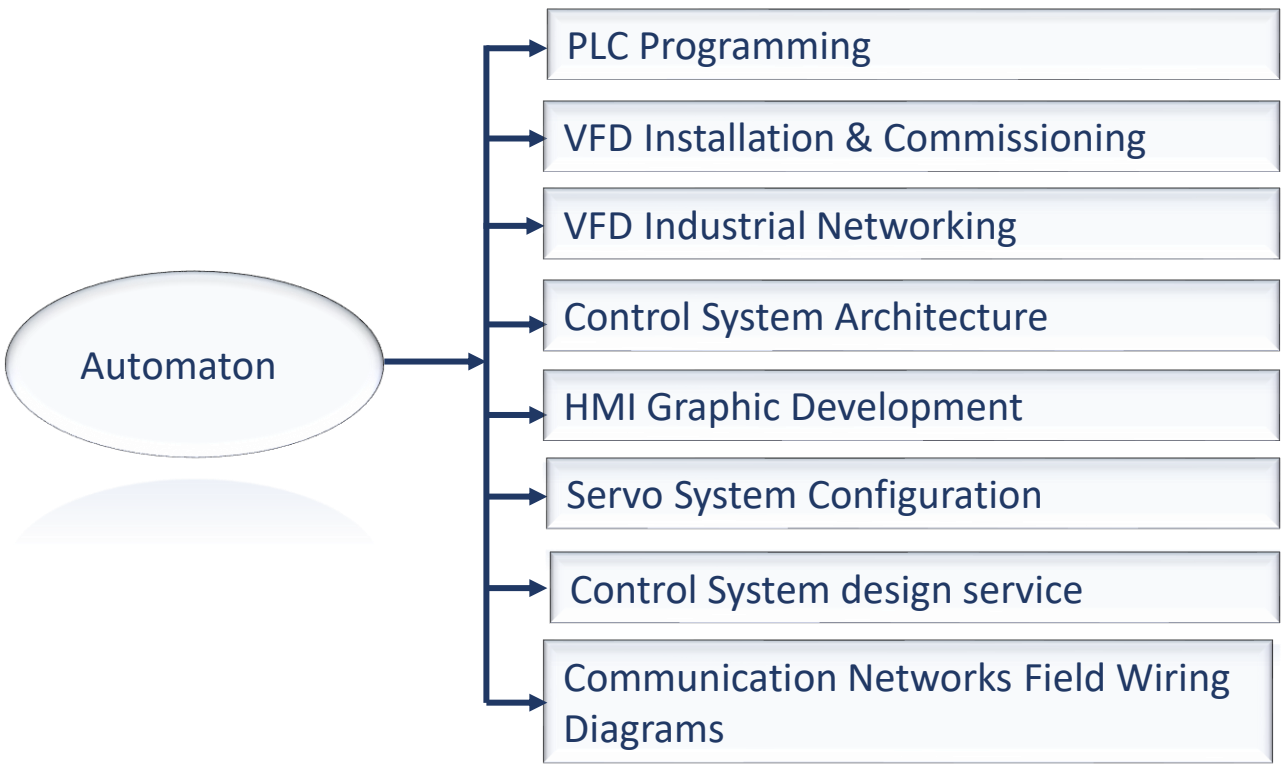
Services

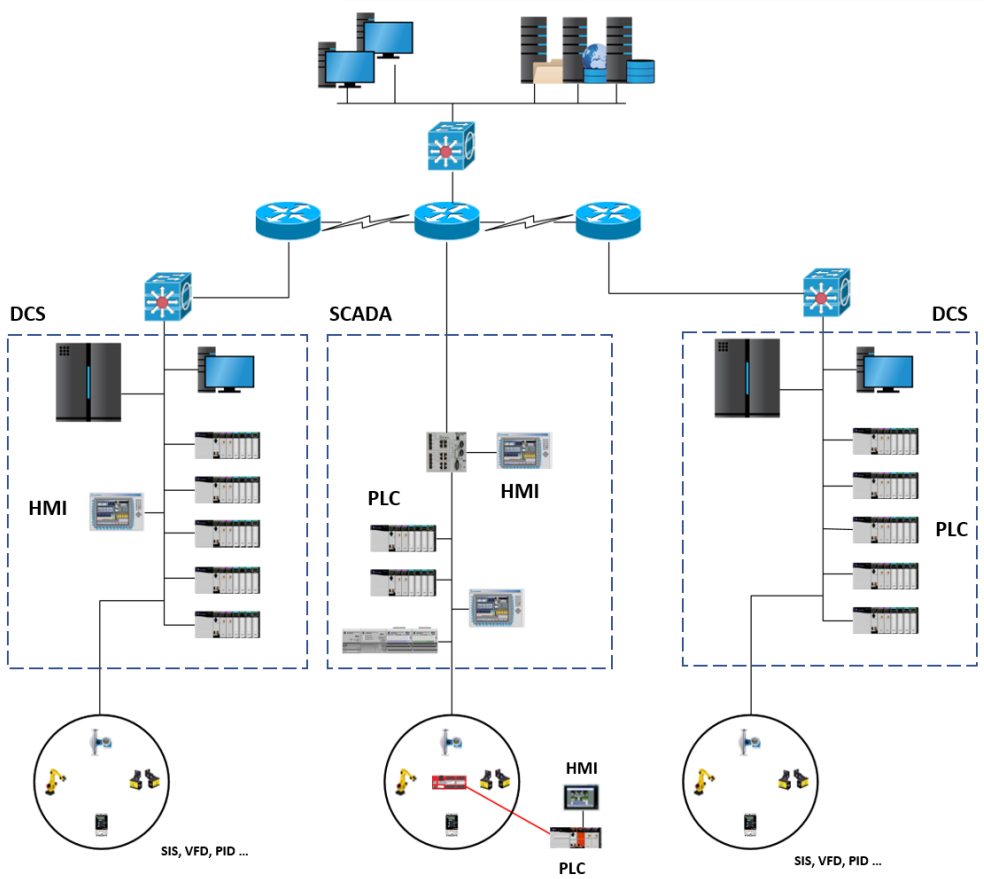
i. Electrical Automation

We provide customer support for industrial automation services such as PLC Programming, HMI Graphic Development, VFD Installation & Commissioning etc.

We are working with major brands such as Mitsubishi, Allen Bradley, Siemens, Omron Delta & Pro-Face etc.

Few of the services we provide are described below:





