



ALMECdiag Device is a telediagnostic, interconnection and satellite geolocalization gateway, to connect machines and equipment, for diagnose and control, through the ALMECdiag Portal web platform.

It can be implemented in a SERIAL or CAN network.

The waterproof case makes this device suitable for use on machines that operate in harsh work environments.



TECHNICAL FEATURES

	BASIC VERSION	FULL VERSION
POWER SUPPLY	9-36 VDC	
COMMUNICATION PORTS	CANOPEN: 1 SERIAL: 1	CANOPEN: 1 + 1 SERIAL: 1 + 1
CAN BUS PROTOCOL	CANOPEN: CAN BUS 2.0 A/B COMPLIANT – (11, 29 BIT) – ISO 11898-2 UP TO 1Mbit/s CIA DS401 DEVICE PROFILE FOR GENERIC I/O MODULE, WITH DS306 EDS FILE	
SERIAL PROTOCOL	RS232 (ON REQUEST: RS485)	
WI-FI	AVAILABLE ON REQUEST	BAND: 2.4GHz IEEE 802.11b/g/n 1x1 Wi-Fi security: WPA2-PSK CONNECTION AND OPERATING RANGE: up to 50 m
GSM/GPRS	QUAD BAND GSM/GPRS 2G OR 4G MODULE, WORLD WIDE COVERAGE, LOW CONSUMPTION IN STAND-BY MODE, EASY REPLECEABLE MICRO-SIM BAND: 2G: 900 , 1800 MHz 4G: 800 , 1800, 2100, 2600 MHz TRANSFER CAPACITY : 2G: 64 kbps 4G: 100 Mbps	
GPS	72 CH RECEIVER GNSS, L1C/A COMPLIANT, WORLD WIDE COVERAGE, INTEGRATED/EXTERNAL ANTENNA	
	PRECISION	Speed: < 0.05 m/s Direction: < 0.3° Position: < 2,5 m
MOBILE CONNECTION	DEDICATED APP AVAILABLE ON REQUEST FOR SMARTPHONE O.S. COMPATIBLE: ANDROID 4.0 VERSION or higher version – iOS 7 or higher version	
SENSOR	THREEAXIAL ACCELEROMETER FOR SHOCK DETECTION	
CONNECTORS	M12 8 PIN, MALE CONNECTOR: POWER SUPPLY + COMMUNICATION PORTS SMA, FEMALE CONNECOR: GPS ANTENNA SMA, FEMALE CONNECOR: GSM ANTENNA	M12 8 PIN, MALE: P.S.+ COMMUNICATION PORTS M12 4 PIN, MALE: COMUNICATION PORTS SMA, FEMALE : GPS ANTENNA SMA, FEMALE : GSM ANTENNA SMA, FEMALE : WI-FI ANTENNA
WORKING TEMPERATURE	-40°C +80°C	
CASE	ABS (UL94 V-0)	



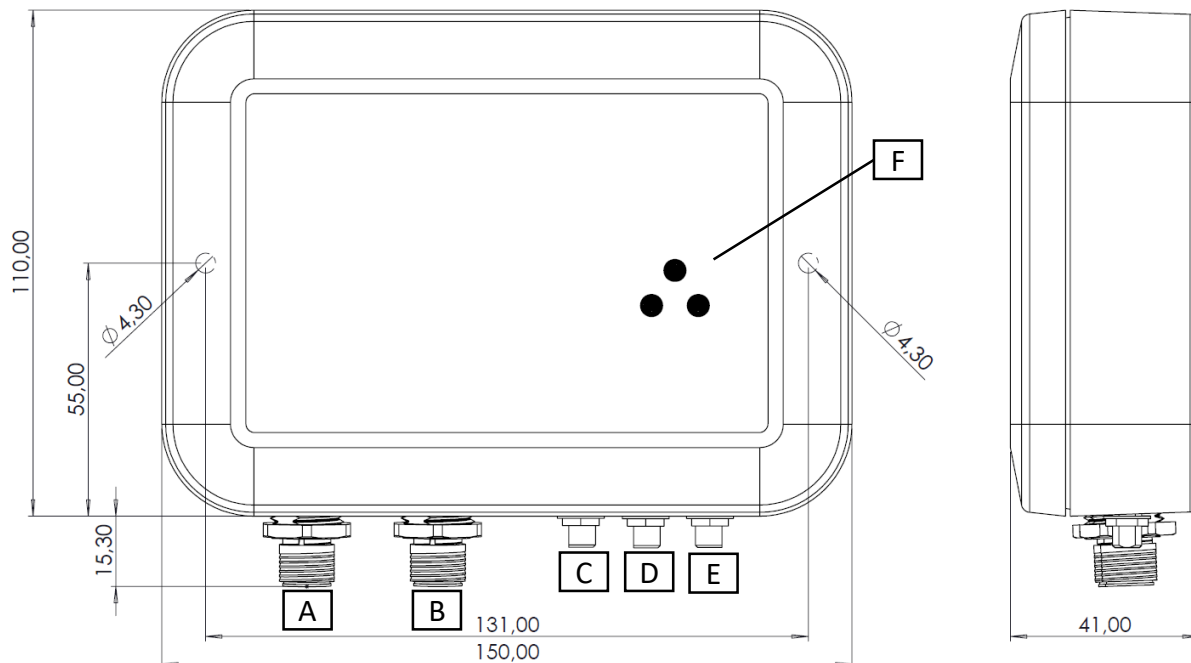


ELECTRONIC FEATURES	
NETWORK INTEGRATION	TRASPARENT CAN FRAME RECEIVE/TRANSMIT CONFIGURABLE BY WEB
INTERNAL SYSTEM CONTROL	Family: ARM Cortex M4, 32bit core Clock frequency = 120 MHz
MEMORY	Black box: 256 MB

