

DTS 4G LTE IoT Gateway

The **DTS 4G LTE IOT Gateway** edge device provides a cost-effective, secure interface between the DTS family of AC and DC power and energy meters and Building Management Systems (BMS) as well as an intermediate IoT cloud Interface. It uses LTE to connect to Verizon, AT&T or Vodafone networks (model dependent)

It provides a "No Cost Cloud Interface" that enables remote monitoring, control and data visualization of your metering assets.

Users can view real-time data of any connected DTS meter as well as download historical data. Additionally, cloud alarming via SMS

or email is included.

A single DTS 4G LTE IoT Gateway can seamlessly connect one or many DTS power / energy meters into BMS systems using serial or Ethernet BACnet and Modbus protocols.

It has a unique ability to act as a Wi-Fi access point. Users can directly connect their mobile devices to the DTS IOT Gateway without having to be on the facility's LAN or WAN to access the local web applications.

Each gateway is delivered pre-configured for immediate connection of the DTS power and energy meters. No additional programming or mapping is necessary. **JUST ADD A SIM CARD** and Data Plan and you are up and running.

Features & Benefits

- Multiple connection points: 1 x Ethernet, 1 x RS-485, Wi-Fi & Cellular 4G LTE
- Support AT&T, Verizon & Vodafone 4G LTE networks
- Modbus or BACnet protocols
- Pre-configured for the DTS family of AC & DC power and energy meters (No Driver development required)
- Supports up to 1500 device points per gateway.
- For practical reasons we recommend connecting 20 or less DTS meters per gateway. (Contact Measurlogic for larger deployments)
- Data logged and buffered in the DTS IoT Gateway for up to 30 days (avoids any data loss in the event of communication failure)
- Data uploaded to the cloud every 10 minutes automatically.
- Remotely retrieve the data from the cloud in CSV or JSON file format at any time.
- Local BACnet/IP access to all DTS meters attached to the DTS IoT Gateway (BTL Certified)

Easily connect any DTS sub-meter to the cloud

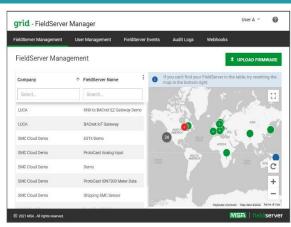




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Benefits of the SMC Cloud

- Registering DTS IoT Gateways on MSA's tenant based IOT Cloud platform effortlessly connects Measurlogic's DTS energy sub-meters to the cloud.
- The MSA Cloud RESTful API allows device data to be available to 3rd party cloud platforms. The cloud platform has no firewall dependencies through HTTPS by utilizing TLS/SSL (Transport Layer Security/Secure Sockets Layer) to ensure data security - port 80 & 443.
- Remote access for diagnostics, monitoring, alarming and configuration of the DTS meters in the field (No driving to site required).
- No annual subscription to connect DTS IoT Gateways to the MSA Grid platform for up to 50 datapoints per minute per gateway and stored for a year.
- Data plans are available if more data points per minute per gateway are required.



Hardware Specifications *

Communications

Serial (galvanic isolation) 1 x RS-485 / RS-232

Baud rates 9600, 19200, 38400, 57600, 76800 & 115000

Ethernet 10/100 Base T, MDIX, DHCP

Environmental

Operating Temperature $-20 \text{ to } 70 \,^{\circ}\text{C} \, (-4 \text{ to } 158^{\circ}\text{F})$ Relative Humidity $10\text{-}95\% \, \text{RH} \, \text{non-condensing}$

Other

Web configuration, on-board diagnostics, DIN rail mount included

Construction

Dimensions (H x W x D) 4 x 1.1 x 2.7 in (101.6 x 28 x 68 mm)

Weight 0.4 lbs (0.2kg)

AWS1700 (B4), 1900 (B2)

Power Requirements

Input 12 – 24Vdc, 670mA @ 12Vdc

Cellular Frequencies Supported

North America **AT&T LTE** 700 (B17/B12/B13), 850 (B5) North America **Verizon LTE** 700 (B13), AWS1700 (B4), 1900 (B2)

EU **Vodafone LTE** 800 (B20) / 900 (B8) / 1800 (B3) / Rx Diversity and MIMO DL 2x2

2100 (B1) / 2600 (B7)

Approvals

CE and FCC Class B & C Part 15 BTL Marked, IC Canada & PTCRB

UL 62368, RoHS and WEEE compliant

Radio Specifications *

Cellular Wi-Fi 802.11 b/g/n

Features: LTE Cat 4 Downlink: Up to 150 Mbps Frequency: 2.4GHz Antenna Type: Internal
Antenna Type: SMA Uplink: Up to 50 Mbps Channels: 1 to 11 (inclusive) Encryption: TKIP, WPA2 & AES

Carriers: Verizon, AT&T and Vodafone Output Power: 4.5dBm
Output Power: Class 4 (2W, 33dBm), 108dBm @UMTS

Ordering Information

CCOM-0026A FPA-C42-1978 For DTS Meters, serial, ethernet, Verizon Cellular & Wi-Fi
CCOM-0028A FPA-C41-2012 For DTS Meters, serial, ethernet, AT&T Cellular & Wi-Fi
CCOM-0050A FPA-C43-1940 For DTS Meters, serial, ethernet, Vodafone Cellular & Wi-Fi