Nokia Industrial 4G dongle DGRx401d

Nokia Industrial 4G dongle DGRx401d provides LTE service in a rugged form factor. With an operating temperature range of -40ºC~ 70ºC, IP67 dust-proof and water-proof endurance, this product is suitable for industrial environments and delivers high speed data services for videos and other bandwidth intensive applications. Designed for both indoor spaces and harsh industrial environments, Nokia Industrial 4G dongle DGRx401d meets high standards in vibration tolerance and is ideal for operations in robot, drones, logistics, automated manufacturing, port and other outdoor applications.

With the self-developed LTE-embedded modules integrated, Nokia Industrial 4G dongle DGRx401d supports multi-band Private LTE in wide range of frequencies. This Dongle can also offer precise information about its real-time location; its built-in GNSS receiver allows GPS, GLONASS, Beidou and Galileo constellations.

Benefits

- Remote management and maintenance via Nokia DAC Device Management over TR-069
- Supports wide range of bands including CBRS and B53
- Supports UE category 12
- Enhanced security capabilities: firewall and VPNs
- Ruggedized design and vibration tolerance
- IP67 rating for outdoor environment
- Compact form factor and easy to install
- Powerful software features
- Local management and maintenance via Web UI

Technical specifications

Dimensions and weight

- Height: 115mm
- Width: 72mm
- Depth: 25mm
- Weight: ≈ 360g

Environmental

- Operating temperature: -40~70ºC
- Storage temperature: -40~85ºC
- Humidity: 5% ~ 95%
- Operating voltage: 9 to 14V DC

Hardware specifications

Fixed interfaces	• 1 X USB Type-C (with the cable to convert to RJ45/USB Type-A/DC Jack) • 2 X SIM slot (4FF Nano, Dual SIM Single Standby)
Antenna ports	• 2 x SMA connectors for LTE antennas • 1 x SMA connector for GNSS antenna
GNSS	• Supports GPS, GLONESS, Beidou and Galileo • Acquisition sensitivity: Greater than -148dBm (GPS at cold start) • Tracking sensitivity: Greater than -167dBm (GPS in continuous mode)
LED indicator	Red/Green/Blue LED indicates SIM/network/firmware upgrading status
Power consumption	<8W
Power supply	9~14V DC
Dimensions and mounting	• Dimensions: 115 x 72 x 25 (mm) • Weight: ≈ 360g • Mounting: wall, desktop and ceiling
Temperature and humidity	• Operating: -40°C~ 70°C • Storage: -40°C ~ 85°C • Humidity: 5% ~ 95% (non-condensing)
EMC compliance	• EN 55032:2016 (EN 55032, Class B) • IEC61000-4-2 (ESD) Level3 • IEC61000-4-3 (RS) Level 3 • EN 61000-4-4 (EFT) Level 2 • IEC61000-4-5 (Surge) Level 3 • IEC61000-4-6 (CS) Level 2 • IEC61000-4-8 (M/S) Level 4
Environment compliance	• Cold: IEC60068-2-1 • Dry heat: IEC 60068-2-2 • Damp heat cyclic: IEC 60068-2-30 • Change of temperature: IEC 60068-2-14 • Shock: IEC60068-2-27 • Free Fall: IEC60068-2-32 (1 meter height with package) • Vibration: IEC60068-2-6

LTE specifications

Category	3GPP release 12, Category 12
Peak throughput	• FDD: DL 400Mbps UL 150Mbps • TDD: DL 280Mbps UL 30Mbps
LTE bands	• FDD: B2/B4/B5/B8/B12/B13/B14/B25/B26/B66 • TDD: B38/B41/B42/B43/B48/B53
CA and MIMO	• DL: 2 CA intra or inter band, 2x2MIMO, 256QAM • UL: 2 CA or 2x2 MIMO, 64QAM
Tx / Rx	2Tx / 2Rx
Transmit power	Power Class 3 (23±2dBm)
Receive reference sensitivity	• Band 2/25 < –94dBm @20MHz bandwidth • Band 42/43/48 < –95dBm @20MHz bandwidth • Band 5/26 < –97dBm @10MHz bandwidth • Band 4/8/12/13/14/17/38/41/53/66 < –96dBm @20MHz bandwidth

Software specifications

WAN	• Multi-APN support, maximum four • IP pass through • IPv4/v6 dual stack
LAN	• VLAN 802.1Q • DHCP Server • DNS and DNS proxy • DMZ • Multicast/Multicast Proxy
Protocol	Routing: Static routing, IGMP proxy
Device management	• Remote maintenance and management via Nokia DAC Device Management over TR-069 protocol. - Plug-n-Play - Configuration Management - Software Management - Performance Management - Fault Management - Monitor and Control - Location Services - Bulk operations • Local management and maintenance via Web UI
Routing mode	• Route mode • Bridge mode • NAT mode • Static route • Port mirror and port forwarding • IPV4/IPv6 dual stack
VPN	• IPsec • PPTP • GRE Tunnel (L2/L3) • L2TPv2 and L2TPv3 • VPN pass-through
Security	• Firewall • MAC address filtering • IP address filtering • URL filtering • Access control • HTTPS login from WAN • Dos attack protection • Two level of user authority
Reliability	• Watchdog for automatic recovery • Auto rollback to previous version when upgrade fails

Accessories

Standard	• 1 x USB Type C to RJ45&DC cable • 1 x Mounting kit U-clip • 2 x U-clip bolts • 2 x Cable mounting screws

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As a B2B technology innovation leader, we are pioneering the future where networks meet cloud to realize the full potential of digital in every industry.

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Nokia OYJ
Karakaari 7
02610 Espoo
Finland
Tel. +358 (0) 10 44 88 000

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