AcquiSuite Ally 48 Advanced Branch Circuit Monitor



AMC48-ED


Split Core CT


Split Core CT


Ally Rogowski Rope CT

## DESCRIPTION

The AcquiSuite Ally 48 is the perfect companion to the Obvius data acquisition product line. The Ally 48 's versatile power metering functionality continues the Obvius mission of lowering the total cost of collecting data by reducing install complexity, and increasing flexibility. The plug-and-play integration ensures the hundreds of data points are immediately captured and made available for countless applications.

The AcquiSuite Ally supports all industry standard communications protocols including RS-485, BACnet MS/TP, BACnet IP, ModBus TCP and Ethernet for maximum flexibility. The integrated USB port may be used for local configuration.

The AcquiSuite Ally monitors current, voltage, instantaneous power, demand and energy consumption of each circuit in a panelboard, including the main feed. As a circuit approaches the user-configured threshold, alarm indicators are triggered preventing costly downtime from overloaded circuits or failed loads.

## APPLICATIONS

Use the AcquiSuite Ally 48 in commercial and industrial applications for:

- Real-time power monitoring for:
- Commercial
- Retail
- Industrial
- Higher Education/Campuses
- REIT management
- Data centers
- Tenant submetering


## FEATURES

- 48 independent, user defined inputs
- 2 independent voltage inputs allow for simultaneous monitoring of multiple systems
- Line powered from 90-600V, phase-to-phase
- ANSI \& IEC metering system accuracy including branch CTs
- Supports solid core, split core and Ally Rogowski Coil CTs
- Meter board features:
- Easy access terminals for CT wiring, removable connectors
- Easily route cable and view LEDs from any angle
- Reports volts, amps, power, demand and energy for each circuit-each AcquiSuite Ally covers a complete 42 breaker panelboard plus mains for a total of 48 circuits
- Provides multi-phase totals for loads with any combination of 1-,2-, and 3-pole breaker positions
- User-configurable alarm thresholds register for improved load management
- Selectable phase orientation and number of circuits
- Limited 5-year warranty


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## CAPABILITIES

## MEASURED PARAMETERS

- Volts
- Amps
- kW
- kVAR
- kVA
- aPF
- dPF
- kW demand
- kVA demand
- Import (Received)
- kWh, Export (Delivered)
- kWh
- Net kWh
- Import (Received) kVAh
- Export (Delivered) kVAh
- Net KVAh, Import (Received)
- kVARh, Export (Delivered)
- kVARh
- Net kVARh
- THD Theta
- Frequency
* All parameters for each phase and system total


## PANEL FEATURES



## ACCURACY

- 0.2\% ANSI C12.20-2010 Class 0.2


## WIDE RANGE POWER

- 90-346 Volts AC Line-to-Neutral
- 600V Line-to-Line, CAT III
- Two voltage reference inputs


## HIGHLY CONFIGURABLE

- 1P/2W, 2P/3W, 3P/4W (WYE), 3P/3W (Delta)


## USER INTERFACE OPTIONS

- Meter front panel display unit
- Ally Configuration Console software with either USB direct to the meter or PC/Ethernet

