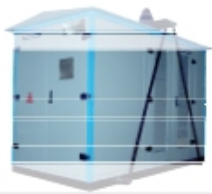


Product Portfolio :-

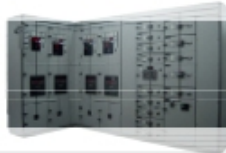
MANUFACTURING PRODUCT RANGES UNDER E-TECHNO SWITCHGEAR PVT. LTD



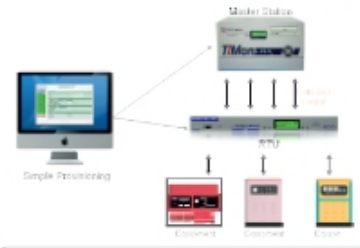
Compact/Package Substation



Feeders Pillars



LT MCC/ PCC PANELS

Medium Voltage
VCB Panels (MV Switchgears)

Power SCADA Solutions

COMPACT SUBSTATIONS

Compact Substations, also termed as CSS/PSS/USS, is designed to provide safe, reliable, compact, and economical power distribution for Power Utilities, Multiplexes, Townships, Hospitals, Software Parks, Residential Complexes, shopping malls, Government Offices, etc. by meeting every requirement of all and customizing as per the power utility demand of the clients.

Compact Substations are widely used for Power Distribution in a modern/ classy way by benefitting the buyer consumer by saving lot of space and are much reliable distribution solution compared to Conventional Over head Lines with transformers mounted on H beams. Compact Substations as its name suggests, are so compact, that it saves atleast 75% of the space taken by conventional substations, though have other advantages too.

VCB
(Vacuum Circuit Breaker)

Electrical Transformer



LT Panel

**COMPACT SUBSTATION**

Salient Features of Compact Substation :-

- Customizable design per the requirements with two options available in transformer design: Oil type or Dry type (*Cast Resin*).
- Protection against theft with Smart PSS.
- Ready to Install, Eco-Friendly, and Economical with low maintenance.
- Aesthetically appealing while saving 75% space against Conventional Substations.
- Doors on every side of Substation for convenient maintenance with proper padlocks.
- 2mm thick painted CRCA/GI enclosure mounted on a 4mm thick base frame.
- Proper Compartmentalized partitions between MV, LV & Transformer compartments.
- Gasket/ Stiffners provided as required. Internal lighting facility provided.

Add-ON Optional Features

- Compatibility with Data Acquisition System (DAS) to link and monitor it with any Bluetooth/Wi-Fi devices.
- Safety Hooters for the outdoor substations to ensure its safety against theft.
- Fault Passage indicators to locate fault in cables b/w two interconnected CSS.
- Option to link devices to the CSS to get notified when anyone tries to enter the substation.
- APFC Panels
- LV & MV Metering



Product Configurations : -

The compact substations can be customized as per the requirement of the site power utilization capacity from 11kV, 200kVA & ranging to 2000kVA for both 11kV & 33kV, comprising of the following equipments:



33kV



11kV

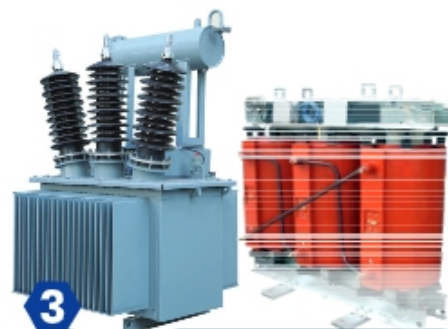
1

MV Switchgears as per PSS Ratings, mainly of **11kV & 33kV** Ring Main Units (RMU's).



2

LV Switchgear or LV Panels

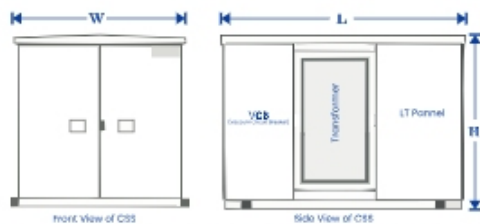


3

Distribution Transformers, which are available in both **Cast Resin OR Oil type Transformers** subject to customer requirement .

Technical Specification

Max HT Voltage		11kV	33kV
Standard Applicable	IEC	62271-202	62271-202
Transformer Rating	kVA	Upto 2500	Upto 2500
LT Voltage	V	433	433
Short Circuit Breaking Capacity	kA	Upto 21	Upto 25
Frequency	Hz	50	50
Ingress Protection of HT & LT Compartment	IP	IP54	IP54
Ingress Protection Class Transformer Compartment	IP	IP34/IP23	IP34/IP23
Enclosure Class		K10	K10

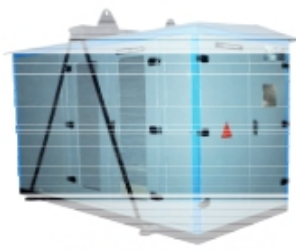


Dimensions of the Compact Substations across the Various Ranges

Ratings (in kVA)	L	W	H
200	2700	1800	2200
250	3000	1800	2200
315	3250	1800	2200
400	3250	1800	2200
500	3500	2200	2300
630	3500	2200	2300
1000	3800	2650	2500



Front View of CSS



Side View of CSS



Advantages :-

- Saves 75% of the space than conventional substation.
- Ensure high safety of Operators, Personnel, and Equipment on site.
- Easily Mobile in nature to transfer from one place to another.
- Reduction of power losses with self-powered relays with low power consumption

Packaging & Transportation :-

- Package Substations are delivered with a protective packaging while transported through road, where lifting lugs with the complete Beam is provided to ensure proper and safe Loading/Unloading practices of the transported product.
- When transporting through the sea, sea worthy packing is done as an option on request.
- The PSS is delivered completely equipped with Transformer, LT Panel & HT panel with Interconnections of LT side with help of Busbars with Transformer & Transformer with HT RMU via cable with termination kit. Only External Cable connection with termination to Incomer is required at site.

