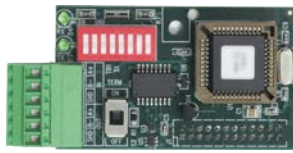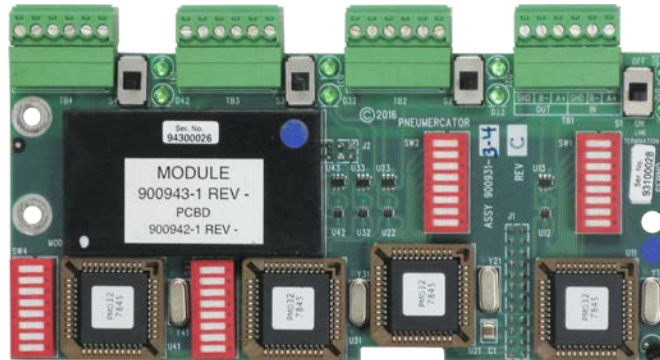## ModBus RTU Interface Cards Provide Simple, Efficient Connectivity Between TMS/LC2000 Systems and Building Management Systems or PLCs

Single-Channel

Dual-Channel

Quad-Channel

Product Description

The ModBus RTU Interface Cards are plug-in connectivity products that offer an easy, cost-effective solution providing access to all TMS real-time tank management data from practically any building management system or programmable logic controller supporting the industry-standard ModBus RTU serial communications protocol. Available TMS/LC2000 data includes continuous tank data, statuses and alarms, leak/point level sensor statuses and contact closure input statuses. Communications is over a half duplex, single twisted-pair RS-485 cable up to 4000 feet in length, with a switch-selectable line termination resistor for multi-drop configurations. Installation and setup is quick and easy, requiring no programming on the TMS/LC2000 console. Available in single, dual and quad-channel configurations, isolated or non-isolated.

Features

- Industry-standard interface to most building management systems and programmable logic controllers
- Add ModBus RTU support to any TMS/LC2000 System, either as a factory-shipped option or as a field upgrade*
- Installs within the locked TMS/LC2000 enclosure for secure, tamperproof connectivity
- No TMS/LC2000 programming required. Simply set slave address and baud rate on ModBus RTU card dip switches.
- ModBus status register allows host processor to confirm continuous updating of ModBus registers by TMS/LC2000
- Single, dual and quad-channel(TMS3000/4000 only) configurations available, with isolated or non-isolated options.

Specifications

- Communications Protocol: Modbus RTU
- Communications Format: RS-485, Half-Duplex
- Connection Type: Plug-In Terminal Block with Wire Entries

    Input: Ch. A (+), Ch. B (-), Shield
    Output: Ch. A (+), Ch. B (-), Shield

- Recommended RS-485 Cable: Belden 9841 (PVC Jacket), 89841 (FEP Teflon Jacket) or similar
- Maximum Cable Length: 4000 Feet (1200 Meters) total to end of run

- LED Indicators: TX (Slave Transmit), RX (Global Receive)
- Serial Data Format: Fixed, 1 Start Bit, N-8-1
- Baud Rate: 9600 or 38400, Dip Switch Selectable
- Slave Address Select: 1 thru 64, Dip Switch Selectable
- Maximum Slave Response Time: 400 ms
- Maximum Number of 16-Bit Registers per READ Command: 64
- Maximum Register Update Rate from TMS: 1.2 seconds (0.8 seconds typ.)

Model Numbers

- 900552-10   Single Non-Isolated Input
- 901050-10   Single Isolated Input
- 900665-5-5   Dual Non-Isolated Inputs

- 900665-R-R   Dual Isolated Inputs
- 900931-1-4   Quad Isolated Inputs, TMS3000
- 900931-3-4   Quad Isolated Inputs, TMS4000

*Requires TMS firmware Vxx.99.94 or later, available at no charge with purchase of ModBus card.