Level Plus®

Magnetostrictive Liquid-Level Sensors
with Temposonics® Technology

Touchscreen Modbus Terminal
Modbus RTU Input
Product Specification

Temposonics
AN AMPHENOL COMPANY

Features

- ◼ **RS-485, Modbus RTU Input**
- ◼ **4X rated enclosure and Display**
- ◼ **UV rated Overlay for Outdoor use**
- ◼ **Graphical Display**
- ◼ **Calibrate transmitter From Display**
- ◼ **Hazardous area approved**
- ◼ **85-264 VAC Input Power**
- ◼ **24 Vdc transmitter and Terminal Power Supply**

APPLICATIONS

- ◼ **Controller**

Markets

- ◼ **Petroleum and Petrochemical**
- ◼ **LPG Terminals**

Level Plus® Touchscreen Modbus Terminal *(part number 280897-2)*

Product Overview

The Touchscreen Modbus Terminal is a fully programmed remote terminal that can be placed in the field or in a control room. The Terminal is available in either a 7" or 10" Touchscreen and features individual tank information, tabular overview, tank calibration, and diagnostics. The input is Modbus RTU from any of the LP-Series and the terminal can output Modbus RTU to a plant wide system (PLC, DCS, SCADA) as well.

The Touchscreen Modbus Terminal can be ordered a the HMI only or in a NEMA 4X enclosure with DC power supply and DIN rail for field wiring. The front of the terminal is NEMA 4X and UV rated for outdoor use. The customer can order an optional sunshade if needed.

Temposonics programs each terminal based upon the number of tanks and process information to be displayed. The Terminal can display product level, interface level, temperature and volume. The number of tanks is limited to 12 for the 7" and 32 for the 10" based upon ease of viewing. The end customer can add additional tanks if desired.

All specifications are subject to change. Contact Temposonics for specifications and engineering drawings that are critical to your application. Drawings contained in this document are for reference only.
Go to https://www.temposonics.com for the latest support documentation and related media.

Product Specifications

Parameters	specifications
INPUT	
Modbus RTU :	RS-485 port
OUTPUT	
Modbus RTU :	1 RS-232 port 1 Ethernet Port
Optional Outputs:	Contact Factory
ELECTRONICS	
Input voltage:	85-265 VAC
Transmitter supply:	24 Vdc ±20% supply
Display:	280897-X 7" WVGA (800x480) touchscreen 280898-X 10" VGA (640x480) touchscreen
ENVIRONMENTAL	
Enclosure rating:	NEMA 4X
Front panel:	NEMA 4X (Front panel overlay - UV rated)
Humidity:	0 to 85% relative humidity, noncondensing
Operating temperatures:	**Electronics:** -20C (-4F) to 60C (140F) **storage temperature:** -20 °C (-4 °F) to 70 °C (158 °F)
Altitude:	2000 meters
FIELD INSTALLATION	
Enclosure mounting hole dimensions:	**SS Housing** **Height:** 539 mm (21.24 in.) **Width:** 254 mm (10.0 in.) **Fiberglass Housing** **Height:** 476 mm (18.75 in.) **Width:** 305 mm (12.0 in.)
Enclosure dimensions	**SS Housing** **Height:** 571 mm (22.5 in.) **Width:** 406 mm (16.0 in.) **Depth:** 242 mm (9.53 in.) **Fiberglass Housing** **Height:** 495 mm (19.5 in.) **Width:** 405 mm (16.0 in.) **Depth:** 248 mm (9.76 in.)

Agency Approvals

| Parameters	specifications
Hazardous Approvals:	ATEX II 3 G Ex ic nA T4 Gc IECEx Ex ic nA IIC T4 Gc cULus Class I, Division 2, Groups ABCD ◊ *Approvals are obtained by original manufacturers for individual components. Temposonics does not maintain any approval for the Modbus terminal final assembly.*

