



Leading IoT Integrated Solutions Provider
A GOSUNCN COMPANY

TYT25_LT_AA



La_DCM is a 4G Tbox developed by Gosuncn for Harman. The vehicle factory is Toyota, targeting the delivery market in Latin America. This product integrates LTE, GNSS, WIFI, six-axis Sensor, MCU, CAN bus and other components to achieve 4G cellular network communication, positioning, WIFI hotspot, vehicle behavior monitoring, remote control and remote diagnosis. Products are designed and manufactured in accordance with IATF16949 quality system to meet vehicle requirements for EMC/EMI, electrical and environmental reliability. Mechanical design is IP52 compliant and supports ports including: Power, Ignition, CAN and dedicated GPIO. The backup battery 1800mA can work for 3h even if the main power supply is lost. To implement certain emergency application scenarios.

- ✓ LTE Cat.4 T-Box
- ✓ High-speed CAN bus
- ✓ Remote Control
- ✓ Remote & Local Diagnostics
- ✓ Vehicle status query
- ✓ The log of Driving
- ✓ Driving Behavior Analysis
- ✓ Vehicle Security
- ✓ OTA upgrade
- ✓ Wi-Fi hotspot
- ✓ Built in 1800mAh LFP battery

Application Scenario



Internet service



Remote Control & Diagnosis



In-vehicle Upgrade (OTA)





General Feature

- Dimension: 115*106*28mm
- Weight: about 240 g
- Voltage Range : 8V~36V
- Working Current: 180mA Typical
- Standby Current: <4mA
- Sleeping mode Current: < 100uA

Working Environment

- Operating temperature: -20° C~ +65° C
- Storage temperature: -40° C~ +85° C

Hardware Feature

- 1-channel CAN
- Sensor1: 6-axis gyroscope and accelerometer
- Sensor2: 3-axis accelerometer
- GNSS
- Wi-Fi
- MCU(S32K146)
- NAD(based on SA415M)
- IGN/Speed/IMI/SEC_ALARM interface
- LEDs(WIFI,LTE,GNSS)
- 1800mAh backup battery
- Internal LTE and WiFi&BT antennas
- External GNSS antenna

Software Feature

- Remote Vehicle tracking
- Provide network communication for vehicles
- Remote vehicle control
- Vehicle status report
- Wi-Fi hotspot
- T-Box OTA upgrade
- Device log reporting

Network

- LTE FDD Band Support: B1/B2/B3/B4/B5/B7/B8/B28a/B28b
 - WCDMA Band Support: B1/B2/B5/B8
- Output Power:
Class 3 (23dBm±2.7dB) for LTE
Class 3 (24dBm +1dB/ -3dB) for WCDMA

