







DOM-530-TSO

4G IIoT Gateway



Key Features

 Modbus TCP/RTU/ASCII	 IIoT Telemetry
 Dual-SIM Failover	 VPN Security
 Industrial Grade Design	 GPS Location

The DOM-530-TSO 4G IIoT Gateway offers LTE Cat.4 connectivity, dual Gigabit Ethernet ports with WAN failover, and dual SIM support for network reliability. It features RS-232/485 interfaces, digital I/O, GPS for device tracking, and supports data logging via MicroSD and USB—making it ideal for versatile IT/OT integration in industrial environments.

Seamless IT/OT Integration for Enhanced Efficiency

The DOM-530-TSO plays a crucial role in unifying business operations with production processes, delivering key benefits such as improved decision-making, streamlined automation, predictive maintenance, and increased production efficiency. With robust 4G connectivity, it enables fast integration of remote sensors, devices, and machinery, ensuring centralized management and strengthening competitive advantage. Featuring versatile interfaces including RS-232/485 and digital I/O (DI/DO), the DOM-530-TSO responds swiftly to IIoT sensor inputs and activates digital outputs to end devices in the OT field, enhancing real-time responsiveness and industrial automation. It supports multiple industrial communication protocols and uses Modbus for seamless RTU and TCP communication, simplifying integration into complex automation and remote control systems while boosting operational efficiency and system reliability.

Enhanced Telemetry and Data Management

The DOM-530-TSO enhances data acquisition and analytics by supporting Modbus TCP, RTU, and ASCII protocols. With versatile interfaces including RS-232/485 and digital I/O (DI/DO), it enables real-time telemetry data transmission to the control center—providing remote access and actionable insights for improved decision-making and operational efficiency. Equipped with a MicroSD card slot and USB port, the DOM-530-TSO supports data logging and storage for machine diagnostics, enabling predictive maintenance and rapid troubleshooting to minimize downtime and extend equipment lifespan.

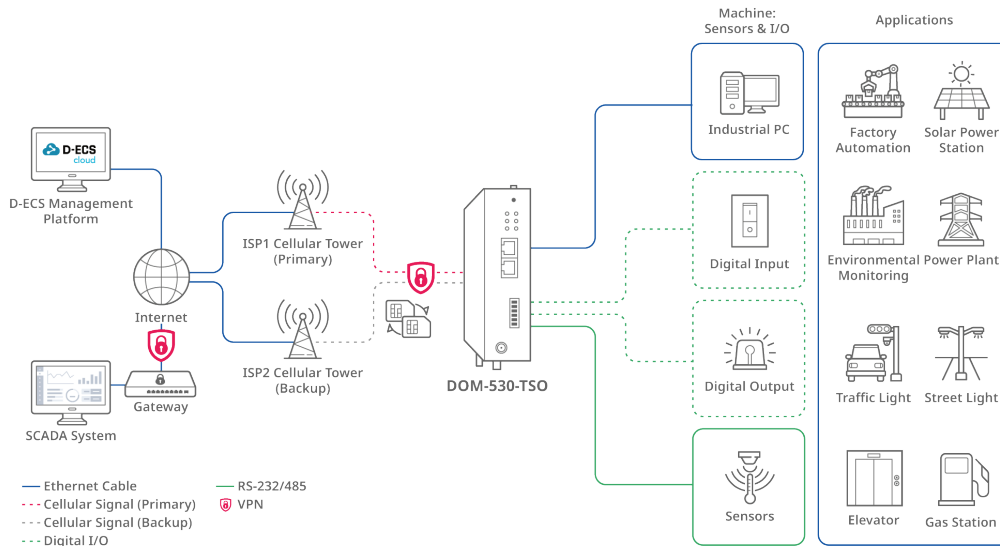
Applications

- Factory Automation
- Solar Power Station
- Environmental Monitoring
- Power Plant
- Traffic/Street Lights
- Elevator
- Gas Station

Advanced Event Management for Efficient IIoT Operations

The DOM-530-TSO streamlines event management with responsive event-trigger capabilities. It is designed to send instant notifications via SMS or email when IIoT sensor readings exceed predefined thresholds, enabling the control center to monitor and manage sensor status remotely via SMS. This functionality enhances the efficiency of IIoT monitoring, automation, and time-sensitive applications.