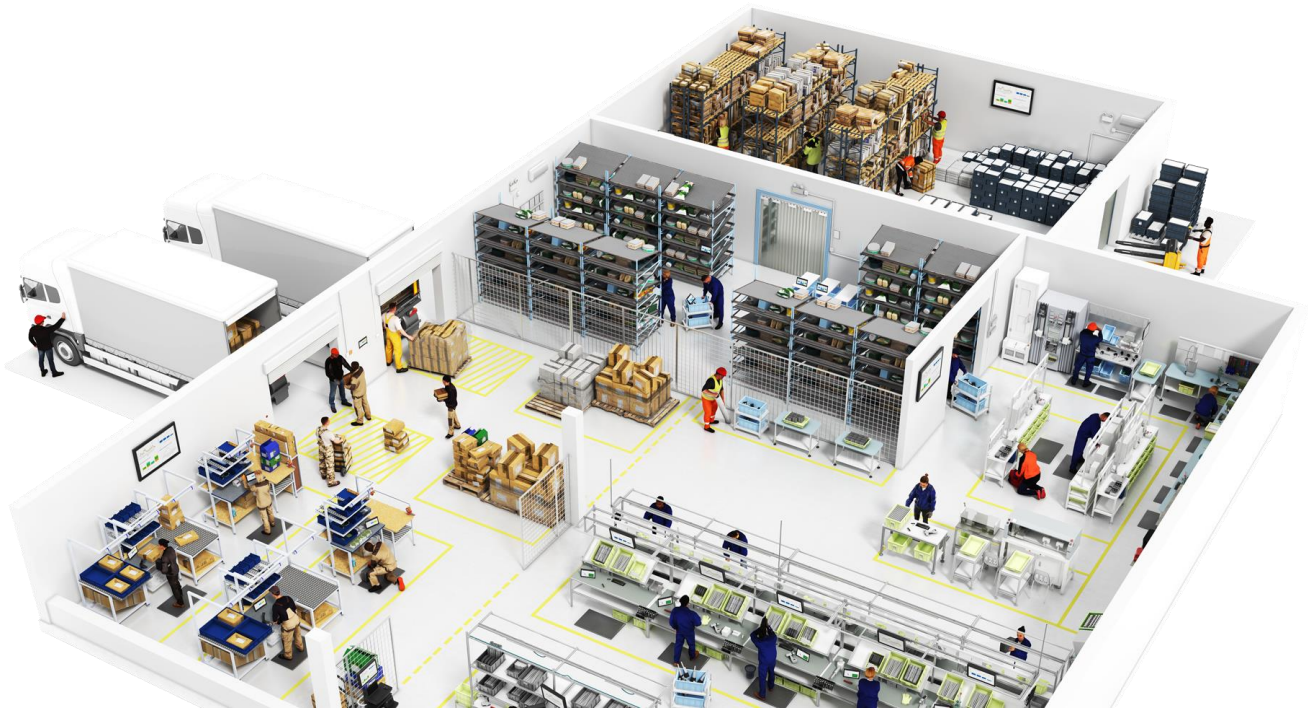
A programmable logic controller (PLC) or programmable controller is an industrial computer that has been ruggedized and adapted for the control of manufacturing processes, such as assembly lines, machines, robotic devices, or any activity that requires high reliability, ease of programming, and process fault diagnosis

A variable frequency drive (VFD) is a type of motor controller that drives an electric motor by varying the frequency and voltage of its power supply. The VFD also has the capacity to control ramp-up and ramp-down of the motor during start or stop, respectively.

