



GPS / BDS TRACKING TERMINAL

GLGT08D GPS/BDS Vehicle Tracking Terminal

MODEL GLGT08D

Vehicle-mounted GPS/BDS positioning terminal with a built-in antenna, LTE and 2G data communication, and a 3-axis sensor for intelligent power-saving wake-up operation.

**KEY PERFORMANCE****GPS + BDS****POSITIONING****B1/B2/B3/B4/B5/B7/B8/B28/B66****LTE/4G BANDS****DC 9-45 V****OPERATING VOLTAGE****< 10 m (1 σ)****POSITIONING ACCURACY**

PRODUCT HIGHLIGHTS

VERIFIED HIGHLIGHTS

Multiple alarms: vibration, power-off and overspeed alert. Electronic fence with entry and exit identification through the platform or APP. Alert text message or phone call to the guardianship number, with simultaneous platform upload. Industrial-grade high-stability GPRS module with built-in GSM high-sensitivity antenna, TCP/IP data transmission and domain name or IP address connection to the server. Built-in large-capacity storage chip for offline data recording and blind-zone retransmission. Built-in mechanical vibration sensor with acceleration algorithms for real-time vehicle condition judgement. High-sensitivity GPS/BDS dual-satellite positioning module with anti-interference ceramic antenna, supporting A-GPS rapid positioning and synchronous timing. Low power saving mode with intelligent sleep and wake-up to reduce average system power consumption.

TYPICAL APPLICATIONS

VERIFIED APPLICATIONS

Insurance industry, corporate fleet management, car manufacturers and 4S stores, individual users, electric new energy sector, passenger vehicles, taxis and rental vehicles.

TECHNICAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Power supply mode	Battery-powered
Operating voltage range	DC 9-45 V
Operating current	12 V / 40 mA average
Sleep current	12 V / < 10 mA
Built-in battery capacity	180 mAh (3.7 V polymer battery), optional

ENVIRONMENTAL SPECIFICATIONS

Operating temperature range	-20°C to 75°C
Storage temperature range	-30°C to 80°C
Operating humidity range	10%-85% RH, non-condensing



PRODUCT DATASHEET

SKU GLGT08D
Rev. 1.0 | 2026-10-28

COMMUNICATION SPECIFICATIONS

Communication module model	7670SA
LTE/4G bands	B1/B2/B3/B4/B5/B7/B8/B28/B66
GSM/2G bands	850/900/1800/1900 MHz
SIM card	Standard SIM card
Communication antenna	Built-in antenna

GPS/BDS POSITIONING SPECIFICATIONS

Positioning module model	AT6558D
Positioning method	Beidou + GPS
Cold start time	32 s average
Hot start time	1 s average
Tracking sensitivity	-162 dBm
Positioning antenna	Built-in antenna
Antenna size	25 x 25 x 4 mm
GPS frequency band	L1: 1575.42 ± 1.023 MHz
Beidou band	B1: 1561.098 ± 2.046 MHz
Satellite channel count	64
Positioning accuracy	< 10 m (1σ)
Timing accuracy	< 30 ns (1σ)
Speed measurement accuracy	< 0.1 m/s (1σ)
Maximum acceleration	4 g
Maximum speed	515 m/s
Maximum height	18000 m

MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	53 x 47 x 23 mm
Shell material	ABS plastic
Mainframe weight	45 g

STATUS INDICATOR LIGHTS

Yellow indicator	GSM: flashes once every 2 seconds during initialization, steady on when communication is normal, off when asleep or powered off
Blue indicator	GPS/BDS: flashes once every 2 seconds while searching for satellites, steady on when positioned, off when asleep

