

# **AcquiSuite Ally 48 Advanced Branch Circuit Monitor**







Split Core CT





AMC48-ED

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 plugand-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

# **PRODUCT DATA**

#### **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

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#### **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

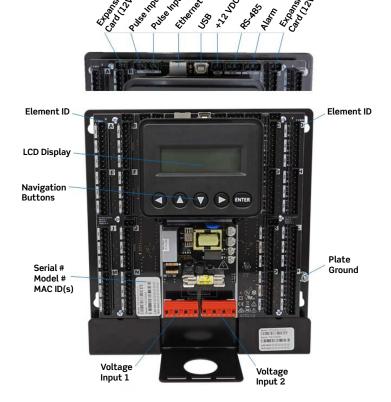
#### **HIGHLY CONFIGURABLE**

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

#### **USER INTERFACE OPTIONS**

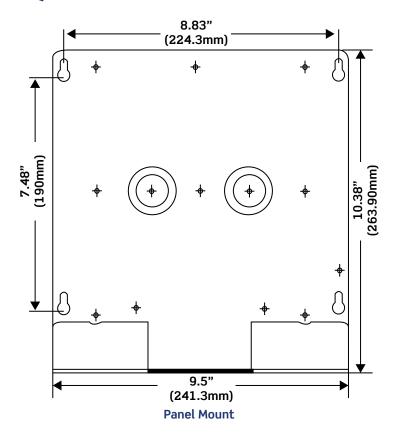
- Meter front panel display unit
- Ally Configuration Console software with either USB direct to the meter or PC/Ethernet

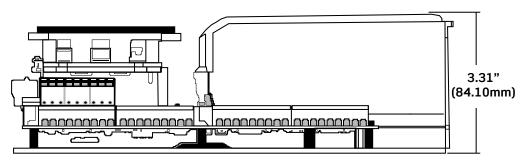
# **PANEL FEATURES**





# **ACQUISUITE ALLY DIMENSIONS**

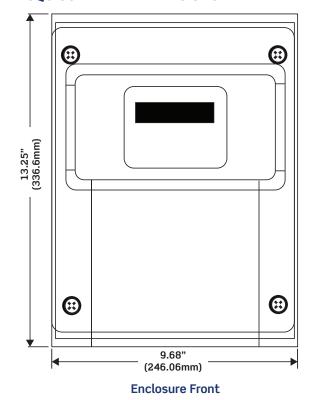


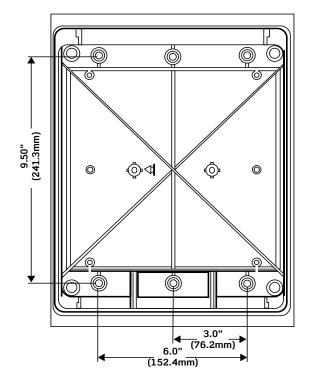


**Panel Mount** 

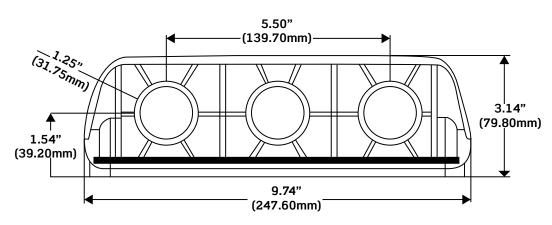
# **obvius**

# **ACQUISUITE ALLY DIMENSIONS**





**Enclosure Back** 



**Enclosure Bottom** 



# **SPECIFICATIONS**

PANELBOARD MONITORIN	NG SYSTEM
ELECTRICAL	
Service Type	1P/2W, 2P/3W, 3P/4W, 3P/3W (Delta)
Power	From L1 Phase to L2 Phase, 90-600VAC RMS CAT III 50/60Hz, 500mA AC 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 mV 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° to 140°F (-20° to 60°C) At -4°F, LCD display could be illegible, meter voltage at -4°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 (343mm x 254mm x 76mm)
PCBA Dimensions	8.5" L x 8.5" 2.5" (216mm x 216mm x 64mm)

# **PRODUCT DATA**



# **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"

<sup>\*</sup>The AcquiSuite Ally 48 is compatible with 333mC CTs, sold separately.

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