Connection Diagram



Specifications

Device Interface

- Cellular: 4G LTE-Cat.4
- SIM Slot: 2 x SIM (Micro SIM) with auto failover
- Ethernet: 1 x GE WAN/LAN port, 1 x GE LAN port
- GNSS: GPS/GLONASS
- Serial Ports:
 - 2 x RS-232 or RS-485 terminal block
 - 1 x DI (isolated, logic 0: 0-2 V, logic 1: 5-30 V)
 - 1 x DO (relay mode, max. 30 V) terminal block
- Log Storage: Micro SD slot, USB 2.0 type A
- Power Input: DC 9-36 V terminal block
- Antenna Connectors: 2 x SMA (F) cellular, 1 x SMA (F) GPS

Performance¹

- Maximum Cellular Data Throughput:
 - LTE: 150 Mbps (DL) / 50 Mbps (UL)

WAN

- WAN Interface: Cellular, Ether-WAN
- Multi-WAN Function: Failover
- Cellular: NAT, bridge
- Ether-WAN: Dynamic IP, static IP, PPPoE, PPTP, L2TP
- Connection Monitoring: Ping/DNS query reboot

Network

- LAN & VLAN: DHCP server/relay, port/tag-based VLAN
- Routing: Static, dynamic RIP v1/v2, OSPF, BGP
- DDNS: DynDNS, No-IP, dynamic DO

Services

- Cellular Toolkit: Data usage, SMS, SIM PIN, network scan
- Event Management: SMS, e-mail, digital I/O, Modbus

VPN

- VPN Tunnel: IPsec, OpenVPN, PPTP, L2TP, GRE
- VPN Pass Through: IPsec, PPTP, L2TP

Security

- Firewall: SPI firewall, IPS, port forward
- Access Control: MAC/IP filter

Administration

- Management: SNMP v1/2/3, D-Link D-ECS²
- Maintenance: Web UI, diagnostic tools via ping/tracert
- System: FW upgrade, backup and restore config, reboot and reset
- Logging: System log, external syslog server, Modbus data

Monitoring

- Device Status: CPU/memory usage, WAN status, client list
- Cellular Status: IMSI, ICCID, operator, band, RSSI, SINR, RSRP, RSRQ
- Security: VPN status, firewall status
- Statistics and Reports: Cellular signal, cellular usage

Field Communication

- Virtual COM: TCP client, TCP server, UDP
- Modbus: Modbus TCP/RTU/ASCII master/slave access

Operating Environment

- Operating Temperature: -30 to 70°C (-22°F to 158°F)
- Storage Temperature: -40 to 85°C (-40°F to 185°F)
- Operating Humidity: 10% to 95% non-condensing
- Storage Humidity: 0 to 95% non-condensing
- Dimensions: 31 x 99 x 131 mm

Actual performances may vary due to settings, cabling, temperature, network configuration, interface, device compatibility, environmental and on-site conditions, and other similar factors. References to power capability, signal or processing speed, signal range or distance, data encryption, storage capacity, display properties, or other performance metrics are based on optimal conditions derived from industry standards and provided for informational purposes only. Specifications may be subject to change without prior notice.

Certifications and Approvals

- Certifications: CE, UKCA
- Cyber Security: EN 18031-1, EN 18031-2, EN 303645

Package Contents (Standard)

- 2 x Cellular SMA Antennas
- 1 x RJ-45 Cable
- 1 x Power Adapter
- 1 x Terminal Block (2-pin)
- 1 x Terminal Block (4-pin)
- 1 x Terminal Block (6-pin)
- 1 x DIN-Rail Kit

Available Versions

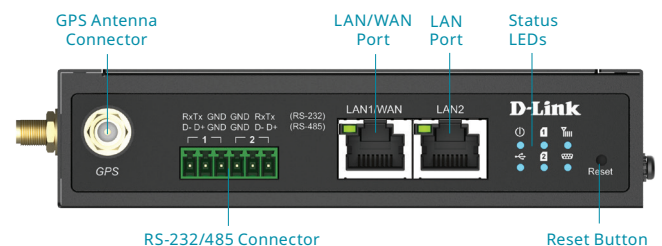
EU SKU (HW: A1)

