

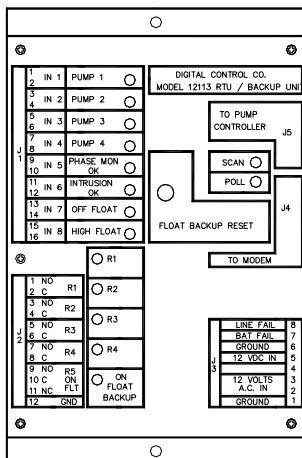


# Remote Terminal Unit (RTU)

## Model Number: 12113

(With Backup Float Switch Pump Control)

Manufacturer of High Performance Instrumentation and Control Systems



### Description:

The Remote Terminal Unit (RTU) is a data collection device designed for monitoring and control of remote stations. It is primarily intended for use in both water and wastewater collection and distribution SCADA systems. The RTU also performs the function of a backup pump controller by using two float switches in the event of primary equipment failure that may cause emergency levels to occur. During normal operation the RTU collects data and sends it to a central monitoring station using a variety of Modbus ASCII based communication devices such as telephone modems or radios. This allows the user to remotely control and configure the RTU from a base station or a workstation. There are two serial ports available on the RTU. One is dedicated for communications while the other can be used to either communicate with a variety of DCC pump controllers or RTUs to provide easy expansion of the remote station.

### Applications:

- Water and Wastewater Collection SCADA Systems
- Water Distribution and Control SCADA Systems
- Most Fluid Monitoring and Control Applications

### Features:

- Controls up to 4 pumps if primary controller fails.
- Built-in time delay between pump starts during backup mode.
- Float switch controller backup mode reset switch.
- Pumps running, phase monitor, intrusion alert, power generator transfer switch, station in service, power failure, and floats inputs.
- Pumps, floats, and alarms status indicators on front panel.
- 12 VDC input power operation allows unit to maintain its alarm system during power outages by using battery power.
- 2 RS-232 serial ports - one for SCADA communications and the other to communicate with DCC pump controllers and RTUs.
- Rain gage input for optional tipping spoon type rain collector.
- Proven software that allows for easy setup and reliability.

### Specifications:

#### Input Power:

- 11 VDC to 16 VDC, 1 A max.

#### Operating Temperature Range:

- -30°C to +60°C (-22°F to +140°F)

#### Inputs (optically isolated):

Low Voltage - 12 VDC or VAC +50% or - 5%

High Voltage - 115 VDC or VAC ± 20%

Isolation - 2500 Vrms

- 4 - Pump Running
- 1 - Phase Monitor
- 1 - Intrusion Alarm or Power Generator Transfer
- 1 - High Alarm Float Switch
- 1 - Off Float Switch

#### Inputs (non- isolated):

- 1 - Rain Gauge
- 1 - Station in Service
- 1 - Battery Failure
- 1 - Line Power Failure

#### Relay Outputs:

- 4 - Pumps 1- 4, SPST Form A - 10 A at 125 VAC
- 1 - On Float Backup, SPDT Form C - 10 A at 125 VAC

#### Transient Protection:

- Metal Oxide Varistor

#### Interconnect:

- Pluggable terminal blocks (screw type)
- 2 - DE-9 connectors for RS-232 Bus

#### Communications Protocol:

- Modbus ASCII

#### External Dimensions:

- 8.30"H x 5.45"W x 1.55"D

4260 114<sup>th</sup> Terrace N, Clearwater, FL 33762

Toll Free (800) 335-5219 • Office Phone (727) 547-1622 • Office Fax (727) 547-1722

E-mail - dcc@digitalcc.com • Website - www.digitalcc.com