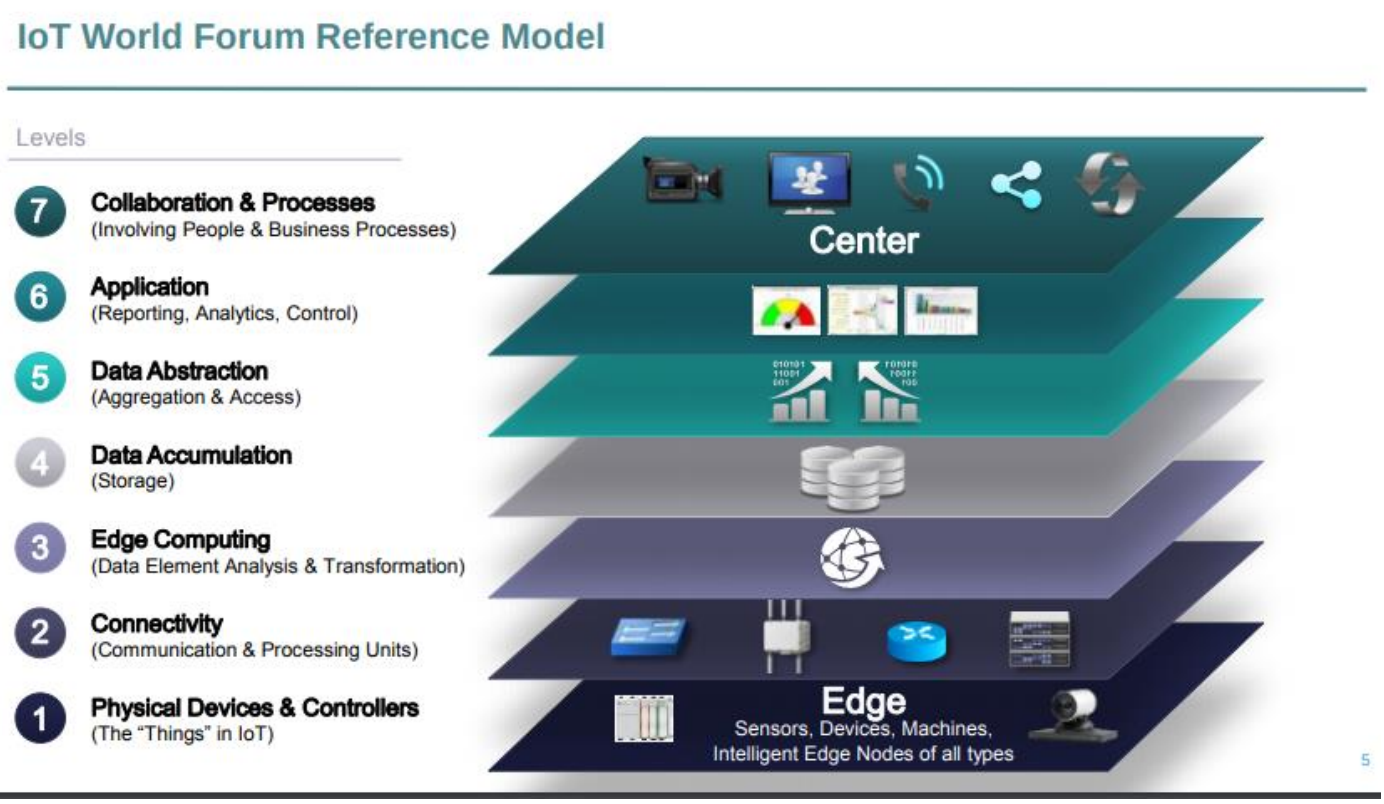
The automation cannot be brought to life and properly maintained for years without a proper control panel design. The design could be a sketch or created using graphical software to get the lines on paper, but preferably CAD or electrical CAD is used to create it

Ethernet is a family of wired Computer networking technologies commonly used in local area networks (LAN), metropolitan area networks (MAN) and wide area networks (WAN). It was commercially introduced in 1980 and first standardized in 1983 as IEEE 802.3. Ethernet has since been refined to support higher bit rates, a greater number of nodes, and longer link distances, but retains much backward compatibility.

