ODG851-0TL4x Outdoor IIoT Base Station

The ODG851-0TL4x is a fully-featured wireless base station designed to operate in harsh environments. It securely connects multiple networks and provides redundant cellular uplink. LoRaWAN™-compliant base station can serve as a transparent LoRa™ gateway, and it also allows setting up controlled closed infrastructure within a private network.

Applications:
- Industrial IoT and networking
- Farming and agriculture
- Environmental monitoring
- Smart City infrastructure: street lighting, waste management, traffic controls
- Utilities, AMI/AMR
- Security sensors, IP surveillance

ODG851-0TL4x
- 1*GE WAN/LAN
- 802.3at PoE PD
- 1* Micro SD
- 8Gb u-SD Storage
- 2.4/5GHz WiFi 2T2R
- 802.11 b/g/n/ac
- LTE Cat.4
- Dual Micro-SIM
- LoRa™ Technology
- 868/915MHz

LoRaWAN™ base station
- 8 channels scan, packet forwarder
- Transparent or private network

Wireless communications hub
- High-speed, low-latency LTE and WiFi
- Low-power, long-range LoRaWAN™

Ingress Protection (IP67)
- Harsh environments, wide t° range
- Weatherproof outdoor design

Reliable uplink for IIoT network
- Multiple WANs: LTE, WiFi, Ethernet
- QoS bandwidth prioritization policies

LoRa™ network server
- On-Device LoRa™ Network Server
- Remote NOC
- VPN Tunnel
- IP CAM
- WiFi SSID 1
- Guest
- WiFi SSID 2
- Staff
- WiFi SSID 3
- 8Gb u-SD Storage
- Local NOC
- PoE
- 4G LTE
- Internet
- 802.3at PoE PD
- LoRa™ technology
- 868/915MHz
**Specification Summary**

**Device Interface**
- **LTE Module**: 1*LTE-Cat.4, 2*micro-SIM
- **Ethernet**: 1*RJ45 GE (with 802.3at PD)
- **WiFi**: 802.11ac/n 2T2R (5G/2.4GHz selectable)
- **LAN LoRa**: 1*LAN-LoRa (8 channels)
- **LoRa Band**: 863MHz-870MHz (EU) 902MHz-928MHz (US)
- **Log Storage**: 1*embedded 8G-SD
- **Power Input**: 1*802.3at PoE, or proprietary Passive PoE Injector
- **Cellular**: 3GPP, 2G/3G/LTE, IP Pass-through, IPv4/6
- **Network Monitor**: ICMP/DNS Query
- **WAN & Uplink**
  - **WAN**: 1* LTE cat.4 module(dual Micro-SIM), 1*11ac/n (5G/2.4GHz) WiFi Uplink, or 1*RJ45 GE(with 802.3at PD, configurable)
- **Antenna Con.**:
  - 2 x N-Type female connectors 3G/LTE antenna
  - 2 x N-Type female connectors 2.4GHz/5GHz WLAN antenna
  - 1 x N-Type connectors for LoRa antenna
- **Ethernet**:
  - 1*RJ45 GE (with 802.3 at PD)
- **LoRa**:
  - 1*802.3at PoE, or proprietary Passive PoE Injector
  - 1*11ac/n (5G/2.4GHz) WiFi Uplink, or 1*RJ45 GE(with 802.3at PD, configurable)
- **Cellular**: 3GPP, 2G/3G/LTE, IP Pass-through, IPv4/6
- **Network Monitor**: ICMP/DNS Query
- **Security**:
  - **VPN Tunneling**: IPSec, OpenVPN, PPTP, L2TP, GRE
  - **Scenario**: Site/Host to Site/host; Hub and Spoke; Dynamic VPN
  - **VPN Capability**: IPSec: up to 16 tunnels
  - **Firewall**: SPI Firewall with Stealth Mode, IPS
  - **Access Control**: Packet Filter, URL Blocking, MAC Filter
  - **Authentication**: MAC based, Portal based Int./Ext LDAP/AD DB

**Administration**
- **Configuration**: Web UI, CLI, Command Script, Python
- **Management**: SNMPv3 Std. & AMIT MIB , TR069
- **System**: Upgrade, Backup & Restore, Reboot & Reset, SysLog
- **FTP**: FTP Server, User Account
- **Diagnostic**: Packet Analyzer, Diagnostic Tools

**Environment**
- **OP/Store Temp.**: -40°C ~ 70°C ; -40°C ~ 85°C
- **Humidity**: 10%~95% (non-condensing)
- **Enclosure**: Die Casting Base + Plastic (PC + anti-UV) Panel
- **IP Rate**: IP67
  - Wind Load: 120mph
- **Dimension**: 254x254x84mm (w/o mounting kit)

**Certificate - CE**
- **Approval / Certificate**
  - CE, EAC
- **Standards & Regulation**
  - IEC 61000-4-2(ESD) Level 4; IEC 61000-4-3(RS) Level 4
  - IEC 61000-4-4(EFT) Level 4; IEC 61000-4-5(Surge) Level 3
  - IEC 61000-4-6(CS) Level 3; IEC 61000-4-8(PFMF) Level 4
  - Radio: EN 301 489-1/-7/-17/-24/-52, EN 301 893 V1.8.1, EN 50385
  - Safety: EN 60950-1, EN 60950-22
  - Housing: IEC/EN 60925-2013, IP67

**Package Accessory**
- 1*Device
- 1*Cable Gland
- 1*Mounting Bracket,
- 2*Metal Rings, 1*Screw Bag, 1*CD (User Manual)

**SKU Information:**
ODG851-0TL41-00-yy : LTE Cat.4
ODG851-0TL42-00-yy : LTE Cat.4, build-in Network Server
**yy**: Area Variant. As below table

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**Mechanic Drawing**

- **Back View**
- **Top View**

**Comment**
- Specifications are subject to change without prior notice..
- Besides CE, region Certification need to check for availability.

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