

Electromechanical TPM Controller

Smart communications for singlephase
electromechanical watt-hour meters

I-70/AB1/D5S/J5S



The TC-1205 TPM Controller turns electromechanical meters into intelligent devices for advanced metering. It delivers meter data on a programmed schedule for basic AMR and can also provide hourly interval data (or in more frequent intervals if desired) for dynamic billing programs such as TOU, CPP, and RTP. A utility can use the TC-1205 to closely monitor power quality (voltage blinks, sags and swells) and detect outages remotely, in near real time. The result is precise consumption measurements and the information needed to achieve a new level of reliability and operational performance.

TANTALUS ADVANTAGES

- Reports kWh energy consumption, voltage and outages
- Reports consumption in periods as low as 15-minute intervals
- Measures voltage from 170 to 260 V; accurate to $\pm 1\%$
- Reports voltage sags / swells / blinks to help ensure high quality power delivery to each home
- On-request reads allow customer service to respond to inquiries and closely monitor endpoints remotely, in near real time
- Remotely programmable operating parameters allow a utility to easily tailor performance measurements
- Field initiated outage and restoration alerts instantly notify staff of critical events and reduce field time
- Under-the-glass design fits into new or existing meters
- Non-volatile memory maintains data during outages
- Automatically negotiates best path to TUNet to ensure reliable communication
- Optional remote disconnect / reconnect available through the RD-1000
- Features Tantalus TruPush™ technology for instant, field initiated event notifications such as outage alerts or load shed success; no device polling required

Data is delivered to the utility via TUNet – the Tantalus Utility Network – where it can be integrated into CIS, OMS, PQM, and other back-end applications. Remote, 24x7 access not only allows a utility to measure consumption, it can quickly pinpoint, diagnosis, and often remedy troublespots prior to dispatching a field crew. Furthermore, CSRs gain desktop access to the information needed for prompt, knowledgeable customer service.

TC-1205 modules fit under-the-glass of new or existing I-70, AB1, D5S, and J5S meters. Compatibility with these popular meters allows a utility to introduce advanced metering without purchasing new devices and, therefore, protect its investment in meter assets. TUNet LAN technology is self-initiating and self-healing to minimize deployment cost and ensure robust communications. Deployment of TUNet smart meters is not constrained by substation location, which gives a utility the freedom to introduce advanced functionality where the needs are greatest or where the return on investment is most attractive.

Meters Supported

- I-70 / AB1 / D5S / J5S

Meter Forms Supported

- 2S

Radio

- Frequency range: 902-928 MHz ISM Band
- TUNet TruPush™ Technology
- Vectored Channels: 64,000
- Data rate: 10-300 kbps
- Transmit power: +27 dBm (0.5 watt)
- Receive sensitivity: -116 dBm
- Antenna: built-in
- ZigBee under glass optional

Power

- Supply: 240 VAC from AC line mains
- Quiescent power: 1.9 watts

Physical

- Operating temperature range: -40° to +158° F / -40° to +70° C
- Operating humidity range: 5% to 95% non-condensing

Approvals / Standards

- ANSI C12.1 & C12.20
- FCC for CFR Title 47 Part 15b
- Measurement Canada

