

EtherMeter® Multi-Drop Applications with RS.485

1. Meter Totalization from Flow Rate Data from Multiple EtherMeters

In certain monitoring and control situations, multiple EtherMeters are planned to be connected to a single master controller.

Ethernet Switch: The most popular method is connection of the master (client) controller and all slave (server) EtherMeters to the same network switch. Polling of EtherMeters is then performed using the Modbus/TCP or EtherNet/IP protocol.

Multi-Drop RS.485: Another method is the connect the master (client) controller and all slave (server) EtherMeters to a multi-drop Modbus/RTU (or Allen-Bradley DF1) network using twisted pair wiring (RS.485).

When utilizing RS.485 and the Modbus/RTU protocol, it is important to perform the following steps:

- Via HyperTerminal Setup Menu, assign each EtherMeter a Unique Modbus device ID (SET ADDRESS ###).
- Set the Serial Port Dip Switches to RS.485.
- Enable the 120 Ohm Terminator on one (1) EtherMeter only.

Wiring Illustration:

