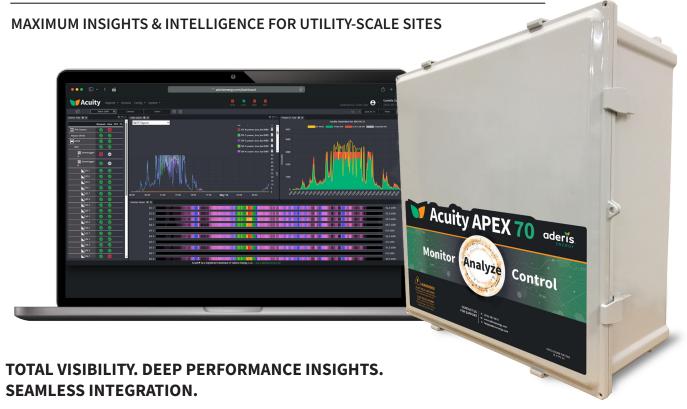
# **Acuity APEX 70**





The Acuity Advanced Performance Expert (APEX) product line empowers solar, storage, and microgrid operators with unmatched visibility and control across every asset. Built for rapid deployment and long-term reliability, the best-inclass tools in Acuity APEX monitor, analyze, and command every device across your system in real time. Plus, like all products powered by the Aderis Acuity™ operating platform, you own your data... from day one.

## FOR UTILITY-SCALE GENERATION UP TO 20 MW • ASTM E2848 CAPACITY TESTING COMPATIBLE WEATHER STATION

Monitor and control up to 500 devices	5G cellular modem with customer-owned data
Real-time alarming and 1-minute archived data logging	Alarming for transformer digital contacts
Integrate Acuity with your systems via built-in APIs	UPS managed battery backup
MODBUS RTU and TCP/IP, DNP3, and OPC-UA protocols	Customize to suit your exact requirements
AcuVIM II revenue grade metering, 5A CT compatible	Upgrade for power plant control (PPC) and EMS storage

## THE ACUITY DIFFERENCE

Behind every APEX system is **Aderis Acuity** – a powerful, flexible software platform that puts you in full control. Unlike other systems that limit access or lock down your data, **Acuity** gives you total ownership from day one. Custom dashboards, no-code integrations, and unlimited user accounts make it easy to keep your entire team informed and connected.

The Aderis Acuity platform is fully customizable – both in software and hardware – to meet the unique telemetry, control, and integration requirements of your project. **Contact us today** to configure your ideal solution.

## **FEATURES YOU'LL LOVE!**

#### NOW YOU CAN MONITOR & CONTROL.

- Monitor up to 500 devices
- Lower operating costs with control for inverters, trackers, and reclosers

#### YOU OWN YOUR DATA FROM DAY ONE!

- Easily backup your data
- Integrate with your existing systems

#### TOOLS YOU NEED TO SUCCEED.

- 24 hours of remote commissioning
- Unlimited user accounts

#### NEVER LOSE CONNECTION.

- Stay connected with a ruggedized cellular modem that supports both 5G and 4G LTE networks.
- Data is still collected and store forwarded during cellular outages.

## **TELEMETRY PACKAGE**

The APEX 70 weather station provides a suite of irradiance, temperature, and wind sensors required to support third party engineer ATSM capacity test requirements.

#### SENSOR SUITE



GHI & POA Irradiance Sensors Hukseflux SR30 Pyrometer (Class A) Heated & Ventilated



Back of Module Temperature Sensor Campbell Scientific CS241DM *PT-1000 (Class A)* 



Compact Weather Station Lufft CWS 500 Air Temp., BP, RH, Wind Speed & Direction



Transformer Alarming Contacts
Five 24V Wetted Digital Inputs
Oil Low, Oil Temp. High, Oil Temp. High-High
Oil Pressure High, Oil Vacuum High

#### SUPPORT RESOURCES

#### **INSTALLATION & COMMISSIONING**

- Field Installation Guide
- EasyBus Sensor Connections

#### GET STARTED NOW, FOR FREE!

- Create your account in FOCUS.
- Configure your facility for Free.

#### LEARN HOW TO...

- Monitor your facility in Acuity.
- Manage your portfolio in FOCUS.



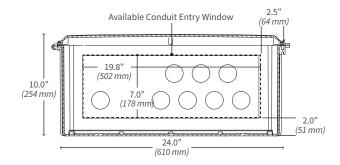
SCAN HERE to access all Acuity APEX Support Resources!

### **CONTROLS ENCLOSURE SCHEMATIC**

#### FRONT VIEW - MAJOR COMPONENTS

#### Digital I/O Battery Fused Network Acuity Cellular Computer DC Bus Module Switch Modem MODBUS RTU Power Protocol Converter Supply Revenue Grade Meter 24.0" (610 mm) 24.0 (610 mi Sealed Lead Acid Battery MODBUS 5V & 24V Surge Arrestors Control Power Input Aux Power Surge Protected XFMR Alarm Fused PT 5A CT Input MET Sensor & Invt LAN Connection **Shorting Blocks** RS485 Inputs

#### **BOTTOM VIEW - CONDUIT PLANNING**



THE CONTROLS ENCLOSURE IS NOT PRE-DRILLED FOR ANY CONDUIT ENTRIES. Actual conduit size, qty, and locations are determined at the discretion of the installer.

All sensors use Aderis EasyBus™ pre-terminated connectors for simplified installation.



SCAN TO LEARN MORE.

- Faster installation
- Eliminates wiring errors
- Simplified ownership

CAPABILITIES		
# of DEVICES	Up to 500	
COMMS. PROTOCOLS	MODBUS RTU and TCP/IP, OPC UA, DNP3	
DATA INTERVAL	Real-time Display & Alarms, 1-Minute Archiving	
DATA SHARING	CSV via Email & SFTP, RESTful JSON API, OPC UA	
METERING	Revenue Grade 0.2% Acc. AcuVIM II Up to 397V LN Fused PT Inputs, 5A CT Shorting Blocks PTs and CTs by Customer	

TECHNICAL SPECIFICATIONS	
UL RATING	UL 508a, TYPE 4X
ENCLOSURE SIZE & WEIGHT	24h x 24w x 10d in. (610 x 610 x 254 mm) 35 lbs (16 kg)
CONTROL POWER	1-Phs, 120 - 277V, 3A Max
BATTERY BACKUP	7Ah, Approximately 4-Hour Runtime
OPERATING TEMP.	-25°C to 70°C

