

# ACU Multi-Circuit Meter

## Electric Submetering for Multi-Circuit Applications

With a built-in web server and ability to export energy usage data in spreadsheet format the ACU is the ideal platform for multi-circuit submetering applications.



Save interval data down to 1-minute resolution to your PC in spreadsheet format with the click of a button or have energy usage summaries and monthly peak demand readings sent to your email address automatically using the BTi Energy Manager services.

For small installations the ACU's integrated web pages give you all the data and reporting you need. View real time data at any time using the web browser on your PC. Save energy usage reports with the click of a button.

For large installations the ACU integrates smoothly into existing building automation systems using automated file transfers and standard communication protocols.

Submetering has never been this easy and affordable.

### Simple

- ▶ All in one energy management system
- ▶ Monitor up to 27 circuits with just one ACU
- ▶ View data using the web browser on your PC
- ▶ Save energy usage spreadsheets to your PC with a mouse click

### Cost Effective

- ▶ Self contained system for small installations means no monthly phone or internet fees
- ▶ Equipment cost benefits from using one sub-meter to monitor many circuits
- ▶ Reduced installation time and wiring costs compared to single circuit meters

### Flexible

- ▶ Built-in web server allows connection using standard web browser
- ▶ Integrate into building management systems
- ▶ Built-in Ethernet (10/100Mbps) and Serial (RS-232/485)
- ▶ Modbus and DNP3.0 eliminate the need for extra converters
- ▶ Measure multiple voltage sources on a single ACU

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 **BTi** Energy Management

[BTiEnergy.com](http://BTiEnergy.com)

# ACU Multi-Circuit Meter

## Technical Specifications

### Model Types

9 or 27 circuits (3PT/27CT)  
4 or 12 circuits (3PT/12CT)  
*\*other combinations on request  
(Eg. 6PT/24CT, 15PT/15CT)*

### Inputs Types

Voltage: 120/240, 415/240,  
208/120, 277/480 VAC  
CTs: 1A, 5A

### Communication Ports

1 10/100BaseT Ethernet port  
1 RS-232/485 port  
1 RS-485 port  
1 RS-232 maintenance port

### Measurements

Volts, Amps, Frequency  
kW, kVAR, kWh, kVARhr  
Peak demand, THD  
Interval data down to 1-min  
2 month storage at 15-min

### Accuracy

Volts, Amps:  $\pm 0.2\%$   
kW, kVAR:  $\pm 0.5\%$   
frequency:  $\pm 0.01\text{Hz}$

### Power Supply

20-60Vdc input  
150VAC isolation  
Reverse polarity protection  
Input fuse protection  
15V max input supply

### Field Terminations

PT/CT: #10 AWG barrier  
Earth Ground: #12 AWG  
RS-232/485: DB9 Female (232)  
RS-485: #12 AWG (485)  
Ethernet: RJ45

### Dimensions

15 PT/CT: 19" x 8.75" x 2.75"  
30 PT/CT: 19" x 10.5" x 4.5"

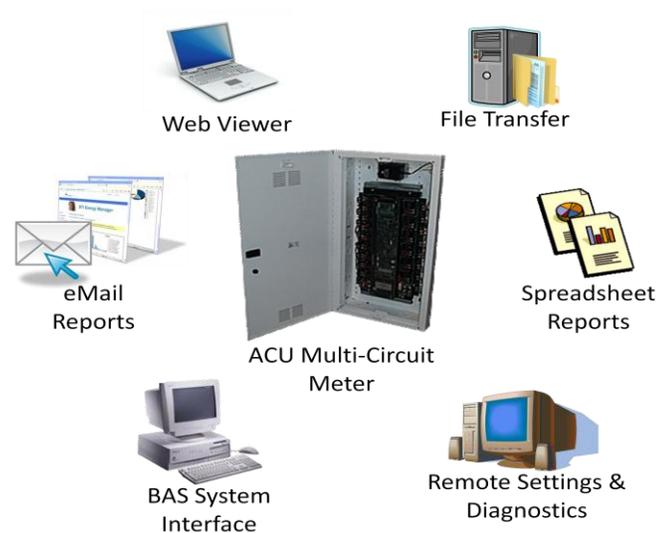
### Environmental

Temperature: -25° to +70°C  
Storage Temp: -40° to +85°C  
Humidity: 93% non-condensing 55°C

### Safety

CE marked

## Communications



### File Transfer

HTTP file transfer  
FTP file transfer (via web service)  
File Grabber\* coordinates data transfer from multiple ACU meters to your PC (no FTP server req'd)  
Spreadsheet format reports (csv)

### Automated email Reporting

Daily energy readings reports  
Summary graphs  
Spreadsheet file attachments  
ACUs automatically register with the email server

### WebView Pages

View web pages using any standard Internet browser  
View real time and historical data  
Standard units on all values (V, A, kW, kVAR)  
Download energy usage summary reports  
Download detailed load profile spreadsheet reports

### Communication Protocols

Connect to existing Building Automation Systems  
Connect to third party reporting packages  
Modbus (Serial and Ethernet)  
DNP3.0 (Serial and Ethernet)

## Cost Characteristics