STANDARDS	
IMMUNITY TO CONDUCTED INTERFERENCE	ISO 7637-2: 2004, pulses 2a, 3a, 3b, 4, severity level 4, function state A ISO 7637-2: 2004, pulse 1, 2b, severity level 4, function state C ISO 7637-2: 2004, pulse 5, severity level 1, function state A
ELECTROMAGNETIC EMISSIONS	EN 61000-6-4// EN 55011 (RF RADIATE)
ELECTROMAGNETIC IMMUNITY	EN61000-6-2// EN 61000-4-2/3/4/6
IMMUNITY TO INTERFERING FIELDS	EN 61000-6-2 (CE)
INTERFERENCE EMISSION	EN 61000-6-3 (CE)
SPECTRUM FREQUENCY ALLOCATION	EN 301489-1 V1.9.2 EN 301489-3 V1.4.1
IP	IP65

IN ACCORDANCE WITH THE EN50498 THE DEVICE MEETS THE TECHNICAL SPECIFIC REQUIREMENTS OF 2004-104 DIRECTIVE (AUTOMOTIVE). THE DEVICE IS EMC 2004/108 COMPLIANT.

SIZE (mm)



THE DEVICE MUST BE FIXED BY OPENING THE TWO SIDE LIDS ON THE FRONT OF THE BOX; RECOMMENDED SCREW: M4 LENGTH 6mm

- A - M12 8 PIN, MALE CONNECTOR: POWER SUPPLY + COMUNICATION PORTS
- B - M12 4 PIN, MALE CONNECTOR: OPTIONAL COMUNICATION PORTS
- C - SMA, FEMALE CONNECOR: GPS ANTENNA
- D - SMA, FEMALE CONNECOR: WI-FI ANTENNA
- E - SMA, FEMALE CONNECOR: GSM ANTENNA
- F - STATUS LED

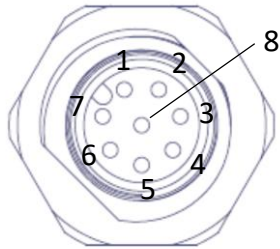




CONNECTOR PINOUT

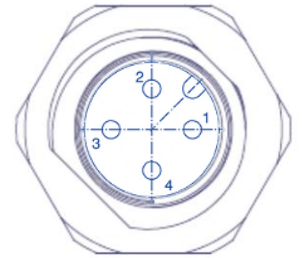
**CONNECTOR A
M12 8 PIN, MALE**

1	POSITIVE POWER SUPPLY
2	SERIAL PORT TX
3	CAN PORT HIGH
4	SERIAL PORT RX
5	GND POWER SUPPLY
6	IGNITION INPUT 1
7	CAN PORT LOW
8	IGNITION INPUT 2



**CONNECTOR B
M12 4 PIN, MALE**

1	SERIAL PORT 2 TX
2	CAN PORT 2 HIGH
3	SERIAL PORT 2 RX
4	CAN PORT 2 LOW



FEATURES

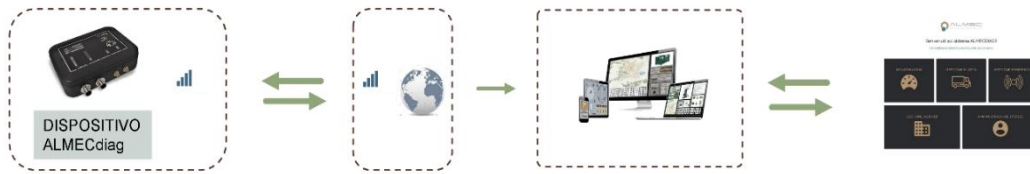
EXTERNAL ANTENNA SIGNAL (included)

BASIC VERSION:
GPS & GSM ANTENNA
FIXING BY SCREW AND DOUBLE-SIDED ADHESIVE
WITH CABLE LENGHT: 3m

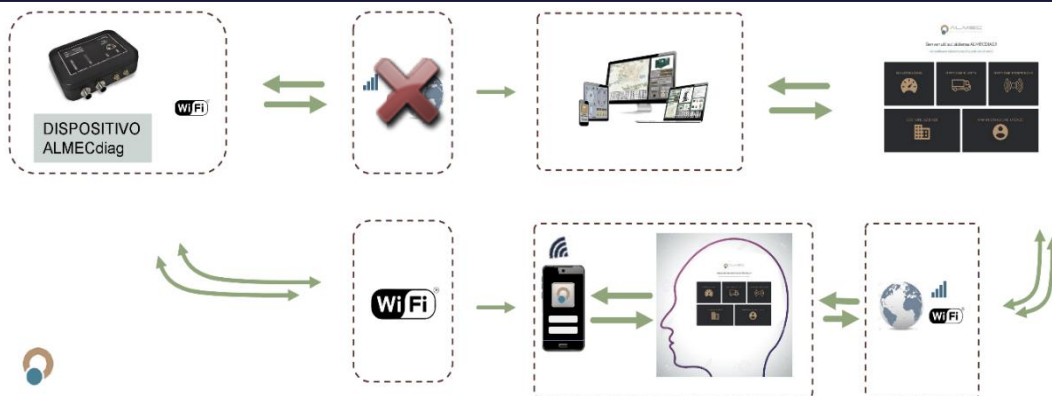
FULL VERSION:
GPS, WI-FI & GSM ANTENNA
FIXING BY SCREW AND DOUBLE-SIDED ADHESIVE
WITH CABLE LENGHT: 3m



CONDITIONS OF POSSIBLE USE IN THE PRESENCE OF GSM NETWORK



CONDITIONS OF POSSIBLE USE IN ABSENCE OF GSM NETWORK





ALMEC
MECHATRONICS

NOTE