# FREEDER REMOTE TERMINAL UNIT (FRTU)

GPRS

EITHERNET

TPC
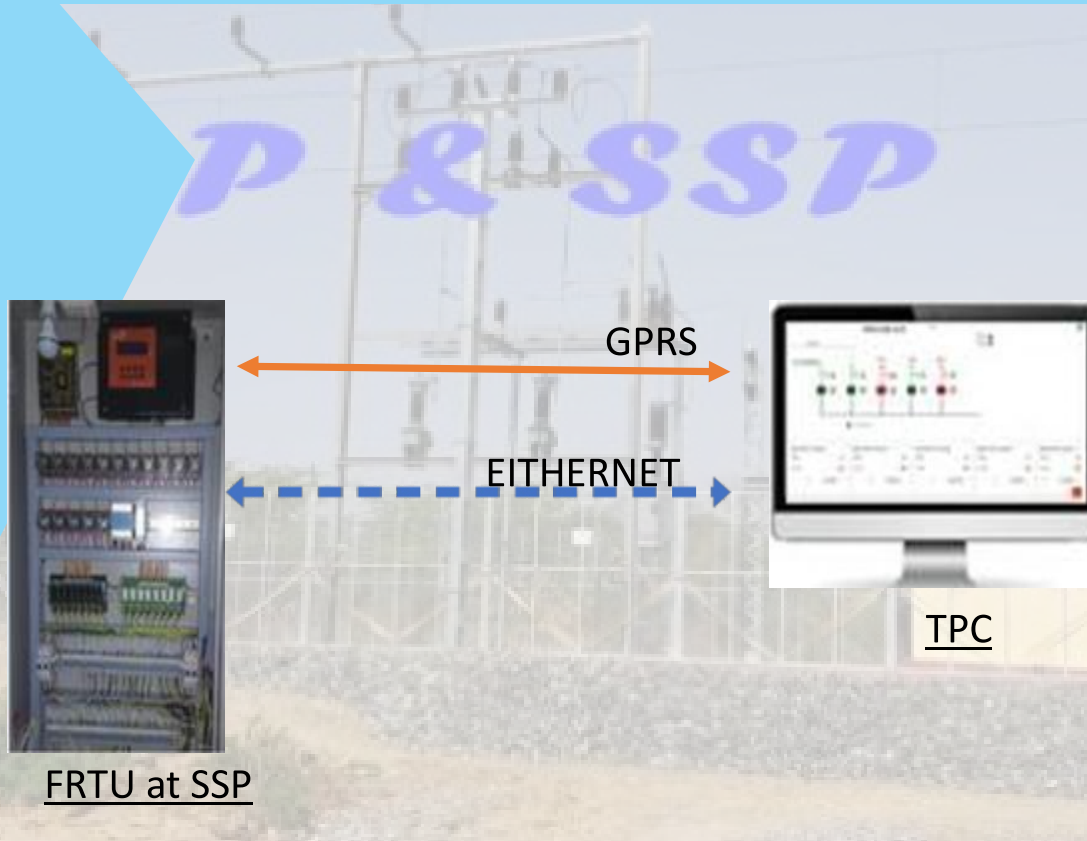
FRTU at SSP

## Why FRTU

FP/SP/SSP are remotely operated with telecommunication cable from TPC. There are two problems. One, sometimes Telecom cable suffers breakdown. In old cables this can be very frequent. Two, some new sidings and some remote areas may not have the cabling to start with and those areas are electrified. So, we do not have a cable to operate such newly electrified private sidings, they continue to be operated manually with private number exchange system.

VGCON's FRTU is designed to establish communication through GPRS or Ethernet to Operate /Monitor various events, alerts as well as connection history

Where existing company not supporting with the spares.

**Picture of feeder side instrument**

**Picture of pole mounted Equipment**

- ✓ FRTU is an intelligent device designed for use of feeder remote control operations at SP/SSP stations.
- ✓ FRTU acquires data, monitors and controls Circuit Breaker, Interrupters, Isolators, Transformers, Transducers in a sub-station.
- ✓ FRTU is scalable and consists of CPU, Ethernet/GSM/LTE Module and a digital input card, digital output card, Analog cards.
- ✓ FRTU interface with communicable protection relays & communicable multi-function electrical meters.

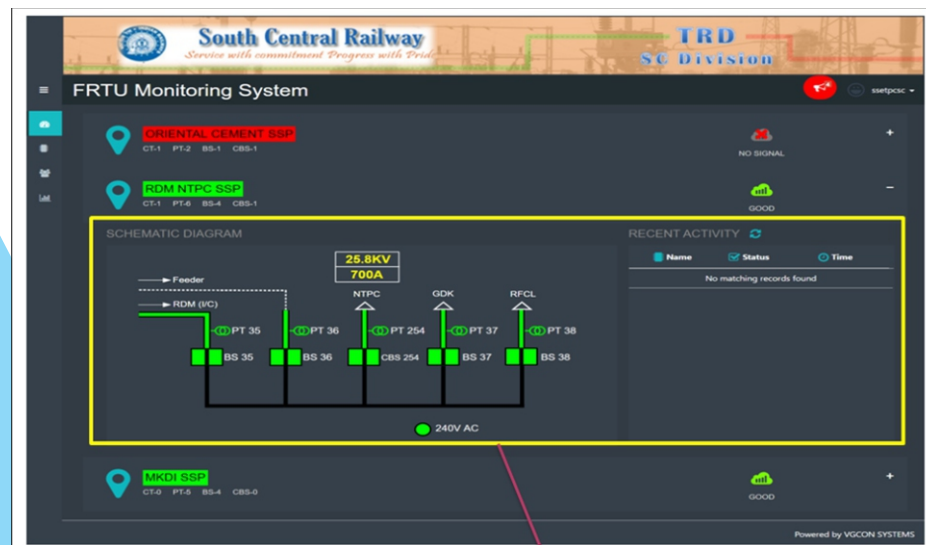## Credentials: FRTUs working in SC division covering FIVE sites.

Ramagundam NTPC SSP: No Optical Fiber Line and VGCON's FRTU is exclusively working

Oriental Cement SSP: No Optical Fiber Line and VGCON's FRTU is exclusively working

Medha Manufacturing Company Siding: No Optical Fiber Line and VGCON's FRTU is exclusively working

Penna Cement Siding -Tandur: No Optical Fiber Line and VGCON's FRTU is exclusively working

Makodi SSP: This is a Tiger Reserve Forest area, VGCON FRTU is working as a backup to the existing SCADA, which has predefined sequential operations.



### GPRS SIGNAL IS CONTINUESLY MONITERED:

Availability of channel of communication is continuously monitored and recorded. The signal strength of every two minutes indicates with color in respective slot of day. This helps to swap the SIM operator.