

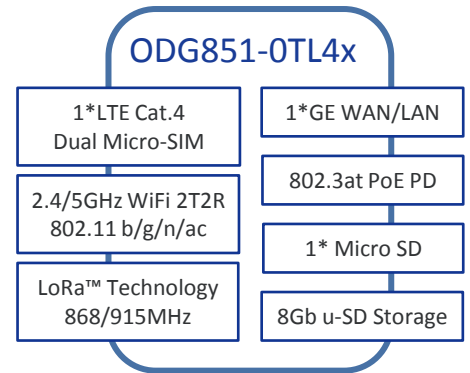
ODG851-0TL4x Outdoor IIoT Base Station



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



LoRaWAN™ base station

- 8 channels scan, packet forwarder
- Transparent or private network

Wireless communications hub

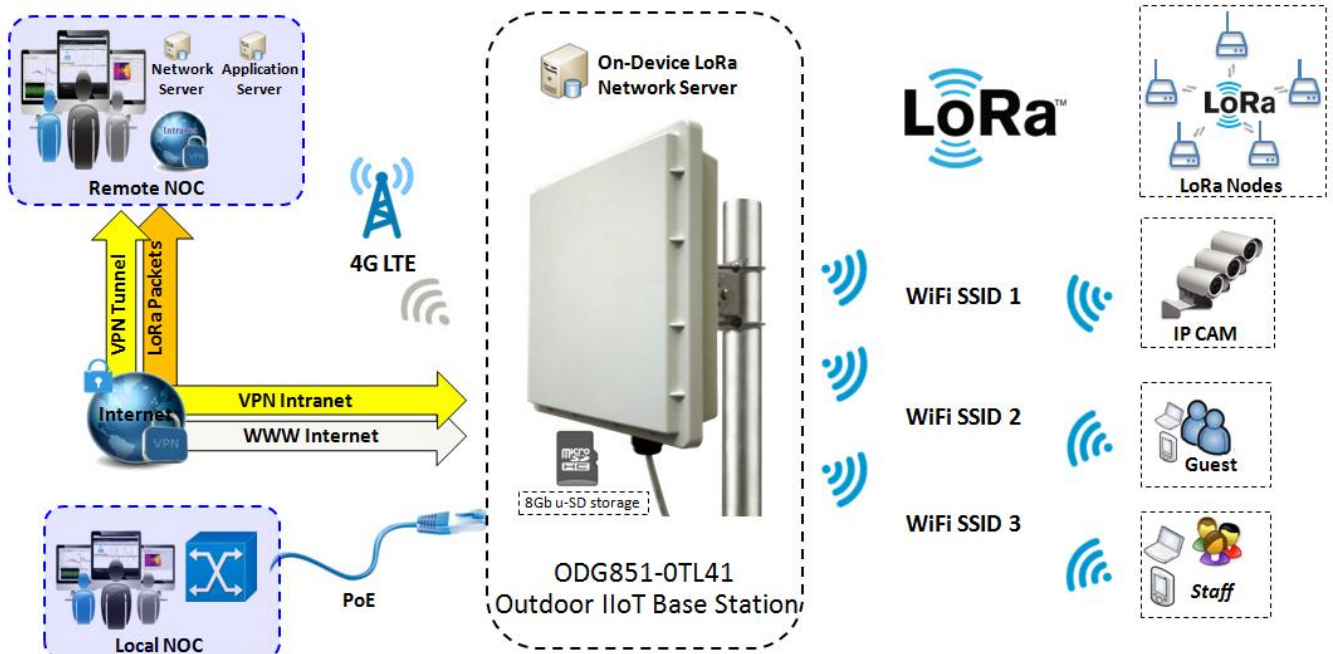
- High-speed, low-latency LTE and WiFi
- Low-power, long-range LoRaWAN™

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



Specification Summary

Device Interface

- **LTE Module:** 1*LTE-Cat.4, 2*micro-SIM
- **Ethernet :** 1*RJ45 GE (with 802.3 at 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
- **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

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)
- **Cellular:** 3GPP, 2G/3G/LTE, IP Pass-through, IPv4/6
- **Network Monitor:** ICMP/DNS Query

WiFi

- **Standard:** 802.11 Industry Compliance
- **Mode:** AP Router, WDS, WDS Hybrid Modes
- **Functions:** Multi-SSID, WPS*, WMM
- **Security:** WEP, WPA,WPA2, WPA-PSK, WPA2-PSK, 802.1x
- **Captive Portal:** External & Internal web portal

Protocol

- **LAN & VLAN:** DHCP Server/Relay , Tag based VLAN
- **IPv6:** Dual Stack
- **Port Forward:** NAT 1-1, 1-many, transversal, DMZ, Virtual Server & Computer, VPN Pass-through
- **LoRa Gateway:** Packet Forwarder,
Public Network Server (external),
Private Network Server (internal)
- **Routing:** Static, Dynamic - RIP1/RIP2, OSPF, BGP
- **QoS:** Policy-based, 802.1q and TOS for priority queues

Object

- **Scheduling:** Time Schedule List
- **Grouping:** Host Grouping List
- **Ext. Server:** Email, Syslog, RADIUS, SCEP, FTP, DDNS, IGMP
- **Certificate:** My Certificate, Trusted Certificate, Issue Certificate

Service

- **Cellular Toolkit:** Data Usage, SMS, SIM PIN, USSD, Network Scan
- **Event Handling:** User Defined Manage/Notify Event; Action & Trigger by SMS, Mail, Syslog, SNMP Trap,
- **LoRa:** LoRa Gateway, Public Network Server (external), Private Network Server (internal, up to 300 nodes)

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

yy	Skew	Band	Module Certi.	System Cert.
E0	EU	B1/3/7/8/20	CE,GCF	CE
R0	Russia	B3/7/20	-	EAC
U0	US	B2/4	PTCRB, AT&T	TBC
J0	Japan	B1/9/18/19/21	Telec , NTT,KDDI	Telec
J1	Japan	B1/8/41	Telec , Softbank	Telec
T0	Taiwan	B3/7/8/28	NCC	TBC
C0	China	B3/39/40/41	MII, SRRC	TBC
A0	Australia	B1/3/5/7/28/40	RCM	TBC

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**
EMI: EN 55032: 2015 +AC: 2016 Class B ;
EN 61000-3-2:2014, 61000-3-3:2013
EMS: EN 55024:2010+A1:2015 ; EN 61000-6-2:2005+AC:2005
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

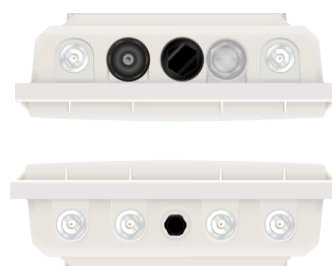
- 1*Device, 1*Cable Gland, 1*Mounting Bracket,
- 2*Metal Rings, 1*Screw Bag, 1*CD (User Manual)

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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