

Government of the People's Republic of Bangladesh
Bangladesh Road Transport Authority (BRTA)
New Airport Road, Banani, Dhaka-1212.
www.brta.gov.bd

1. GPS Device Specification (Minimum)

GPS Device with below minimum specification must be installed from BTRC registered VTS (Vehicle Tracking System) service provider who has own tracking software with local dedicated server, and who can provide API data to BRTA server. All devices must be manufactured or imported in compliance with the laws and regulations of the Government of Bangladesh.

SI No	Specification Item	Minimum Requirement	Abbreviation / Full Form	Remarks
1.	GNSS Support	GPS (L1), GLONASS, Galileo, BeiDou, QZSS (Optional) – or updated support	GNSS = Global Navigation Satellite System	The device can receive signals from several satellite networks, improving location accuracy and reliability.
			GPS = Global Positioning System (USA)	Uses the world's most common satellite navigation system.
			GLONASS : Russian satellite navigation system	Provides additional satellites for better coverage and accuracy.
			Galileo : European satellite navigation system	Enhances positioning accuracy and reliability.
			BeiDou : Chinese satellite navigation system	Improves location performance, especially in Asia.
2.	Positioning Accuracy	≤ 2.5 m CEP	CEP = Circular Error Probable	The reported location will generally be within 2.5 meters of the actual position.
3.	SoS/ Emergency Button Support	Device must have this option.		A wired or wireless button should be setup in a suitable position in the vehicle.
4.	Tracking Sensitivity	-162 dBm or lower	dBm = Decibel-milliwatts	Can continue tracking even when satellite signals are very weak.
5.	Acquisition Sensitivity	-148 dBm or lower	dBm	Can detect and lock onto satellite signals quickly, even in poor signal conditions.
6.	TTFF (Hot Start)	≤ 1 sec	TTFF = Time To First Fix	If recently used, the device can determine its location within 1 second.
	TTFF (Cold Start)	≤ 40 sec	TTFF	When powered on after a long time, it can determine its location within 10 seconds.
7.	Communication Network	GSM Quad-band (700, 900, 1800, 2100, 2300, 2600 MHz)	GSM = Global System for Mobile Communications	Sends tracking data through standard mobile phone networks.






SI No	Specification Item	Minimum Requirement	Abbreviation / Full Form	Remarks
8.	Frequency Bands	700, 900, 1800, 2100, 2300, 2600 MHz	MHz = Megahertz	Compatible with most GSM networks worldwide.
9.	Input Voltage	9-90 VDC	VDC = Volts Direct Current	Suitable for motorcycles, cars, buses, trucks, and heavy equipment.
10.	Battery Capacity	≥ 270 mAh / 3.7V	mAh = Milliampere-hour	Provides backup power if the main vehicle power is disconnected.
11.	Battery Type	Rechargeable Li-ion/Li-Poly	Li-Polymer = Lithium Polymer Battery	Lightweight, rechargeable, and commonly used in electronic devices.
12.	SIM Card	Standard SIM / Micro SIM / Nano SIM / eSIM	SIM = Subscriber Identity Module	A regular mobile SIM card is required for communication.
13.	Motion Sensor (Optional)	Accelerometer	Accelerometer Sensor	Detects movement, vibration, harsh braking, acceleration, and impacts.
14.	Ignition Detection	ACC Detection	ACC = Accessory/Ignition Power Input	Can determine whether the vehicle engine is ON or OFF.
15.	Operating Temperature	-20°C to 70°C	°C = Degrees Celsius	Operates reliably in very cold and very hot environments.
16.	Ingress Protection	IP65/IP68 or higher	IP = Ingress Protection	Protected against dust and water splashes; suitable for outdoor installation.
17.	Accelerometer	Accelerometer should be included		Helps to detect harsh braking, impact, motion detection

Note:

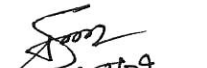
- For GPS enabled 'AI Dashboard Cam', the GPS specification should meet the above minimum requirements and installed from BTRC registered VTS (Vehicle Tracking Service) service provider.

সার্ভিস প্রোভাইডার এর শর্তসমূহ:

- (ক) বাংলাদেশ টেলিযোগাযোগ রেগুলেটরি কমিশন (বিটিআরসি) কর্তৃক Vehicle Tracking Service প্রদানের জন্য নিবন্ধনকৃত/লাইসেন্সপ্রাপ্ত প্রতিষ্ঠান হতে হবে এবং নিবন্ধন/লাইসেন্স হালনাগাদ থাকতে হবে।
- (খ) বিটিআরসি'র এ সংক্রান্ত হালনাগাদ গাইডলাইন অনুসরণ করতে হবে;
- (গ) বাংলাদেশ সড়ক পরিবহন কর্তৃপক্ষ (বিআরটিএ) কর্তৃক প্রস্তুতকৃত মনিটরিং ড্যাসবোর্ডের সাথে Application Programming Interface (API) এর মাধ্যমে ডাটা সংযোগ থাকতে হবে।

***শর্তসমূহ পালনকারী Vehicle Tracking Service নিবন্ধন/লাইসেন্সধারী প্রতিষ্ঠানসমূহের হালনাগাদ তালিকা BRTA এর ওয়েবসাইটে পাওয়া যাবে।**


15.07.26
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Android Display Specification (Minimum) (Optional)

SI No	Specification Item	Minimum Requirement	Abbreviation / Full Form	Remarks
1.	Operating System	Android 13 or Higher	OS = Operating System	Capable of running modern applications and software
2.	Display Size	≥ 7 Inch IPS Touchscreen	IPS = In-Plane Switching	Clear and touch-enabled display
3.	Screen Resolution	≥ 1024 × 600 Pixels	HD Resolution	Clear information visualization
4.	Processor	Quad-Core 1.5 GHz or Higher	CPU = Central Processing Unit	Fast data processing
5.	RAM	≥ 4 GB	Random Access Memory	Support for running multiple applications simultaneously
6.	Internal Storage	≥ 32 GB	GB = Gigabyte	Application and data storage capability
7.	Communication	4G LTE / GSM	LTE = Long Term Evolution	Communication with the server
8.	Wi-Fi	IEEE 802.11 b/g/n	Wireless Network	Software updates and data connectivity
9.	Bluetooth	Version 4.2 or Higher	BT = Bluetooth	Connectivity with other devices
10.	Audio	Built-in Speaker	Audio Output	Audible alerts and notifications
11.	Microphone	Built-in	Audio Input	Voice communication capability
12.	USB Port	Minimum 1 × USB	Universal Serial Bus	Data transfer functionality
13.	SIM Slot	Single SIM	Subscriber Identity Module	Mobile network connectivity
14.	Input Voltage	9V–90V DC	Direct Current	Suitable for use in cars, buses, and trucks
15.	Operating Temperature	-20°C to +70°C	°C = Degrees Celsius	Effective operation in various weather conditions
16.	Mounting Type	Dashboard Mount	Vehicle Mounting	Dashboard-mountable design
17.	Power Protection	Over-voltage & Reverse Polarity Protection	Electrical Protection	Protection against electrical damage
18.	Data Transmission	Real-Time GPS Data	Real-Time Communication	Live tracking capability
19.	OTA Update	Supported	OTA = Over-The-Air Update	Software update support


13.07.26


22/09/2024


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