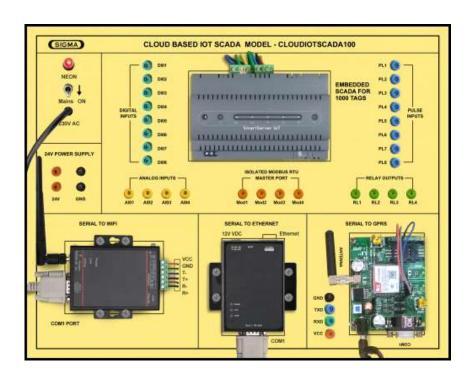


# CLOUD BASED IOT SCADA MODEL-CLOUDIOTSCADA100

# **SPECIFICATIONS**



This trainer has been designed with a view to provide practical and experimental knowledge of Cloud Based IoT SCADA.

#### **SPECIFICATIONS**

# A. Main Specs

- 1. Following Parts and Modules are assembled on Single PCB of size 18 Inch x 15 Inch.
- 2. The complete circuit diagram is screen printed on component side of the PCB with circuit and Parts at the same place.
- 3. The PCB with components on front side is fitted in elegant wooden box having lock and key arrangement.
- 4. Modules and Parts should be removable without desodlering for easy repair / replacement
- 5. The acrylic cover is fitted on PCB to safeguard main parts.

# **B.** Modules and Hardware

- 1. 1000 Tag License for Cloud based SCADA to connect IoT Devices
- 2. 24 VDC Isolated Power Supply
- 3. MODBUS RTU Master

IoT based Smart Systems with Device Manager with

- 1 Wi-Fi Port
- 1 Ethernet Port
- 1 GPRS Port
- 4 Analog Inputs
- 8 Pulse Inputs
- 8 Digital Inputs
- 4 Relay Outputs
- 4. IO Server
- 5. Alarm Server
- 6. Historian and Reporter
- 7. Web Server

#### C. Accessories

Ethernet Cable : 2 No
 Jumper wires : 30 Nos.
 Software and Driver CD : 1 No.
 Practical Manual - Printed + Soft Copy : 1 No.

5. E-Books for Subject : 10 Nos. in PDF Format

6. Mp4 Video Class for Subject : 40 Nos

7. Cloud Hosting Services for 20 devices for 7 years

#### **EXPERIMENTS**

# **A.** Theory Experiments

- To study theory of Cloud SCADA for 1000 Tags
- 2. To study theory of 24 VDC Isolated Power Supply
- 3. To study theory of MODBUS RTU Master
- 4. To study theory of Ethernet IOT Data Acquisition using Ethernet Port
- 5. To study theory of Wi-Fi IOT Data Acquisition using Wi-Fi Port
- 6. To study theory of Cellular (GSM / GPRS) IOT Data Acquisition using GPRS Port
- 7. To study theory of 4 Analog Input
- 8. To study theory of 8 Pulse Inputs
- 9. To study theory of 8 Digital Inputs
- 10. To study theory of 4 Relay Outputs
- 11. To study theory of Serial to Ethernet Converter
- 12. To study theory of Serial to Wi-Fi Converter
- 13. To study theory of Serial to GPRS Converter
- 14. To study theory of IO Server
- 15. To study theory of Alarm Server
- 16. To study theory of Historian and Reporter
- 17. To study theory of Web Server

#### **B.** Hardware Experiments

- 18. To use and implement Cloud SCADA for 1000 Tags
- 19. To use and connect 24 VDC Isolated Power Supply
- 20. To use and implement MODBUS RTU Master
- 21. To use and implement 4 Analog Input
- 22. To use and implement 8 Pulse Inputs
- 23. To use and implement 8 Digital Inputs
- 24. To use and implement 4 Relay Outputs
- 25. To acquire data using Ethernet IOT Data Acquisition using Ethernet Port
- 26. To acquire data using Wi-Fi IOT Data Acquisition using Wi-Fi Port
- 27. To acquire data using GPRS IOT Data Acquisition using GPRS Port
- 28. To convert acquired serial data into Ethernet data using Serial to Ethernet Converter
- 29. To convert acquired serial data into Wi-Fi data using Serial to Wi-Fi Converter
- 30. To convert acquired serial data into GPRS data using Serial to GPRS Converter

# **C. SCADA Cloud Experiments**

- 31. To implement IO Server on SCADA cloud
- 32. To implement Alarm Server on SCADA cloud
- 33. To implement Historian and Reporter on SCADA cloud
- 34. To implement Web Server on SCADA cloud
- 35. To show the SCADA data on server using PHP and MySQL

# **Contact us**

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