

Itron CENTRON TPM Controller

Smart communications for Itron's popular
solid-state 120 V and 240 V meters



Tantulus and Itron deliver smart meter precision, performance and flexibility.

TUNet modules fit securely under-the-glass into CENTRON meters. The 900 MHz radio modem delivers the rich data contained in CENTRON meters direct to the utility via TUNet – the Tantulus Utility Network. The TUNet module reads directly from the register, which means there is no discrepancy between what is displayed on the meter and what is reported to the utility.

Better information leads to more accurate billing, greater reliability, and faster repairs. TC-1116 and TC-1216 modules eliminate the need to dispatch field crews to investigate every issue and provide CSRs with the ability to respond quickly and knowledgeably to customer inquiries. The result is improved 24/7 operational performance, minimal off-cycle reads, and fast customer service on every front, from clarifying statements to addressing blinking lights and brownout reports.



SMART METERING

Tantulus transforms CENTRON meters into wireless communications devices that automatically capture endpoint data – in hourly intervals or more frequently if needed – to support dynamic TOU, CPP, or RTP billing. It enables a utility to precisely monitor power quality as well as instantly detect outages and verify restorations. It also allows control center staff to read in/out new customers and troubleshoot problems at the operations center. Reporting parameters can be changed remotely so a utility can tailor performance metrics without a site visit. Itron and Tantulus deliver precision and flexibility. By integrating CENTRON solid-state meters into TUNet, a utility can go beyond basic kWh monitoring and implement a two-way Smart Grid communications network. Tantulus gives a utility the freedom to introduce advanced functionality where the needs are greatest or where the return on investment is most attractive.

TANTALUS ADVANTAGES

- Reports kWh energy consumption, voltage, and outage
- Direct Register Read: the TPM Controller module is the Register of Record to eliminate the possibility of discrepancies
- Reports consumption in periods as low as 15-minute intervals
- On-request reads allow customer service to respond to inquiries and closely monitor endpoints remotely
- Remotely programmable operating parameters allow a utility to easily tailor performance measurements
- Measures voltage from:
 - TC-1116: 85 to 130 V; accurate to $\pm 1\%$
 - TC-1216: 170 to 260 V; accurate to $\pm 1\%$
- Reports voltage sags / swells / blinks to help ensure high quality power delivery to each home
- Field initiated outage & restoration alerts instantly notify staff of critical events
- Under-the-glass design fits into new or existing CENTRON meters
- Non-volatile memory maintains data during outages
- Automatically negotiates the best communications path
- Optional remote disconnect / reconnect available through the RD-1000; Remote Disconnect Under Glass also available from Tantulus
- Features Tantulus TruPush™ technology for instant, field initiated event notifications such as outage alerts or load shed success; no device polling required

Meter Forms Supported

- TC-1116 (120 V): 1S, 3S, 12S / 25S
- TC-1216 (240 V): 2S, 3S, 4S

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: 120 VAC from AC line mains (TC-1116)
- Supply: 240 VAC from AC line mains (TC-1216)
- 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 including California Utilities extensions
- FCC for CFR Title 47 Part 15b