Dimension References

The following drawing is for reference only.
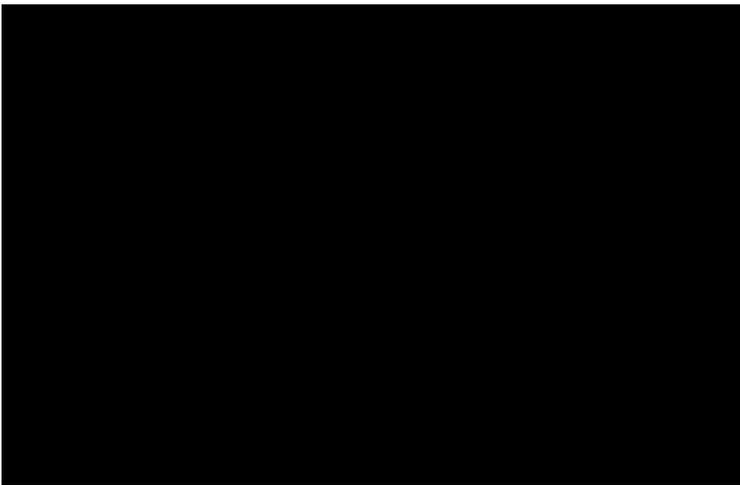
Control Room Installation

The following illustration shows an example of the Touchscreen Modbus Terminal used as a HMI in a plant-wide automation application. This example is for reference only. Actual configurations are dependent on the hazardous location and type of protection used at a Modbus terminal installation site. For information specific to your application, contact Temposonics.
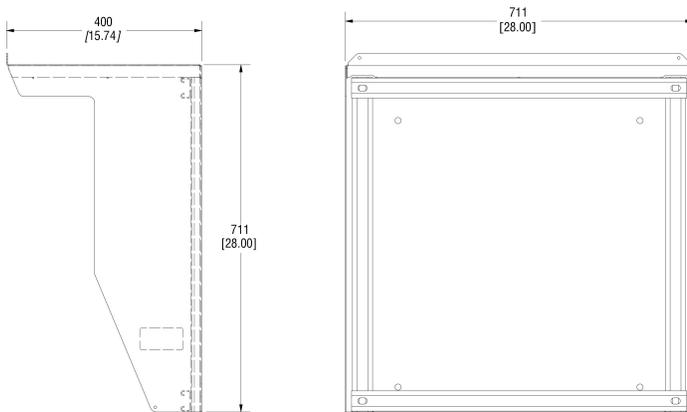

3
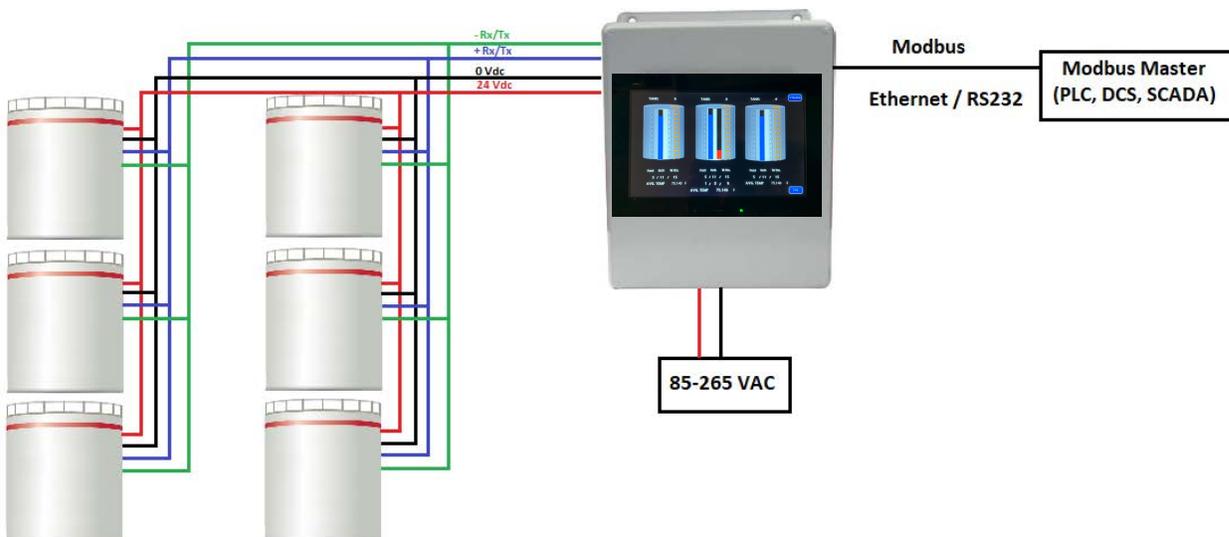
Ordering information

TOUCHSCREEN MODBUS TERMINAL

Housing	Screen Size	Part Number
SS	7"	280897-1
Fiberglas	7"	280897-2
None	7"	561394
SS	10"	280898-1
Fiberglas	10"	280898-2
None	10"	561494

Accessories

SUNSHADE 562369

400
[15.74]

711
[28.00]

711
[28.00]

711
[28.00]

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