IOT SYSTEM & SMART FACTORY



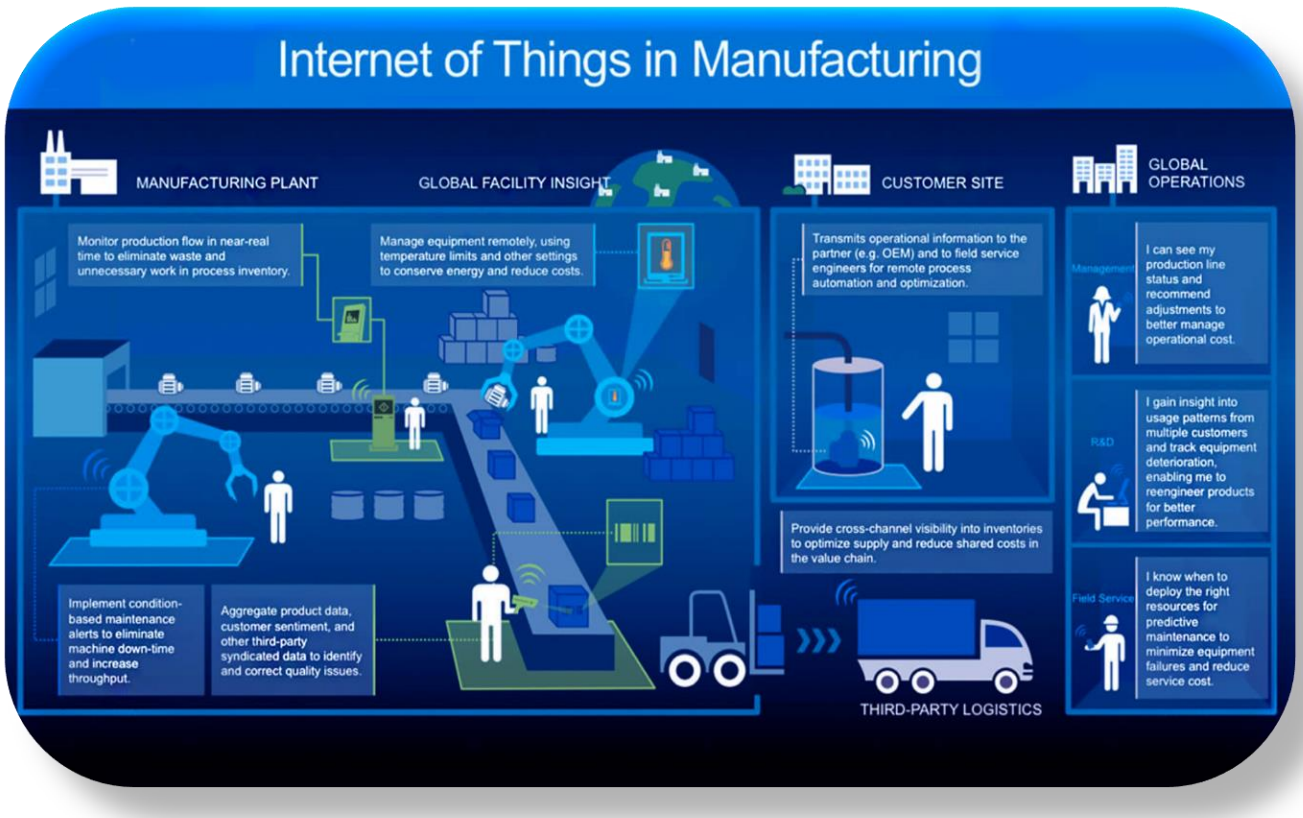
IIoT, smart manufacturing, digital factory, digital plant, connected industry, Industry 4.0, intuitive industries. No matter what you call this disruptive transformation of industry, it offers — through the power of sensors, secure connectivity, and an IIoT platform — improved productivity, efficiency, sustainability, and cybersecurity across both new and legacy manufacturing facilities.

