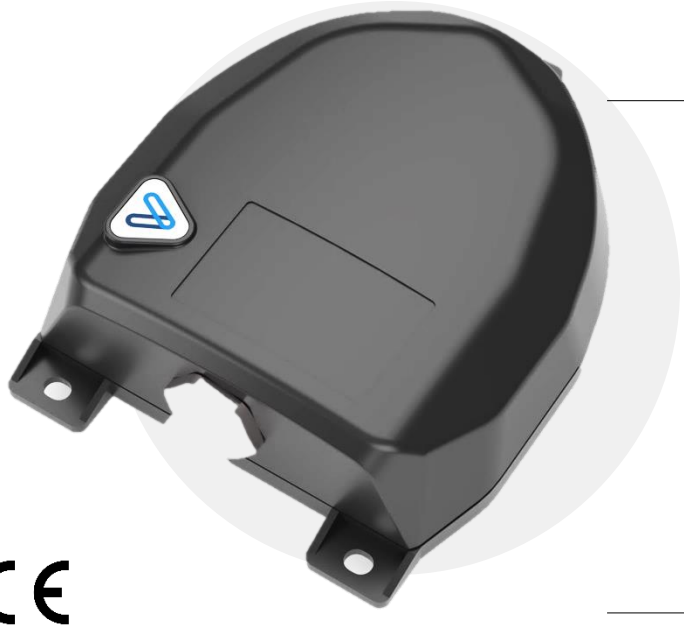
Nexus | CAN BUS IoT GATEWAY

Diaboard



- Rugged IoT Gateway for DIABOARD cloud portal data transmission
- With GPS trace signal
- 4G LTE communication with
- M2M Multi-network SIM card
- WiFi connection
- Bluetooth connection for device configuration
- Integrated antennas
- Cyber security
- Designed for machines and equipment equipped with a CAN BUS network

TECHNICAL DATA

	BASIC VERSION	FULL VERSION
POWER SUPPLY	9-30 VDC	
BACKUP BATTERY	NO	YES
CAN BUS PORT	x2 CAN BUS 2.0 A/B COMPLIANT – (11, 29 BIT) – ISO 11898-2 UP TO 1Mbit/s Compatible sniffering protocol: CANOPEN – J1939	
4G LTE cat.1 **2G EDGE GPRS**	LTE Frequency band [MHz]: • Europe: LTE-FDD: B1/3/7/8/20; GSM: B3/8 • America: LTE-FDD: B2/3/4/5/7/8/28/66; GSM: B2/3/5/8 • Europe-Asia: LTE-FDD: B1/3/7/8/20/28; GSM: B3/8 Data Transmission: • LTE data rate (Mbps): Max. 10 (DL)/Max. 5 (UL) • EDGE data rate (Kbps): Max. 236.8 (DL)/Max. 236.8 (UL) • GPRS data rate (Kbps): Max. 85.6 (DL)/Max. 85.6 (UL)	
GPS	GPS + BeiDou + Galileo ACCURANCY: 10m (with optimum signal conditions)	
WIFI	NO	IEEE 802.11 b/g/n Frequency Band: 2.4GHz
BLUETOOTH	NO	BT 5.2
SENSORS	NO	Shock and acceleration detection
BLACK BOX Data storage in case of signal absence	Optional	128MB internal flash memory
STATUS INDICATION	No. 3 leds lights	
TEMPERATURE	OPERATIVE: -35+75°C STORAGE: -40+80°C BATTERY (TEMP): -20°C+60°C	

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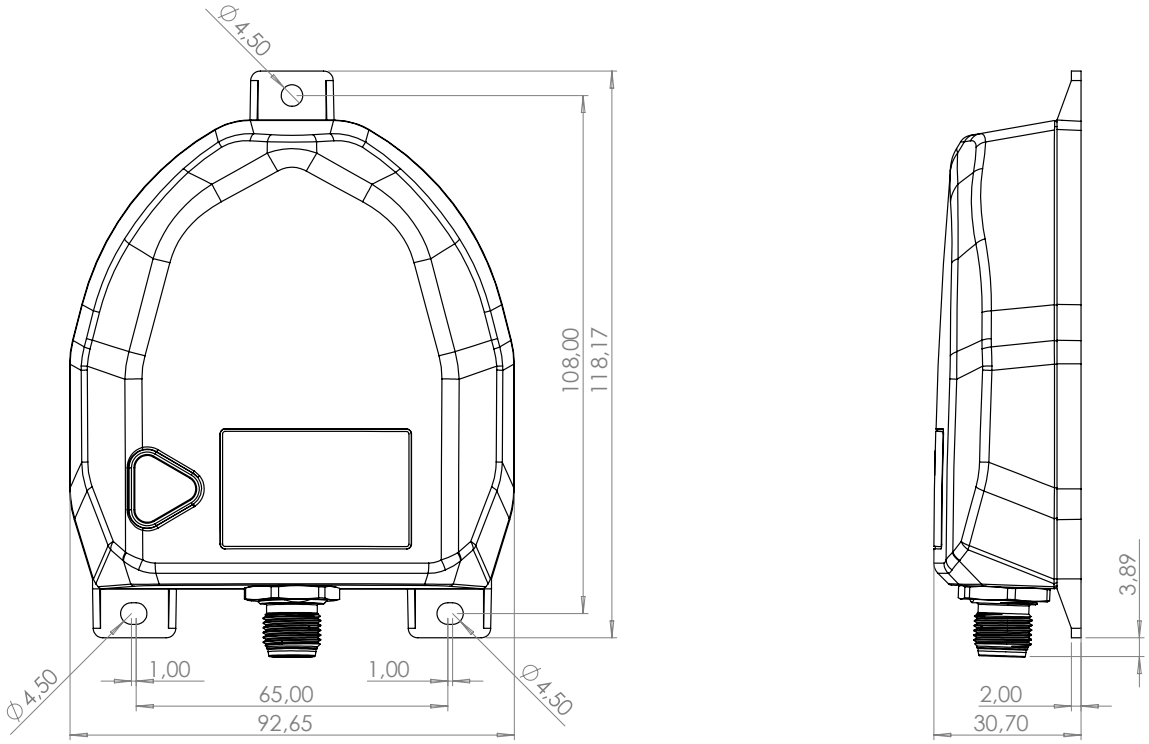
ELECTRONIC FEATURES

