

Tipify IoT platform

| NUMBER OF STREET, STRE | | |
|--|-------------|--|
| | Intellastar | |

- 3G/4G Modem options
- Ethernet LAN for BACnet and Mobus
- Ethernet WAN for enterprise connection
- WiFi for data, WAN or local access to device
- RS-485 Modbus RTU
- 2 Pulse Inputs for Tariff meter

T-Star 245 Data Sheet

The T-Star 245 Tipify Platform satisfies many Internet of Things Application requirements. It is an ANSI C12 certified tariff meter for both pulse inputs and, with a Modbus RTU connected Veris CT package and its ability to connect to Building Automation Systems make this a good fit for Metering, Monitoring, Automated Demand Response, and Analytics for Buildings.

Ethernet LAN and WAN connect to plant over BACnet IP and Mobus TCP, and to enterprise servers with oBiX and Haystack and Arcbeam protocols. There are Verizon and AT&T 4G modem options, and 3G for international roaming. RS-485 serial connection supports Mobus RTU.

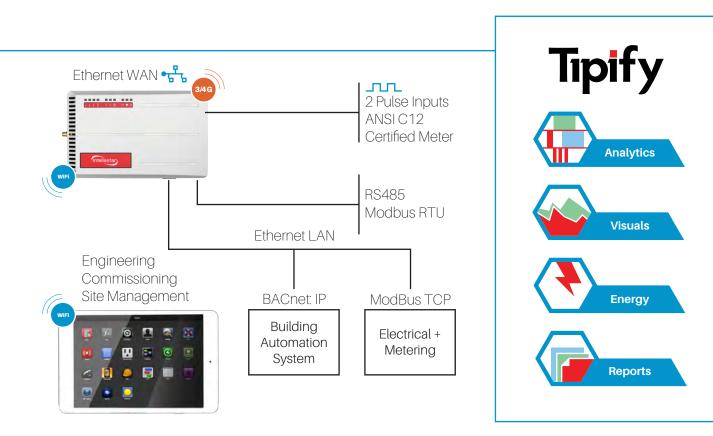
The T-Star 245 Tipify Platform is part of a comprehensive range of Hardware, Software, and Connection Services that enable Service Providers to deliver the benefits of the Internet of Things to Intelligent Buildings, Equipment, and Smart Devices.

Tipify provides Visualization of Data with Dashboards, Custom Reporting, and industry leading on-board Analytics.

The Platform is used for many Applications including:

- Energy Monitoring and Analysis
- Building and Equipment Fault Detection and Diagnosis
- Smart Grid and Automatic Demand Response

Tipify incorporates the Project Haystack standard for Data Modeling. A built in Wi-Fi Access Point allows Mobile Devices to Communicate with the T-Star 245 Platform for commissioning visualization and for communication between T-Stars.



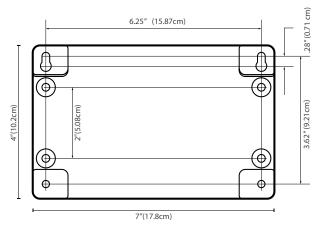
www.Intellastar.com

Software

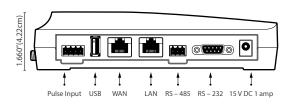


- Tipify Application Environment
- Project Haystack modeling
- Linux Operating System with Java Virtual Machine
- Serial communication for Modbus RTU
- IP protocols Modbus TCP, BACnet IP, oBIX, Haystack

Mounting Dimensions



- Molded plastic case, convection cooled
- Multiple mounting options—desk, wall, or in enclosure
- •Net weight 1.0 pound (0.45 Kg)



Hardware

- TI ARM Cortex A8 Cortex processor @ 600 MHz
- 512 MB DDR3 RAM
- 16 GB Micro SD Flash
- Optional 128 GB HiSpeed SD for high frequency data acquisition
- Trusted Platform Module (TPM)
- 2 10/100 MBit Ethernet port
- Wi-Fi for data, WAN and user interface connectivity
- Two digital inputs for pulse counting up to 50Hz pulses at 50% duty cycle
- One RS-232 port: DB9 male connector
- One RS-485 port: 3 point terminal
- 3G modem for international roaming
- 4G modem class 1 for AT&T and Verizon
- Power—15 volts DC
- Rechargeable internal battery backup
- Multiple Mounting Options-Desk, Wall or Enclosure Environmental—Operating range:
 0 to 50 Deg C (32 to 122 Deg F) Humidity 0 to 90% RH non-condensing

Agency Listings

- UL-60950 or Met Labs equivalent
- FCC Part 15 Class B for electromagnetic Class C for modem
- RoHS compliant
- CE compliant
- ANSI C12 Certified Meter

Ordering Information

| Part Number | Description |
|-------------|--|
| 245 G-M | 4G Verizon modem |
| 245 G-B | 4G AT&T modem |
| 245 G-A | 3G UMTS/HSPA modem for international roaming |
| /SDS | High Speed 128 GB SD Flash memory |