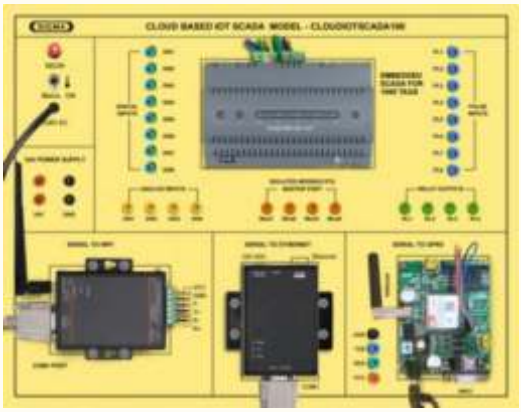
CLOUD BASED IOT SCADA
MODEL-CLOUDIOTSCADA100

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



SPECIFICATIONS

(1) Hardware

Following Hardware is assembled on Single PCB of size - 18 Inch x 15 Inch

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

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Dealer:-

(2) Accessories

1.	Ethernet Cable	: 2 No
2.	Jumper wires	: 30 Nos.
3.	Software and Driver CD	: 1 No.
4.	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	

(3) Cabinet and PCB

The complete circuit diagram is screen printed on component side of the PCB with circuit and Parts at the same place. The PCB with components on front side is fitted in elegant wooden box having lock and key arrangement. The acrylic cover is fitted on PCB to safeguard parts. It works on 230 V AC Supply.

EXPERIMENTS

A. Theory Experiments

1. 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 for1000 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