



# MICRO RTU



The Micro-RTU is designed specifically for monitoring and controlling the electrical distribution network. The RTU can be deployed in utility networks or in a large industrial complexes to control and monitor various transformers, motors and other electrical loads. The housing is designed for outdoor installation .

The Various communication media such as GSM DATA, GSM SMS, GPRS, Radio, Cable can be integrated for remote operation on IEC - 870-5-101, 104, DNP 3.0, Modbus protocol.

## Features

- ❖ Pole Top / Indoor design.
- ❖ All parameter measurement,
- ❖ Dual Serial Port
- ❖ High Input - output isolation.
- ❖ Low VA Burden on CT & PT.
- ❖ Isolating link for CTs.
- ❖ Battery back-up for operation during power outage..
- ❖ Data transfers under three condition
  - ◆ Event or deadband crossings.
  - ◆ Time scheduled transfers.
  - ◆ Master / Central controller requests.
- ❖ With GSM / SMS scheme multiple transmission can be initiated.
  - ◆ To Master / Central Controller
  - ◆ To Designated authority
  - ◆ To Customer

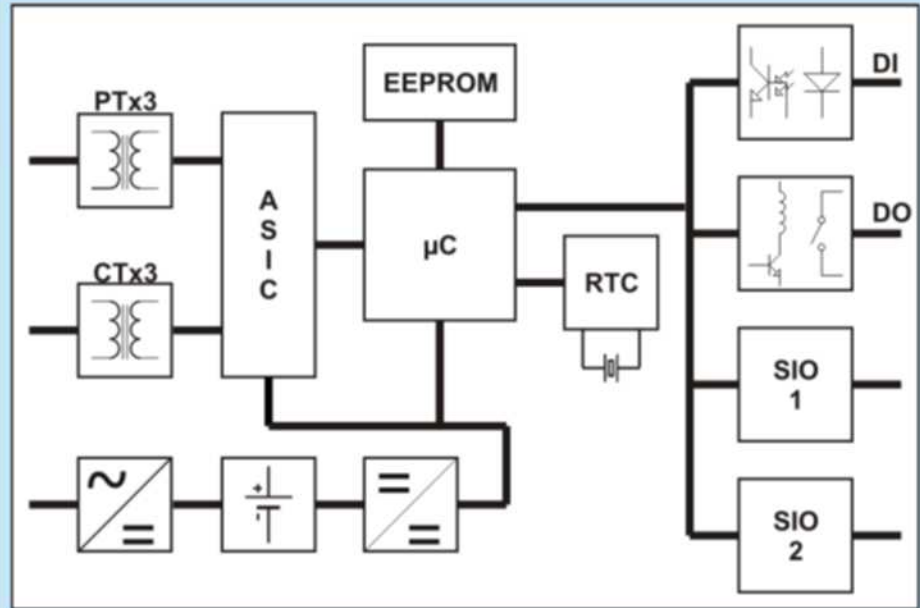


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## Technical Data

- **Enclosure** : Primarily designed for use on pole tops with IP-65 Protection and locking arrangement.
- **Dimensions** : 300mm x 200mm x 300mm
- **Power supply** : 230 VAC +/- 20 %, 50 Hz.
- **Relay outputs** : 4 Relay outputs
  - ♦ Form C contacts
  - ♦ 5A @ 24 VDC / 230VAC
  - ♦ Can be used in Select-Before-Operate or Direct Operate modes.
- **Status inputs** : 8 Status inputs
  - ♦ With optical isolation
  - ♦ 12 VDC, 5 mA.
  - ♦ Resolution < 5 mSec.
- **Analog inputs** : 6 Analog inputs
  - ♦ 3 phase voltage and current inputs directly from transformer secondary side ( 440 V. )
  - ♦ 0.5 class accuracy.
  - ♦ Measurements available for line voltage, phase voltage, phase current, PF, KVA, KW, KVAR, MD, Freq, Energy.
- **Battery Backup** : With charger for 4 hours. Incorporates Battery monitoring and cutoff to avoid deep discharge of batteries.
- **Communication links** : 2 ( RS-232 )
  - ♦ Remote link with DNP-3 protocol. This link can be configured for cable / PSTN line / GSM modem / Radio modem.
  - ♦ Local link for configuration, local operation and program downloading.
- **Storage** :
  - ♦ Alarm generation on change of status and threshold crossings of analog inputs.
  - ♦ Non volatile storage for 1000 events and processed data.
- **Time Synchronisation** : Through communication link.
- **Optional Feature** : Using one serial port to control / monitor other devices such as energy meter & second serial port for remote data transmission.

## Block Diagram



## Other Products

- Supervisory Remote Control & Data Acquisition Systems - Total turnkey, including Communications..
- Remote terminal Units (RTU).
- Transducer for AC / DC Electrical Parameter
- Microprocessor Based Equipments \_ MCB Monitors, Beetle Monitors, Temperature Scanner etc.
- Custom Built Electronic Equipments.
- Digital A.C. Ammeter.
- Digital A.C. Voltmeter.
- Digital Volt, Amp, & Watt Meter - class 0.5/0.2.
- Position Indicating Transducers.
- Static Energy Meters.
- Digital Flow Meters.
- Digital Power Monitor Cum Controllers.
- On-line Gas Analysers.



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