ACQUISUITE ALLY DIMENSIONS


Panel Mount

ACQUISUITE ALLY DIMENSIONS


## SPECIFICATIONS

| PANELBOARD MONITO ELECTRICAL | YSTEM |
| :---: | :---: |
| Service Type | 1P/2W, 2P/3W, 3P/4W, 3P/3W (Delta) |
| Power | From L1 Phase to L2 Phase, 90-600VAC RMS CAT Ill $50 / 60 \mathrm{~Hz}, 500 \mathrm{~mA} \mathrm{AC} \mathrm{Max}$ |
| AC Protection | 0.5A Fuse 200kA interrupt capacity |
| Power Out | Unregulated 12VDC output, 200 mA , self-resetting fuse |
| Voltage Channels | 90-346 Volts AC Line-to-Neutral, 600V Line-to-Line, CAT III. Two voltage reference inputs |
| Current Channels | 48 channels, 0.525 VAC max, $333 \mathrm{mV} \mathrm{CTs}, 0-4,000+$ Amps depending on CT |
| Maximum Current Input | $150 \%$ of current transducer rating (mV CTs) to maintain accuracy. Measure up to 4000A with Rogowski Coil CTs. |
| Measurement Type | True RMS using high-speed Digital Signal Processing (DSP) with continuous sampling |
| Line Frequency | 50/60Hz |
| MECHANICAL |  |
| Wire Connections | 12-22 AWG 600 VAC, voltage connection must be \#14 AWG or larger \& 600 VAC rated |
| Mounting | Panel Mount/Enclosure |
| High Voltage Cover | IP30 |
| PCBA Mounting | 0.5" standoffs \#6 (quantity 6, user supplied) |
| COMMUNICATIONS |  |
| Hardware | RS-485, Ethernet and USB (for configuration only) |
| Supported Protocols | ModBus, BACnet MS/TP, ModBus TCP or BACnet IP |
| Max Distance | ModBus RTU - 1200 meters ( 4000 ft ) max, other network protocols follow standard network management practices |
| Data Bits | 8 |
| Parity | None, Even, Odd |
| Stop Bit | 2,1 |
| ENVIRONMENTAL |  |
| Operating Temperature | $-4^{\circ}$ to $140^{\circ} \mathrm{F}\left(-20^{\circ}\right.$ to $\left.60^{\circ} \mathrm{C}\right) \mathrm{At}-4^{\circ} \mathrm{F}$, LCD display could be illegible, meter voltage at $-4^{\circ} \mathrm{F}$ must exceed 100 VAC to power the meter |
| Operating Humidity | 5-95\% non-condensing |
| CODES \& STANDARDS |  |
| Accuracy \& Billing | ANSI C12.20 Class 0.2, NIST traceable calibration |
| Listing/Safety | CE EN 61000-6-4: Class A, UL Listed (Indoor enclosure version only), UL Recognized (Circuit board version only) |
| OTHER |  |
| Enclosure Dimensions | 13.5 " L x 10" W x 3.0" H ( $343 \mathrm{~mm} \times 254 \mathrm{~mm} \times 76 \mathrm{~mm}$ ) |
| PCBA Dimensions | 8.5" $\mathrm{L} \times 8.5$ " 2.5 " ( $216 \mathrm{~mm} \times 216 \mathrm{~mm} \times 64 \mathrm{~mm}$ ) |

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## ORDERING INFORMATION

| CAT. NO. | DESCRIPTION |
| :--- | :--- |
| AMC48-ED | NEMA 1 Enclosure, Dual Voltage, Branch Circuit Monitor, 48 inputs, LCD display |
| AMC48-EN | NEMA 1 Enclosure, Dual Voltage, Branch Circuit Monitor, 48 inputs, no display |
| AMC48-MD | Mounting Plate, Dual Voltage, Branch Circuit Monitor, 48 inputs, LCD display |
| AMC48-MN | Mounting Plate, Dual Voltage, Branch Circuit Monitor, 48 inputs, no display |
| COMPATIBLE CT OPTIONS* |  |
| CAT. NO. | DESCRIPTION |
| ACT-XS-SC-50 | Ally Split Core CT, 50A, extra small |
| ACT-XS-SC-100 | Ally Split Core CT, 100A, extra small |
| ACT-XS-SC-200 | Ally Split Core CT, 200A, extra small |
| ACT-S-SC-50 | Ally Split Core CT, 50A, small |
| ACT-S-SC-100 | Ally Split Core CT, 100A, small |
| ACT-M-SC-100 | Ally Split Core CT, 100A, medium |
| ACT-M-SC-200 | Ally Split Core CT, 200A, medium |
| ACT-M-SC-400 | Ally Split Core CT, 400A, medium |
| ACT-M-SC-600 | Ally Split Core CT, 600A, medium |
| ARCT-16 | Ally Rogowski Coil CT, 16" |
| ARCT-24 | Ally Rogowski Coil CT, 24" |
| ARCT-36 | Ally Rogowski Coil CT, 36" |
| ARCT-47 | Ally Rogowski Coil CT, 47" |
| ARCT-72 | Ally Rogowski Coil CT, 72" |

*The AcquiSuite Ally 48 is compatible with 333 mC CTs, sold separately.

## Obvius

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