

Energy Remote Terminal Unit ERTU-BS05



Grid Electricity Data Acquisition

- Power Generation Plants
- Transmission & Distribution Substations
- Large Industrial Enterprises

- *Highly reliable software and hardware design; Mono-structure; Excellent performance*
- *Real-time multi-task running mode based on real-time operating system VxWorks*
- *Powerful data processing and communications; supports transparent communications*
- *Flexible user running mode; supports multiple user tasks*
- *Adequate meter communications protocols; extensible on customer requirement*
- *Flexible meter physical interfaces*
- *Multi-protocols and simultaneous multi-central station communications*
- *Flexible communications, supports dial-up, dedicated and LAN communications*
- *Perfect events registration functions*
- *Different user access levels management; system security achieved by password protection*
- *Large screen LCD display; interchangeable English and Chinese operation interface*
- *Convenient and easy remote maintenance functions*
- *Super capacity data storage space; non-volatile data storage longer than 20 years*
- *A/C & D/C redundancy design; seamless interchangeable without interruption*

Data Acquisition

- Collecting energy meter's data at real-time
- Timing tasks collecting energy meter's data
- Collecting various energy meters data
- Cycling data storage mode with sampling data or sampling cycle; storage capacity configurable

Events Registration

- System reboot
- System power outage; AC/DC power source interchanging
- User operation info
- System running info
- Warning and error info

Clock Synchronization

- Clock sync from remote central station
- Clock sync from local GPS
- Synchronize energy meters' clocks

Archive Management

- ERTU archive management
- Energy meters archive management
- User info archive management

Scheduled Timing Tasks

- Energy meters clock sync task
- Multiple energy data acquisition tasks
- Timing data-send-back task
- Task parameters can be customized

Local Operations

- Inquire electricity data and recorded events
- configure and inquire running parameters

Remote Operations

- Parameters configuration,
- Remote diagnosis & maintenance

Security

- Different user access levels management; system security achieved by password protection

Self Diagnosis

- Hardware and software watchdogs guarantee system uptime and continuity of data acquisition

ERTU-BS05 Technical Specifications

Power

- Rated voltage A/C 85 - 265V, 47-63Hz
D/C 120-330V
- Power Consumption depends on configuration
Normal 35W
Maximum 75W

Environmental Parameters

- Storage temperature -25°C - +70°C
- Operating temperature -20°C - +55°C
- Humidity <= 90%
- Shock IEC68-2-6
- Mechanical strength IEC68-2-27

Internal real-time clock with backup batteries

- Time-keeping accuracy < 0.5 Sec / 24Hours
- Clock operating with battery > 15 years

Communications - Meters

- Up to 8 RS-485, each supports up to 128 meters
- up to 4 current loop, each for 4 meters
- Up to 255 meters total

Communications - Central Station

- 10/100 Ethernet
- Up to 3 embedded internal V90/56K modems
- Built-in GSM/GPRS
- RS-232 Serial port

Integration Cycle

- Adjustable from 1 to 65535 (45 days) minutes

Memory

- Flash disk 256M to 4G for data storage
- Up to 10,000 cyclic events registration; configurable

Display

- 320 x 240 matrix LCD

Case and Dimension Sizes

- Case Standard 3U, 19"
- Dimensions (mm) 483 x 320 x 132
- Weight 7.25 Kg

Reliability

- MTBF > 60,000 Hours
- Service time > 15 Years

AMR System Integration

ERTU-BS02 can be integrated into AMR system with BlueStar central station software TMR-BS02 and BlueStar Class 0.2S & 0.5S electricity meters, or other brand meters.