Diagnostic Function

- Remote Diagnostic

Hardware Interface

- GNSS antenna interface
- USB connector
- 24PIN connector

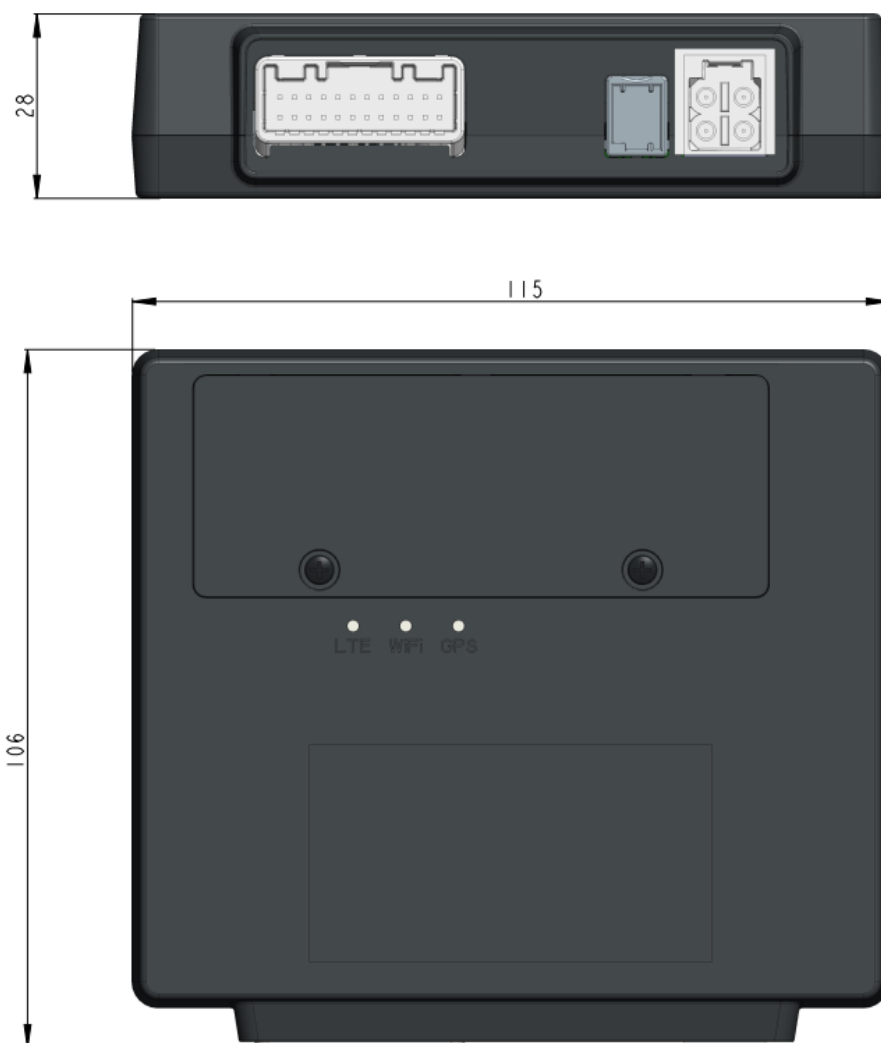
Certification

FCC/ROHS/WEE/PTCRB/CE/JATE&TELEC/ANATEL/ENACOM

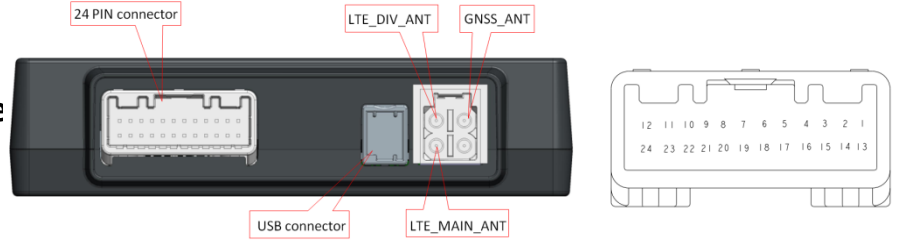




Device size reference



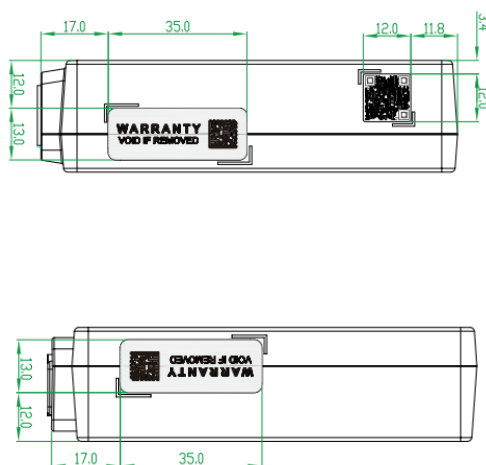
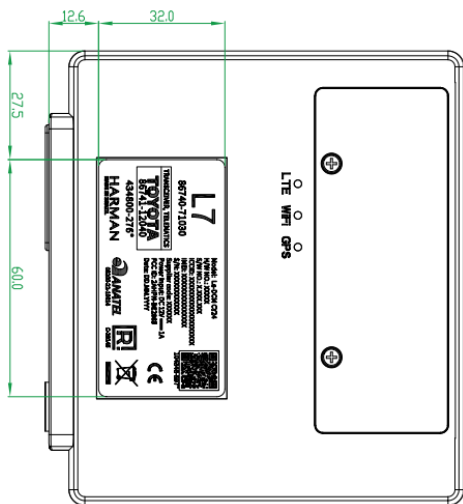
La_DCM Hardware Interface



Pin No.	Signal name	Device Input/Output	Detail of Signal name and Required timing
1	+B	IN	+B Power supply
3	GND	-	Power GND
2	NC	-	NC
4	NC	-	NC
5	24PIN_UART_RX	-	UARTdebug communication
6	GND	-	GND
7	24PIN_UART_TX	-	UARTdebug communication
8	NC	-	NC
9	NC	-	NC
10	CAN_H	IN/OUT	CAN communication
11	CAN_L	IN/OUT	CAN communication
12	GND	-	GND
13	IG	IN	IG2 signal
14	NC	-	NC
15	SPD	IN	Speed pulse signal
16	NC	-	NC
17	NC	-	NC
18	NC	-	NC
19	NC	-	NC
20	Sec_Alm	IN	Security alarm signal
21	NC	-	NC
22	NC	-	NC
23	NC	-	NC
24	IMI	IN	IMI signal



Label Position



CAUTION

Risk of explosion if the battery is replaced by an incorrect type
disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery,
that can result in an explosion;
leaving a battery in an extremely high temperature surrounding environment that can result
in an explosion or the leakage of flammable liquid or gas;
a battery subjected to extremely low air pressure that may result in an explosion or the
leakage of flammable liquid or gas.



Version record

No.	Version	Date	Revised by	Description
1	V1.0	2023.1.18	Qiu Hongpeng	Initial construction
3	V1.1	2023.2.20	Shi Heming	add device size reference
2	V1.2	2023.6.15	Jiang Jinhui	update connector information and picture information
4	V1.3	2023.10.30	ZhangRui	Update BUB information and Certification information
5	v1.4	2023.11.16	ZhangRui	Update label design and caution information
6	V1.5	;2023.11.21	ZhangRui	Update max output power

CAUTION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

