

4G rugged gateway – edge

CONNECTIVITY WITH INTERNAL OR EXTERNAL ANTENNA



The 4G rugged gateway is part of the connectivity portfolio. It is an outdoor LoRa gateway equipped with an internal antenna and a 4G worldwide module with 3G/2G fallback. It is suitable for a wide variety of projects: construction areas, tailings dams, open pits, bridges, railways, roadways, soil consolidation projects and others.

FEATURES

- ▶ External waterproof connectors (RJ45, SIM card) eliminating the need to open the casing during installation.
- ▶ Easy installation mounting kit.
- ▶ Integrated internal antenna for GPS, 4G and LoRa (peak gain=2,6 dBi), external LoRa antenna 3dBi or 6dBi available as options.
- ▶ USB (type C) connector for local access.
- ▶ Faster processor (operating in a single-gateway architecture, it can manage up to 50 data messages per minute).*
- ▶ Compatible with Trimble 4D Control software for analysis and visualization.

*Contact us if your monitoring plan requires more than 8 messages per minute.

CONNECTIVITY

- ▶ ISM Sub 1 GHz band, sensitivity: down to -137 dBm (SF11).
- ▶ Integrated internal antennas GPS, 4G, LoRa (peak gain=2,6dBi).
- ▶ DDRAM 256MB, 8GB eMMC (6GB available for user).
- ▶ GNSS receiver (GPS, GLONASS, QZSS & SBAS).

POWER

- ▶ Powered by:
 - PoE both mode A and mode B (802.3af specifications).
 - ± 48 VDC through RJ45 (isolated power).
- ▶ Mean power consumption: 4.5 watts.
- ▶ PoE injector for indoor use included in the kit.

