Overview

- The AMR130 is a combined display and communication module. Its communication capability allows it to be connected to a remote host for automated meter reading.
- The AMR130 has one channel to connect to the pulse output of a water meter, it accumulates the pulses then scales it before displaying it.
- Can use with 12VDC rechargeable battery for continued operation during a power failure.

Features

- Provides for the accumulation of water meter pulses
- Connects to the water meter via a 22~24 AWG signal cable (UL2464) for up to 100 meters
- Optically isolated input, and pulse input noise filtering
- Modbus/RTU protocol over RS485 interface for communication with a remote host
- The LED display together with the function key can be used to set the RS485 device address
- Non-volatile memory for storing the accumulated pulses and user defined settings; data will not be lost due to a power interruption
- Provides scaling factors for converting the pulse count to a meaningful water meter reading value
- Remote host can synchronize with the displayed value through Modbus

Applications

- Monitoring of water usage
- Resource management
- Condominiums
- Dormitories, rental offices, rented stalls
- Leak detection

System Diagram

[Diagram showing the connection of water meters, AMR130, communication converter, and auto meter reading system with labeled connections and components.

AMR130 datasheet-1.1e

Dormitories
Retail Shops
Market Stalls

www.daeinstrument.com  DAE Instrument Corp.
Specifications

- Channel: One dry contact pulse input
- Communication: RS485 interface, Modbus/RTU protocol, data format: 8/n/1
- Maximum AMR130 to water meter distance: 328 feet (100 meters) (UL2464 shielded twisted pair)
- Displayed Value: water meter reading
- Display: 6 digit LED display unit
- Setup: One function key
- Device Address: 0 to 99
- Pulse Divider: 1, 4, 8, 10, 16, 32, 64, 100, 160, 320, 640, 1000, 2000, 10,000 or 20,000
- Decimal Places: 0, 0.0 or 0.00
- Non-volatile memory for storage of user defined settings and cumulative water meter reading
- Baud Rate: 1200, 2400, 4800 or 9600 bps
- Protection: Optically isolated communication port
- Cable Type for Extension: Use 22 to 24AWG, UL2464 shielded twisted pair
- Power Supply: DC15V
- Operating Temperature: 0 to 60˚C (32 to 140˚F)
- Operating Humidity: 0 to 90%RH (non-condensing)
- Mounting: DIN Rail, TS35/7.5 or TS35/15

Wiring Diagram

> Tip: After installation, the AMR display should be synchronized through software calibration (Modbus protocol)

Dimensions

Ordering

<table>
<thead>
<tr>
<th>Order Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMR130</td>
<td>Display and communication module for pulse output water meter</td>
</tr>
</tbody>
</table>