



Smart for Greenlife!

Overview

The AMR is an I/O module specially designed for applications where the pulse output of various metering devices need to be incorporated into a Modbus/RS485 network for creating cost effective data acquisition and auto metering solutions.

Up to 8 or 16 meter pulse output can be directly connected to the AMR, the running total of the pulse count is stored in non-volatile memory in case of power failure. The pulse count data can then be read using the Modbus protocol through the RS485 network.

The AMR is also available with optional charger and battery for those applications where the AMR must continue operating even during a power failure.

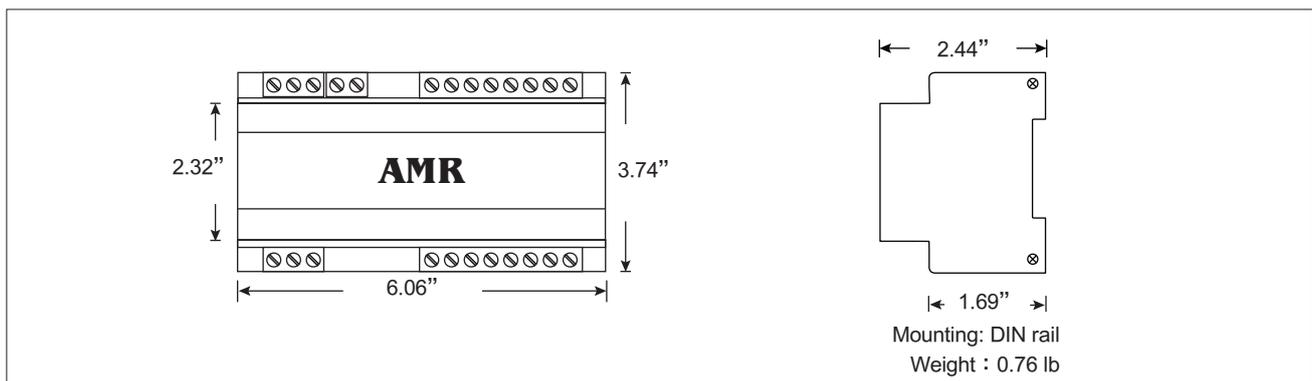
Applications

- Cost allocation for departments, tenants and third parties
- Measurement of utility costs and verification of energy savings
- Auto meter reading online or offline for water meters with pulse output
- Online process measurement
- Monitoring performance of building systems (e.g. chillers, boilers, fans, etc.)
- Benchmarking building operation performance

Features

- Supports up to 8 or 16 meters with pulse output signal
- Pulse input up to 100 meters using 18-24 gauge signal wire
- Photo isolation for each pulse input
- LED indicator when signal is detected on each input for quick verification of pulses
- Modbus/RTU over RS485 communications for linking with a host for remote reading
- On-board LED display for reading meter value
- DIN rail mounting make installations quick and easy
- On-board switch and LED display to set the RS485 address
- RS485 TX and RX activity LEDs
- Non-volatile memory retains configuration and pulse totals during power failure
- Software debouncing to prevent miscounts (pulse must be 30 msec or longer before it is recognized as a signal)
- Optional rechargeable battery for continued operation even during a power failure

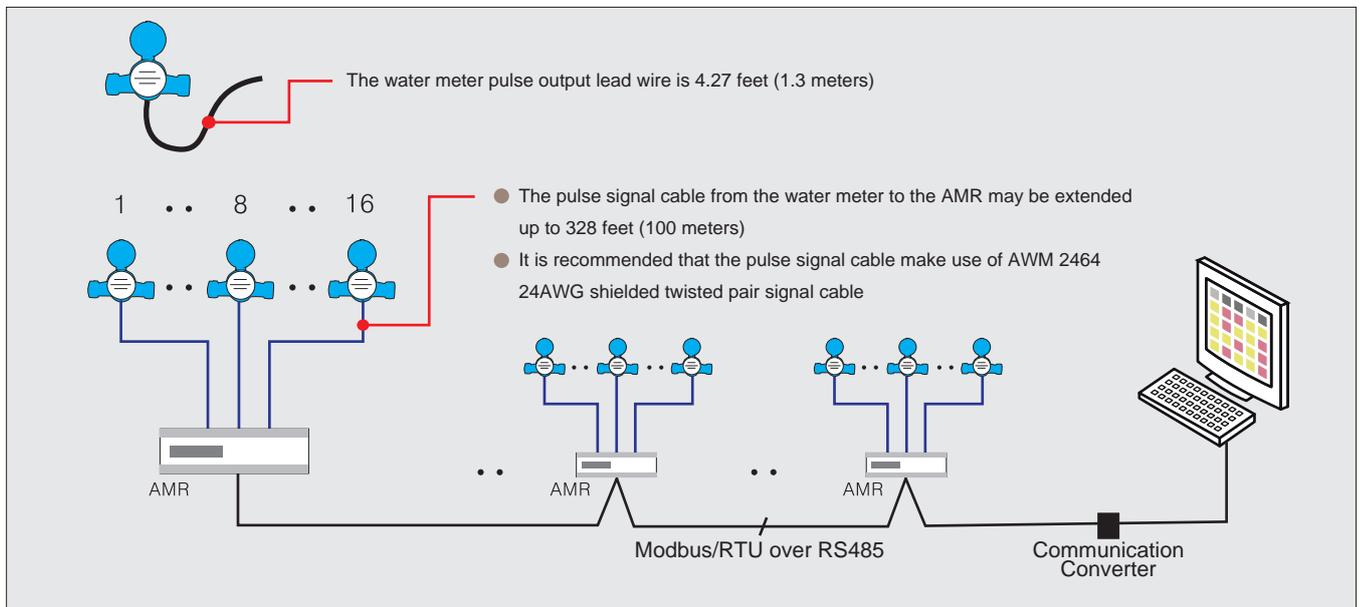
Dimensions



Specifications of AMR

Channels (pulse input)	8-channel or 16-channel
Communication	Modbus/RTU over RS485
Display	6-digit LED display for showing the cumulative counts for each channel and setting parameters
Auxiliary Power	DC 15V
Water meter signal lead wire	Use shielded twisted pair 18 to 24 gauge signal cable; max length 328 feet (100 meters)
Operating Temperature	0 to 60°C (32 to 140°F)
Operating Humidity	0 to 90% RH (non-condensing)
Power Consumption	2.4VA
Mounting	DIN rail
LED indicators	- RS485 TX activity - RS485 RX activity - Pulse input activity LED for each channel

System Architecture



Ordering Code

Ordering Code	Description
AMR-8	8-Channel AMR base module
AMR-16	16-Channel AMR base module
BAT-18	Rechargeable battery for AMR-8 & AMR-16

Rechargeable Battery



Dimension
W3.11" x H3.74" x D2.64"
Mounting : DIN Rail

Provides up to 8 hours of power for continuous operation of one AMR module