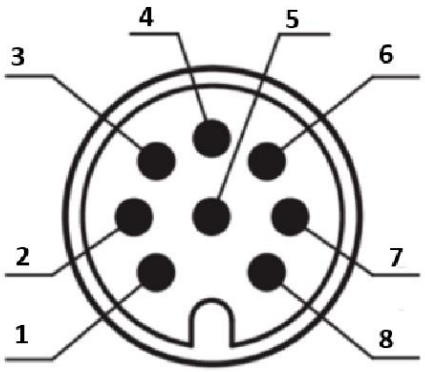
SIM CARD	Included micro-SIM card • Non-steered roaming SIM with worldwide coverage • M2M Multi-network SIM card
FIRMWARE UPDATE	OTA system update via OTA-CAN BUS included
WEB INTEGRATION	Data collected by communication ports are displayed on the DIABOARD portal (MQTT)
CYBER SECURITY	• Encrypted communication between gateway and portal • On board authentication and secure data management services
IGNITION KEY	digital input for switch ON/OFF management

SIZE (mm)



ELECTRICAL CONNECTION - pinout

CONNECTOR TYPE — M12 8 pin male connector



1	+ POWER SUPPLY
2	IGNITION KEY
3	GND
4	GND
5	CAN 1 H
6	CAN 1 L
7	CAN 2 H
8	CAN 2 L

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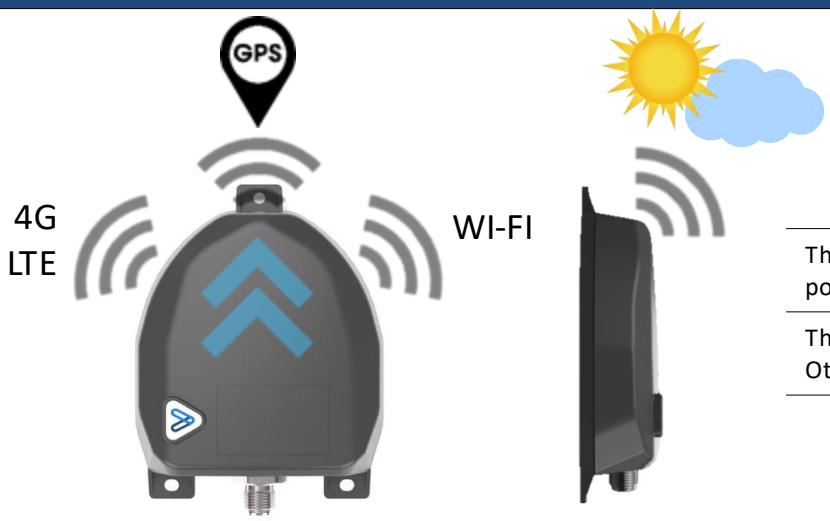
INTEGRATED ANTENNA LOCATIONS



The device shall be installed with the antenna surfaces pointing UP

The GPS reception is optimized for outdoor installation. Otherwise, external antenna required.

AVAILABLE ON REQUEST

EXTERNAL GPS ANTENNA	External connector for wired rugged antenna for indoor or cabin installation
SMS communication	Optional: SMS Configuration, Events, DOUT control, Debug
PROTOCOLS INTEGRATION	OBDII CAN FD custom on request

STANDARDS

APPROVAL	CE RED On request: FCC
Health and safety - Article 3.1(a)	EN IEC 62368-1:2020 + A11:2020 EN 50665:2017 EN IEC 62311:2020
Electromagnetic compatibility - Article 3.1(b)	EN 301 489-1 V2.2.3 EN 301 489-17 V3.2.4 EN 301 489-19 V2.2.0 EN 301 489-52 V1.1.2 EN 55032:2015+A11:2020 EN 55032:2017+A11:2020
Efficient use of radio spectrum - Article 3.2	EN 301 511 V12.5.1 EN 301 908-1 V13.1.1 EN 301 908-13 V13.1.1 EN 300 328 V2.2.2 EN 303 413 V1.2.1
ENVIRONMENTAL TESTING	IEC 60068-2-64 IEC 60068-2-27 IEC 60068-2-27 IEC 60068-2-30
PROTECTION	IEC 60529 (IP67)

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NOTE