



VERITAS Engineering

Catalog
Of

SCADA Training Module for Power System

Brand: VERITAS

Model: VSCADA-001

Technical Specification

- Measurement of Voltage, Current & Power of Generating Station, Step Up Substation, Transmission Line, Step Down Substation, Distribution Line and Load at Software
- Control of all Station from Software

SCADA System

Input Power: AC 220V, 50 Hz

PLC:

SIMATIC S7-1200

CPU1214C AC/DC/Relay,

PS=24VDC,

DI=14,

DO=10(Relay),

AI=2,

Model/Size - 6ES7214-1BG40-0XB0

Brand - Siemens

Analog Input Module: - 6ES7231-4HF32-0XB0 – 2 Pcs

SCADA Software: Win CC or any other

Communication Cable– 1 PCs

Magnetic Contactor: 10 Pcs

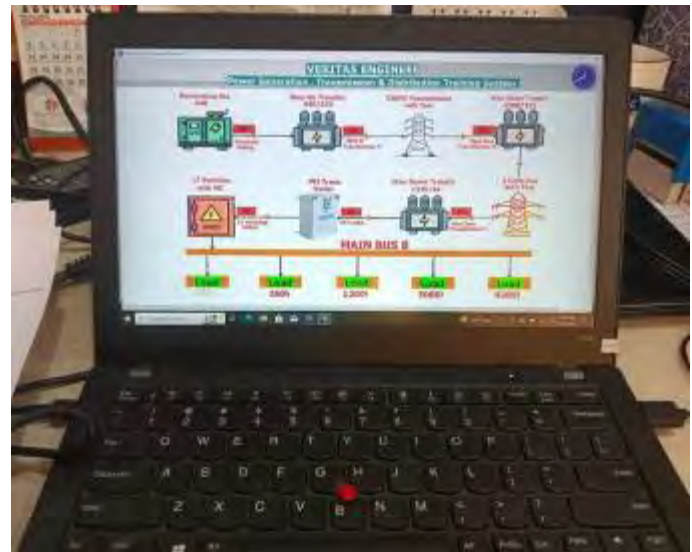
PT: 5 Pcs

CT: 15 Pcs

Laptop Configuration:

Core i5, 8th Generation, SSD: 256GB, RAM: 8GB with Built in Graphics Card

Wi-Fi Router as required



Power System

1. Generating Station 380V

Power: 10KVA (8KW),

Voltage1: 380V, 3-φ, 50 Hz

Voltage2: 220V, 1-φ, 50 Hz

Gasoline Generator Or Diesel Generator

4 Stroke Single Cylinder Engine

Engine Type: Horizontal

Self Start Engine



2. Step Up Sub-station 380/2300V

Transformer: – 1 Nos

Rating: 380V/2300V, 10 KVA

Type: Dry Type Air Cooling

Panel Board:

Digital Ammeter (AC): 5A – 1 Nos

Digital Voltmeter (AC): 500V – 1 Nos

Multifunctional Digital Watt Meter (W, VAR, VA, I_L , I_P ,

V_L , V_P , $\cos\theta$): – 1 Nos



3. Primary Transmission Line 2300V

Span: 2 Meter

Tower: - 2 Nos

Materials: Stainless Steel (1" x 1" Angle Bar),

Dimension: 2 Feet x 2 Feet x 9 Feet

No of Cross Arm: 3

No of Circuit: 2 (1 Live and 1 Demo)

Earth Wire On Top of the Tower with Lightning Arrester

Insulator:

Disk Type Insulator (String)

No of Disk: 18 each Tower

Materials: Wooden

Color: Coffee

Conductor:

Size: 1x4RM

Materials: Copper/Aluminum/ACSR

Length: 6 x 2 Meter



4. Step Down Sub-station 2300/1320V

Transformer: – 1 Nos

Rating: 2300V/1320V, 10 KVA

Type: Dry Type Air Cooling



5. Primary Distribution Line (Feeder) 1320V

Span: 2 Meter

Tower: - 2 Nos

Materials: Stainless Steel (1" x 1" Angle Bar),

Dimension: 1.5 Feet x 1.5Feet x 8 Feet

No of Cross Arm: 3

No of Circuit: 2 (1 Live and 1 Demo)

Earth Wire On Top of the Tower with Lightning Arrester

Insulator:

Disk Type Insulator (String)

No of Disk: 18 each Tower

Materials: Wooden

Color: Coffee

Conductor:

Size: 1x7 RM

Materials: Copper/Aluminum/ACSR

Length: 6 x 2 Meter



6. Step Down Sub-station 1320/380V

Transformer: – 1 Nos

Rating: 1320V/380V, 10 KVA

Type: Dry Type Air Cooling

PFI: 9KVAR PFI – 1 Nos

4 Stages PFI

Automatic & Manual Capacitor Connection System



LT Switchgear Panel with Load:

50Amp LT Panel Control with MCCB – 1 Nos

Digital Ammeter (AC): 5A – 1 Nos

CT Ratio: 100:5 – 1 Nos

Digital Voltmeter (AC): 500V – 1 Nos

Multifunctional Digital Watt Meter (W, VAR, VA, I_L , I_P , V_L , V_P , $\cos\theta$): – 1 Nos