

TANTALUS LM-153X

# Enhanced Load Management M&V

Advanced load management with measurement and verification.



The Tantalus LM-153X is embedded with a TUNet radio inside an advanced load management M&V switch.

It is simple to install and program, either on-site or over the air. It acts as a standard TUNet communication endpoint, automatically associating with the LAN and finding the most optimal network path back to the TUNet Control Center.

Products are controlled with a global command set. The LM family of load management switches can have their firmware upgraded over TUNet so future applications and operating scenarios can keep pace with evolving operational and efficiency requirements.

Tantalus enables a utility to add an effective load management tool to its cost-saving and conservation initiatives. The LM-153X is the cornerstone of a demand response program that works in both emergency and economic load control situations. It is also an essential part of a reliability strategy aimed to improve SAIDI and SAIFI results by avoiding overloads, blackouts and brownouts through intelligent, proactive load management efforts.



Powered by:



## DEMAND RESPONSE & ENHANCED LOAD CONTROL

The Tantalus LM product line gives utilities the power to remotely manage loads directly via TUNet® AMI in order to quickly reduce electricity consumption both locally or across the service territory. The new measurement and verification (M&V) capability allows utilities to track their curtailable load in real-time.

M&V offers the following key benefits:

- Predictive curtailment results
- Optimize curtailment strategies
- Tamper detection



The Enhanced Load Management switch is controlled by a newly enhanced intuitive interface which provides real time graphical reporting and a wide variety of curtailment strategies.

## TANTALUS ADVANTAGES

- LM-153X available as a 2-relay configuration for controlling water heaters, heat pumps, air conditioners, agricultural and pool pumps. Models include 30amp only, 30 amp/ 5 amp, 5 amp only, and 5 amp / 5 amp.
- Operates seamlessly within the TUNet network for two-way, 24/7 connectivity so a utility can react instantly whenever a critical event occurs
- Independent relay control with meter grade voltage and current measurement for precise load measurement.
- TUNEup® over the air firmware upgrade, programming, and control
- Real time reporting of metrics on relay state changes and current thresholds
- Cycling, on/off, adaptive, randomization, cold load pickup, resume after power loss
- Flexible wiring options; can be powered from the appliance or a separate source
- Designed for maximum penetration into basements and bunkers
- Communicates directly with Itron 60W, 100W, 100G, and R300 series ERT modules as well as Badger Orion water meters
- Non-volatile memory maintains data and configuration during "off" periods
- Rugged design for indoor and outdoor installation
- Features Tantalus TRUPush™ technology for instant, field initiated event notifications such as outage alerts or load shed success; no device polling required

### Power Management

- Internal 30A/240V, 3A/24VAC for switching primary loads and control circuits of larger loads
- Current sensors may be mounted internally or externally

### Measurement & Verification

- Voltage: 192 - 288 RMS +/- 2%
- Current: 0 - 60 A +/- 2%
- Active Power: 0 - 7.2kW +/-2%

### Radio

- Frequency range: 902-928 MHz; license exempt
- Transmitter Power: 0.8 watt
- Antenna: 0dBi omni integrated (EIRP + 29dBm)

### Operating Power

- Supply: 208-277 VAC at 50/60 Hz
- Consumption: 6.5 watts typical

### Physical

- Operating temperature range: -22° to +158° F / -30° to +70° C
- Humidity: 5% to 95% non-condensing
- NEMA 3R certified, 4X designed
- Enclosure: 8.4" h x 6.4" w x 2.9" d

### Approvals / Standards

- Certified to UL916 "Energy Management Devices" for use in Canada and United States
- FCC CFR Title 47 Part 15c
- Meets and exceeds ANSI C37.90a

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