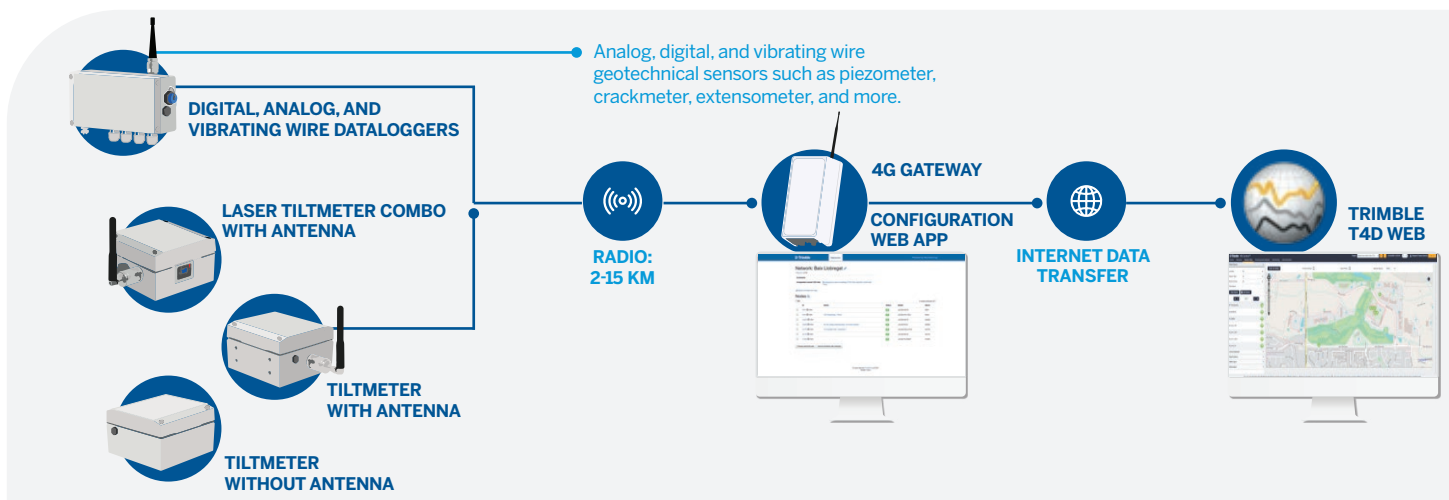
MECHANICAL

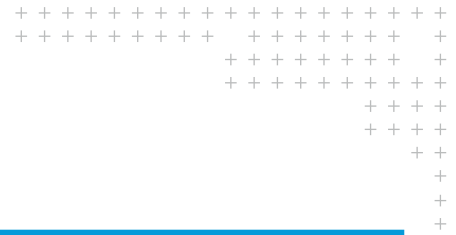
- ▶ Size: 265 x 165 x 100 mm (without external LoRa antenna).
- ▶ Weight: 1.4 kg (including mounting kit).
- ▶ IP67 aluminum (back), polycarbonate (front), Inox (mounting kit).
- ▶ Operating range: -40°C to $+60^{\circ}\text{C}$.
- ▶ Two LEDs: 1 x green LED for power, 1 x red LED for system status.
- ▶ SIM card slot (mini-SIM format).

NETWORK INTERFACES

- ▶ 10/100 Ethernet WAN (RJ45 PoE).
- ▶ Integrated 4G modem & antenna with worldwide LTE, UMTS/HSPA+ and GSM/GPRS/EDGE coverage.

IoT-based Geotechnical Monitoring SYSTEM INSTALLATION





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WITH INTERNAL ANTENNA

WWAN Capabilities		
Technologies	Band	Data rate
LTE	Band 1 (2100)	LTE FDD: - Max 150Mbps (DL) - Max 50Mbps (UL)
	Band 2 (1900 PCS)	
	Band 3 (1800+)	
	Band 4 (1700/2100 AWS-1)	
	Band 5 (850)	
	Band 7 (2600)	LTE TDD: - Max 130Mbps (DL) - Max 35Mbps (UL)
	Band 8 (900)	
	Band 12 (700 ac)	
	Band 13 (700 c)	
	Band 18 (800 lower)	
	Band 19 (800 upper)	
	Band 20 (800 DD)	
	Band 25 (1900+)	
	Band 26 (850+)	
	Band 28 (700 APT)	
	Band 38 (TD 2600)	
	Band 39 (TD 1900+)	
	Band 40 (TD 2300)	
	Band 41 (TD 2600+)	
	WCDMA	
Band 2 (1900 PCS)		
Band 4 (1700/2100 AWS-1)		HSUPA: Max 5.7Mbps (UL)
Band 5 (850)		
Band 6 (850 Japan)		
Band 8 (900)		
Band 19 (800 upper)	WCDMA: - Max 384Mbps (DL) - Max 384Mbps (UL)	
GSM	B2 (1900 PCS)	EDGE: - Max 296Mbps (DL) - Max 236.8Mbps (UL) GPRS: - Max 107Mbps (DL) - Max 85.6Mbps (UL)
	B3 (1800 dcs)	
	B5 (850)	
	B8 (900)	

4G GATEWAY

Product ordering references:

LS-G6-KIO-GW-868-MON	RX: 863- 873 MHz, TX: 863-873 MHz For Europe, Middle East, and Africa region.
LS-G6-KIO-GW-915-MON	RX: 902-915 MHz, TX: 922-928 MHz For Asia Pacific and Latin America Region.
LS-G6-KIO-GW-923-MON	RX: 915-928 MHz, TX: 915-928MHz For North America region.

ACCESSORIES - External Antenna

LS-ACC-SUPGW-01-MON	Optional vertical omni-directional outdoor antenna kit, 3 dBi, 868 MHz, 30 cm length.
LS-ACC-SUPGW-03-MON	Optional vertical omni-directional outdoor antenna kit, 3 dBi, 915/923 MHz, 30 cm length.
LS-ACC-SUPGW-02-MON	Optional vertical omni-directional outdoor antenna kit, 6dBi, 915/923 MHz, 110 cm length.

POWER SUPPLY

Dual Input 12 V 8 A Solar Charge Controller with 48 V PoE.

Note: Specifications are subject to review and change without notice.



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