



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous)

Report of the Event

Title of the Event: Workshop on Industrial Automation- PLC and SCADA

Organized Date: 3rd November 2015 to 4th November 2015

Summary: An Industrial Control Systems(ICS) typically consists of the specialized computer called Programmable Logic Controller (PLC) which connects directly to instruments, valve actuators, pump motors, robotic machine actuators, and whatever equipment is needed to implement some process. In turn the PLC communicates over a network and telecommunications lines with other PLCs, graphic operator interface panels, and with a SCADA central command center. PLCs are programmed in a specialized language that mimics relay logic and also provides automated control functions to manage pressure, flow, temperature, motion control, and all process variables. Historically, automated control functions were accomplished with discrete controls, either mechanical, pneumatic or electronic. Today, most of that functionality is accomplished in the PLC with software.

A Remote Terminal Unit (RTU) is a device, that is not unlike a PLC, which provides the interface between an item of equipment and the SCADA system. While a PLC is multipurpose and programmable and expandable, the RTU typically is designed for a specific narrow purpose and lacks programmability.