

Tantalus Utility Network™



TC-1200 Series Installation Instructions

The TC-1200 series module is a two-way 900 MHz LAN device which is integrated into a single phase electro-mechanical meter. The TC-1200 series module counts meter disk rotations using an optical sensor and delivers meter readings on request or on a programmed schedule for Time-of-Use and interval data applications. The TC-1200 series module also reports power outages and monitors power quality including voltage (plus sag/swell alarms) and momentary outages (blinks).

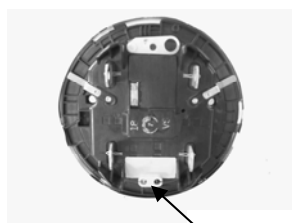
The TC-1200 series module is retrofitted into a single phase electro-mechanical meter either in the utility company meter shop or a contract meter shop.

WARNING

Energized meters, meter sockets and distribution lines present the risk of electrical shock. Work on this equipment should be performed only by qualified metering specialists or industrial electricians following all utility company established operational and safety procedures.

Installation Instructions

1. Remove the existing meter from the meter socket and record the final reading per utility standard practice.
2. Inspect the meter socket jaws to ensure that they are in good condition.
3. Perform voltage checks, line-to-line and line-to-neutral, to ensure the voltage is at proper levels.
4. Visually inspect the meter. Ensure that the optical interface is secured in place on the meter base.
5. Install the meter and observe the Network Status LED to verify that a valid association candidate is found per the table on the reverse page.
6. Install the meter ring and seal.
7. Record the new meter number and initial reading per utility standard practice.



Optical interface

Network Status LED (Red)

Message Status LED (Green)



Transceiver LED (Amber)

TC-1200 series module Network Status LED (Red) (Amber on earlier versions)	
Start-up/Power-up	Solid ON (Fast flashing indicates module is not programmed)
Unassociated/Re-associating	Solid ON
Valid association candidate found	Flashing
Full network association confirmed	OFF
TC-1200 series module Message Status LED (Green)	
Start-up/Power-up	OFF
Message queued for transmission	Long flash
Valid message received (addressed to this device)	Short flash
TC-1200 series module Transceiver (XVR) LED (Amber) (Green on earlier versions)	
Start-up/Power-up	OFF
RF packet transmitted	Long flash
RF packet received (LAN activity)	Short flash

Specifications	
Frequency Range: 902-928 MHz frequency hopping, license exempt	Operating Temperature: -22 to 140°F (-30 to +60°C)
Modulation: FSK	Operating Humidity: 5 to 95% non-condensing
Antenna: under the glass	Standards:
Power supply: 240VAC	FCC CFR Title 47 Part 15b (unintentional radiators)
Power consumption: Quiescent 1.9 watts typical	ANSI C12.1:1995 Sections: 4.7.3.1 Insulation, 4.7.3.11 EFT/Burst
Data interface: optical to attached TUNet 3205	4.7.3.3.1 Surge Immunity, 4.7.3.3.2 Ring Wave Immunity

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications to this device not expressly approved by Tantalus Systems Corp. could void the user's authority to operate the equipment.

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