WORKING LOGIC AND ALARM BEHAVIOUR

ACC on	The device does not sleep and uploads one data record every 20 seconds
ACC off	The device remains stationary for 10 minutes
Sleep mode	The device transmits only the heartbeat data. If a vibration is detected during the rest period the device recalculates and goes into sleep mode for 10 minutes
Vibration alarm	After the alarm is triggered the device needs to remain still for 5 minutes; the alarm can be triggered again
Power-off alarm	When the power supply is disconnected for 3 seconds the device triggers the power-off alarm and uploads it to the server
Overspeed alert	When the GPS acquisition speed reaches the set threshold the device triggers an overspeed alert and uploads it to the server

NOTES

Values are taken from the source parameter table. The source usage instructions describe a Micro SIM card while the parameter table lists Standard SIM card; the table value is used here. The source calls the periodic sleep-mode report 'heart rate data'; it is written here as heartbeat data, matching the HBT# heartbeat command in the SMS list.



SMS COMMAND REFERENCE

SMS COMMANDS	
1. Check device status	STATUS#
2. Check device parameters	PARAM#
3. Check GPRS parameters	GPRSSET#
4. Check device latitude and longitude	WHERE#
5. Set server IP or domain name	SERVER,1,domain name,port,0# (0 = TCP) or SERVER,0,IP,Port,0# (0 = TCP)
6. Check server parameters	SERVER#
7. Reset device	RESET# (the terminal restarts after 1 minute)
8. Set GPS data upload interval	TIMER,T1,T2# ; T1 = ACC ON interval, T2 = ACC OFF interval, both 0 or 5-18000 seconds. Example: TIMER,30,300#
9. Check upload interval	TIMER#
10. Control relay	RELAY,A# ; A = 0 on, 1 off. Example: RELAY,0#
11. Check relay status	RELAY#
12. Open vibration alert	SENALM,A,M# ; A = ON, M = 0 GPRS only, 1 SMS+GPRS, 2 GPRS+SMS+CALL. Example: SENALM,ON,2#
13. Close vibration alert	SENALM,OFF#
14. Check vibration alert status	SENALM#
15. Open power-off alert	POWERALM,A,M,T1,T2,# ; A = ON, M = 0 GPRS only, 1 SMS+GPRS, 2 GPRS+SMS+CALL, T1 = 2-60 seconds power-off detection time, T2 = 1-3600 seconds minimum charge time. Example: POWERALM,ON,2,30,300#
16. Check power-off alert status	POWERALM#
17. Check heartbeat data status	HBT#
18. Open overspeed alert	SPEED,A,B,C,M# ; A = ON, B = 5-600 seconds, C = 1-255 km/h, M = 0 GPRS only, 1 SMS+GPRS. Example: SPEED,ON,10,120,1#
19. Close overspeed alert	SPEED,OFF#
20. Check overspeed status	SPEED#
21. Open low battery alarm setting	BATALM,A,M# ; A = ON, M = 0 GPRS, 1 SMS+GPRS. Example: BATALM:ON,1 (reply)
22. Close low battery alarm setting	BATALM,OFF#
23. Query low battery alarm status	BATALM#
24. Query sleep mode	CXCS#SLPDISCONNECT (reply: READOK: SLPDISCONNECT=0)
25. SMS time zone setting	GMT,A,B,C# ; A = E eastern or W western time zone, default E; B = 0-12, default 8; C = 0/15/30/45 half-hour zone, default 0. Example: GMT,E,8,0#
26. SMS time zone query	GMT#
27. GPRS time zone setting	SZCS#GT06GPRSGMT=A ; A = 0 report with time zone 0 (default), 1 synchronized with the SMS time zone
28. GPRS time zone query	CXCS#GT06GPRSGMT
29. Open dismantle alarm	DISMANTLE,A,M# ; A = ON, M = 0 GPRS only, 1 SMS+GPRS, 2 GPRS+SMS+CALL. The dismantle alarm is reported by the extended ID, alarm ID 0x13. Example: DISMANTLE,ON,2#
30. Close dismantle alarm	DISMANTLE,OFF#
31. Query dismantle alarm	DISMANTLE#

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