# TTU301 Smart Distribution Transformer Terminal Unit

Overview: Smart distribution transformer terminal unit is installed in the transformer station area. It has the functions of power distribution energy metering, reactive power compensation, three-phase load unbalance treatment for 0.4kV low voltage equipment of distribution transformer and automatic measurement, acquisition, protection, monitoring and safety protection for power supply demand information .

**Overview:**

The TTU301 is installed in the station area of pole mounted transformer, which has the functions of power distribution, energy metering, reactive power compensation, three-phase load unbalance management, and the automatic measurement, acquisition, protection, monitoring, safety protection, etc. of power supply and consumption information for 0.4kV low voltage equipment of distribution transformer.

**Features:**

- **Distribution transformer monitoring:** Real-time collection and uploading of voltage, current, temperature and humidity data in the station area
- **Automatic meter reading:** Data collection of total meter in station area, to obtain the refined operation data of station area, the extendable broadband carrier reads the user's meter data.
- **Equipment monitoring:** Automatic monitoring of equipment such as feeder switches and leakage switches in the station area.
- **Intelligent reactive power compensation monitoring:** Real-time data collection of intelligent reactive power compensation equipment.
- **Micro-power wireless maintenance:** Due to the complex environment of the installation location of the box, the terminal provides convenient on-site wireless debugging and upgrade.
- **Three-phase unbalance management:** Perform balance adjustment using commutation device according to the monitoring of three-phase unbalance situation in the station area.
- **Fault location and indication:** In-situ indication and automatic report by monitoring information such as its own status, external switch faults, etc.
- **Safety protection:** Information safety protection based on embedded security chip.

**Technical Parameters:**

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|---|---|---|
| Power supply | Rated voltage | AC220V/380V， 50Hz |
| | Allowable deviation | -30%~+30% |
| | Rated current | 5A |
| Precise measurement range | Voltage | 176-264V |
| | Current | 0-6A |
| | Frequency | 45Hz-55Hz |
| Measurement accuracy | Voltage | ≤±0.5% |
| | Current | ≤±0.5% |
| | Frequency | ≤0.01Hz |
| | Active power | ≤±1% |
| | Reactive power | ≤±1% |
| | Power factor | ≤±1% |
| | inspecting power | ≤±1.0% |
| | Electrical measurement | ≤1.0% |
| | Terminal static power consumption | ≤10 VA |
| Power consumption | Voltage current Loop power consumption | ≤0.5VA |
| Backup power | Super capacitor | |
| Communication channel | RS485, 4G mobile, micro power wireless, Ethernet, carrier interface, USB | |