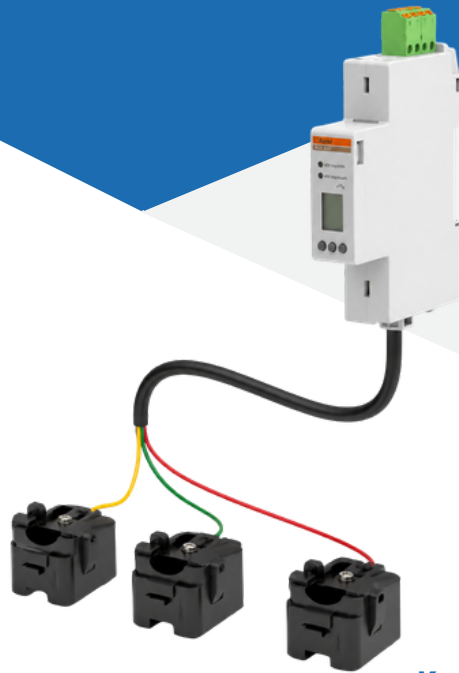


ADL400N/ADL400M Three-Phase RS485 Energy Meter



Product Overview

The ADL400N/ADL400M Three-Phase RS485 Energy Meter provides circuit-level electrical monitoring for industrial machinery, commercial buildings, pumps, HVAC equipment, solar systems and electrical distribution boards.

It measures electrical parameters and accumulated energy across three-phase circuits, while RS485 Modbus RTU communication enables integration with PLCs, HMIs, SCADA, Building Management Systems and cloud-based energy platforms.

Its compact DIN-rail design and external current-transformer options make it suitable for new installations, existing switchboard upgrades and higher-current electrical feeders.

Why Choose ADL400N/ADL400M ?

Conventional Monitoring	ADL400N/ADL400M
Total site consumption	Individual feeder monitoring
Limited load visibility	Real-time electrical data
No phase-level insight	Phase-level monitoring
Manual reporting	RS485 system integration
Difficult performance comparison	Actionable energy insights

Key Features

- Three-phase circuit monitoring
- RS485 Modbus RTU communication
- Voltage, current and frequency measurement
- Active, reactive and apparent power
- Power factor monitoring
- Forward and reverse energy measurement
- Phase-level information on supported models
- External current-transformer options
- Compact DIN-rail installation
- PLC, SCADA and BMS integration
- LCD display, depending on model
- Selected RCM-compatible models available



Key Specifications

Parameter	Specification
Electrical Network	Three-phase
Typical Configuration	Three-phase, four-wire
Nominal Voltage	3 x 230/400 V AC
Communication	RS485 Modbus RTU
Modbus Address	1-247
Baud Rate	1200-38,400 bps
Installation	DIN rail
Current Measurement	External CT options
Energy Measurement	Forward and reverse active/reactive energy
Phase Information	Supported on selected models

System Integration

Three-Phase Electrical Circuit



External CT and Energy Meter



RS485 Modbus RTU Network



PLC / HMI / SCADA / BMS



Local Dashboard or Cloud Platform

Multiple meters may share an RS485 network when correctly addressed, wired and terminated.

Key Benefits

- Improved visibility of major electrical loads
- Real-time three-phase monitoring
- Easier system integration
- Better maintenance planning
- Supports energy optimisation
- Phase-loading insight
- Remote energy reporting
- Industrial IoT ready

Applications

Ideal for monitoring:

- Industrial machinery
- Production lines
- Pumps and water systems
- HVAC and mechanical services
- Compressed-air systems
- Main and sub-distribution boards
- Refrigeration systems
- Three-phase solar installations
- Battery energy-storage systems
- EV charging infrastructure
- Generator and backup supplies
- Energy-efficiency projects

Conclusion

The ADL400N/ADL400M Three-Phase RS485 Energy Meter provides detailed electrical and energy monitoring for major commercial and industrial loads.

With comprehensive measurements, bidirectional energy monitoring and RS485 Modbus RTU communication, it supports improved energy visibility, maintenance investigation, operational reporting and integration with modern automation systems.

APS Technology Australia can assist with meter and CT selection, RS485 network design, panel integration and connection to local or cloud-based monitoring platforms.