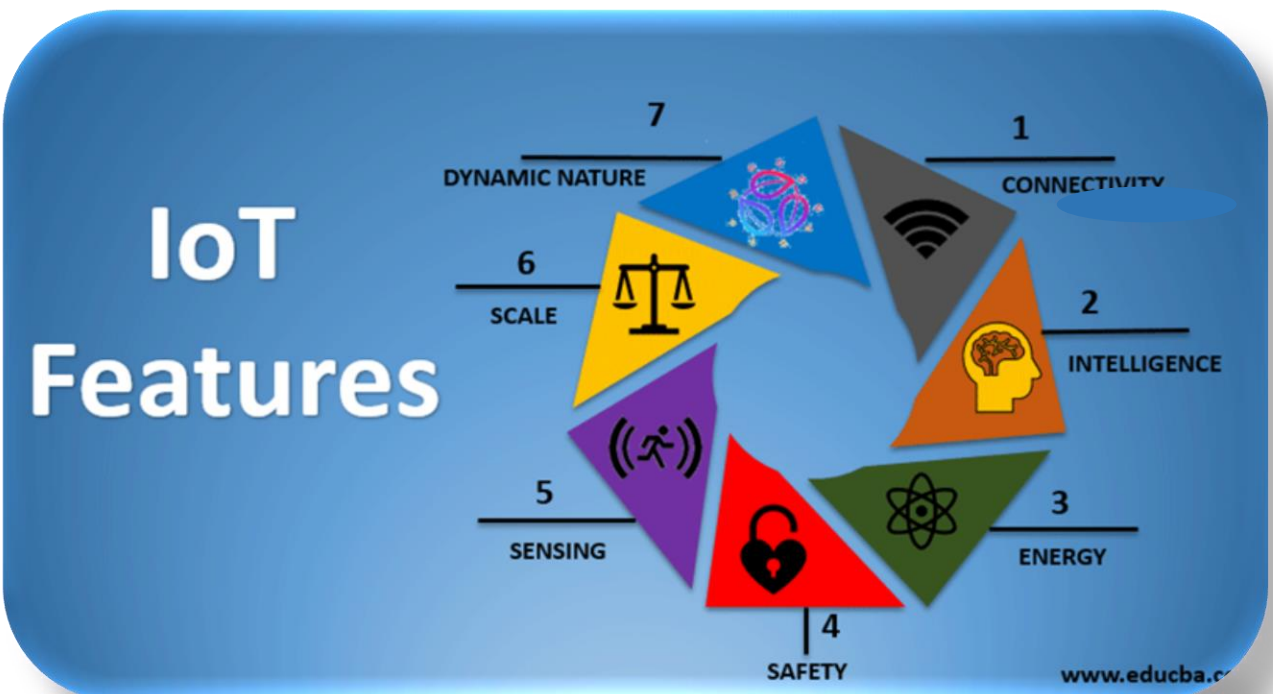


Industrial IoT Applications

For long time industries and plants have had sensors and systems to track progress but IoT takes a step further and provides intricacies to even the minute problems.

- Digital/Connected Factory
- Facility Management
- Production Flow Monitoring
- Inventory Management
- Plant Safety and Security
- Quality Control
- Packaging Optimization
- Logistics and Supply Chain Optimization