4G LTE	FDD: B1/B3/B7/B8/B20/B28A
	TDD: B38/B40/B41

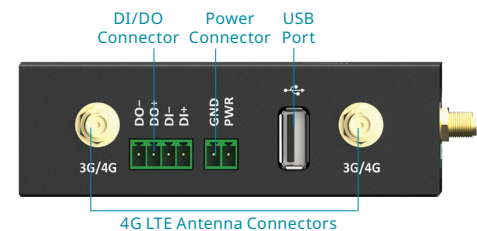
- 1 Data rates are theoretical. Data transfer rate depends on network capacity and signal strength.
- 2 You only have to pay a M2M device license fee when you apply for D-ECS license.

Hardware

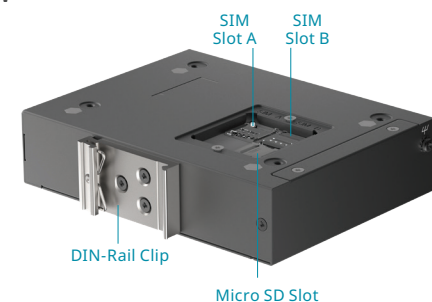
Front View



Side View



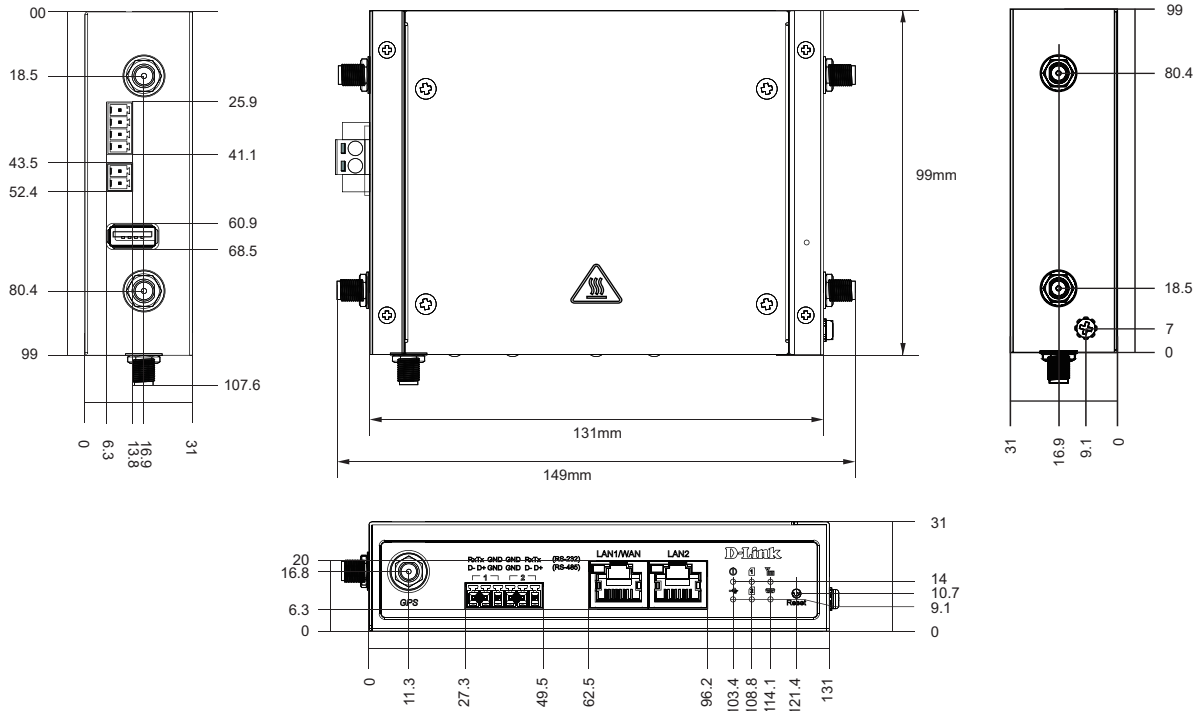
Bottom View



Spatial Measurement

The following diagrams provide the product's physical dimensions measured from top, front, left, and right views for installation and integration reference.

Unit: mm



Mounting Space Requirements