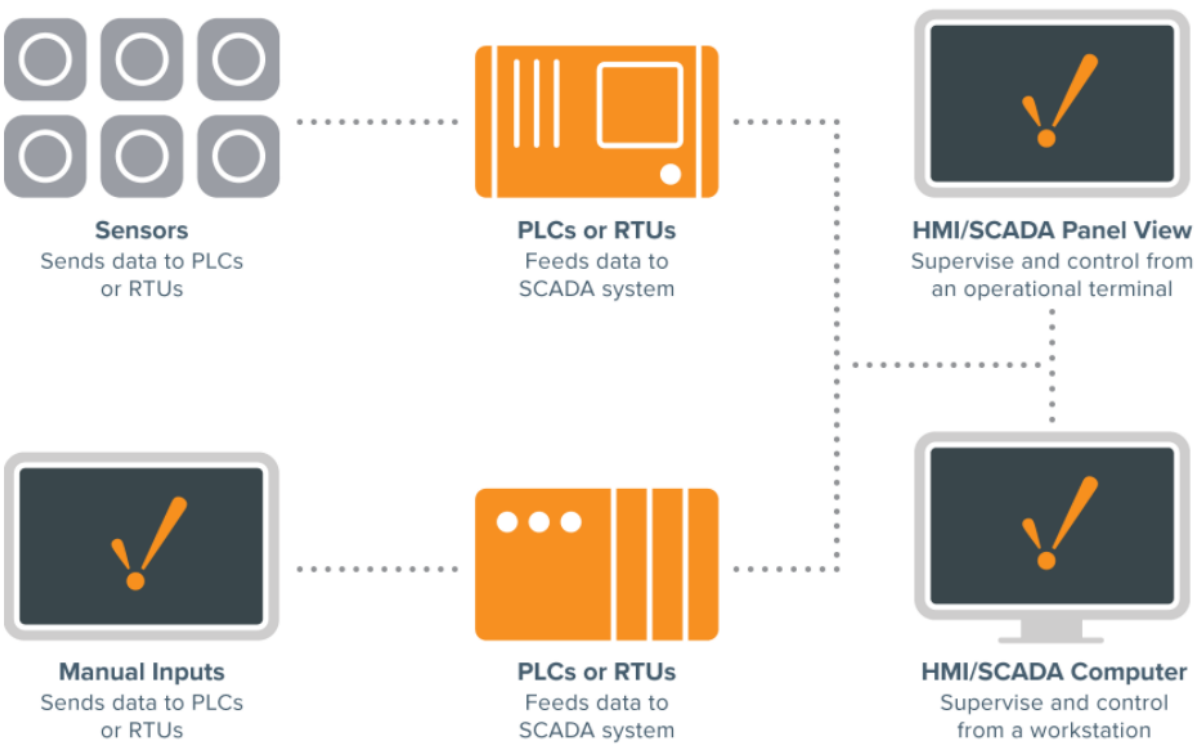




SCADA SYSTEM

Supervisory control and data acquisition (SCADA) is a system of software and hardware elements that allows industrial organizations to:

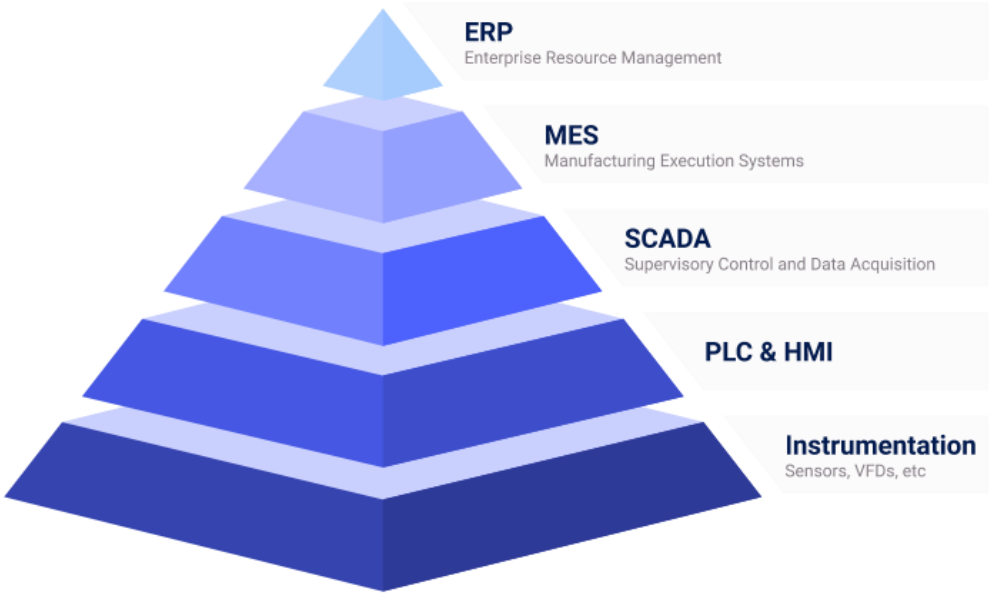
- Control industrial processes locally or at remote locations
- Monitor, gather, and process real-time data
- Directly interact with devices such as sensors, valves, pumps, motors, and more through human-machine interface (HMI) software
- Record events into a log file.



WHO USES SCADA

SCADA systems are used by industrial organizations and companies in the public and private sectors to control and maintain efficiency, distribute data for smarter decisions, and communicate system issues to help mitigate downtime. SCADA systems work well in many different types of enterprises because they can range from simple configurations to large, complex installations. SCADA systems are the backbone of many modern industries

The Automation Pyramid



Industrial Automation

Enterprise Level Controls

- Product Lifecycle Management (PLM)
- Enterprise Resource Planning (ERP)

Plant Level Controls

- Sensor Human–Machine Interface (HMI)
- IoT Supervisory Control and Data Acquisition (SCADA)
- Distributed Control System (DCS)
- Programmable Logic Controller (PLC)
- Others

Instrumentation

- Robots
- Machine Vision
- Relays & Switches
- Sensors
- Motors & Drives
- Others