Global connectivity

2G 4G and Cat.M1

Indoor and outdoor Positioning

WIFI GNSS LBS

Ideally for Trailer Tracking

Operating Temperature:

-20°C~+70°C

IP67

WaterProof

AOVX

Firmware Upgrade:

USB interface, OTA

Sufficient Hardware Interface
Analog Input and Digital Output

Supply Voltage:

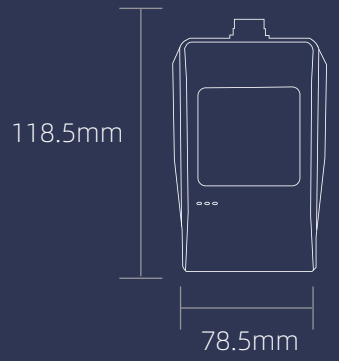
9v~ 40v
(9v~100v optional)

Data Encryption:

TEA, AES or RSA (optional)

Extended BLE Sensors and RS485 sensors

Long life battery



Dimensions:
118.5mm x 78.5mm x 35.5mm

2022 PRODUCT SPEC

“ THE DATA THROUGH THE WHOLE SHIPMENT IS CRUCIAL , SO WHAT WE NEED IS NOT ONLY TRACKER , BUT ALL DATA . ”

Aovx V series tracker devices are ideally for vehicle , trailer tracking and remote monitoring and command control , supporting by ACC ignition , relay control and multiple GPIOs for data telematics . Integrates global connectivity by cellular network 2G,4G Cat.1 , NB-IoT and Cat.M1 without data plan contract .

Aovx V series tracker devices have integrated multiple sensors for monitoring of movement , vibration , tampering , delay ,overspeed and geofence . Indoor and outdoor positioning supported by WIFI ,LBS and GPS ,GLONASS ,GALILEO and BEIDOU . Short range wireless BLE [Bluetooth Low Energy] is flexible for easy configuration , pair with external BLE sensors or accessories , which makes V series tracker device working as BLE gateway .

Aovx data is always crucial for assets management , which has been encrypted , data buffer capacity and uploaded via TCP/MQTT protocols ,make it easy to deploy in the cloud platform. Firmware over the air OTA is always important for after sale maintaince .

Aovx insight platform view location and condition data of your shipments in real time to ensure on time and in full delivery , specify the constraints relevant to your shipments and receive notifications when issues arise and create detailed reports to share with customers and analyze your data to identify improvement opportunities.

“AOVX VISION IS TO HAVE SHIPMENT FULLY TRANSPARENT , WHERE THE ASSETS ARE ALL IN SAFE AND UNDER CONTROL ”

" People in the world are connected by mobile phone in the daily life , they share the location , emotion in the internet . At the age of IoT , we are thinking about if it is possible to have a basic functional mobile phone for these assets , which make them connected and have their data managed , it would make shipment smater and make assets safer .That's the reason why Aovx is here . Aovx team members are from Quectel ,Queclink ,Hikvision and Sony . Strong knowledge of cellular modules ,worldwide network and regulatory in tracker field .

Aovx assets tracker solutions corp. is committed to protecting the assets in warehouse and in-Transit process , rather than location service , assets condition is also under monitored - vibration status , temperature alert embedded with multiple sensors and wireless technology , 4G LTE , NB-IOT and Cat.M1 , WIFI and BLE .

Supported by "service consciousness, customer experience, executive action " business philosophy, continue to provide customers with stable and reliable product and technology sales services, grow together with customers success."

RICKY GUO
CEO
Aovx assets tracker solutions corp.

Linkedin
Scan QR code

OVERVIEW

VEHICLE TRACKING V SERIES

FEATURES

General Specification

Operating Temperature	-20°C ~ +70°C
Dimensions	118.5mm x 78.5mm × 35.5mm
Weight	Approx. 230g (VM350), 229g (VL350)
Firmware Upgrade	USB interface, OTA
Data Encryption	TEA, AES or RSA(optional)
Supply Voltage	9V~ 40V (9V~ 100V optional)
Stand-by Current	≤10mA

Global Deploy

- **Variant for the Global**

VM350-GL (Cat M1)	LTE FDD:B1/B2/B3/B4/B5/B8/B12/B13/B14/B18/B19/B20/B25 /B26*/B27/B28/B66/B71/B85 GSM: 850/900/1800/1900MHz
VL350-GL* (Cat 1)	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/ B26/B28 GSM: 850/900/1800/1900MHz

- **Variant for China/India**

VL350-CN (Cat 1)	LTE FDD: B1/B3/B5/B8 LTE TDD: B34/B38/B39/B40/B41 GSM: 900/1800MHz

- **Variant for EMEA**

VL350-EM (Cat 1)	LTE FDD: B1/B3/B5/B7/B8/B20/B28 GSM: 850/900/1800/1900MHz

- **Variant for Latin America**

VL350-LA (Cat 1)	LTE FDD: B2/B3/B4/B5/B7/B8/B28/B66 GSM: 850/900/1800/1900MHz

- **Variant for North America**

VL350-NA* (Cat 1)	LTE FDD: B2/B4/B5/B12/B13/B25/B26
VM350-NA (Cat M1)	LTE FDD: B1/B2/B3/B4/B5/B8/B12/B13/B14/B18/B19 /B20/B25/B26*/B27/B28/B66/B71/B85

General specification

Horizontal Position Accuracy	Autonomous: <2.5m CEP
Velocity Accuracy	Without Aid: <0.1m/s
Acceleration Accuracy	Without Aid: <0.1m/s²
Reacquisition Time	<1s
TTFF @-130dBm with EASY™:	Cold Start: <15s; Warm Start: <5s; Hot Start: <1s
TTFF @-130dBm without EASY™	Cold Start: <35s; Warm Start: <30s; Hot Start: <1s

Hardware Features

Interfaces	VM350/VL350: VCC GND ACC RELAY DI1/AI1 DO1 VOUT(5V) Solar+ Solar-
USB	× 1, Micro
UART	× 1, RS485 * , RS232*, TTL*
(U)SIM Interface	× 1, 1.8V/3V, Nano SIM card
Cellular Antenna	Internal
GNSS Antenna	Internal, GPS/GLONASS/BeiDou
LED	× 3, System LED, Network LED, GNSS LED
WLAN	2.4G
Bluetooth	5.0
Battery Capacity	5000mAh (lithium polymer battery, optional)

Air Protocol

LTE (Cat 1)	LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL) LTE TDD: Max 8.96Mbps (DL)/Max 3.1Mbps (UL)
LTE (Cat M1)	LTE FDD: Max 588Kbps (DL)/Max 1119Kbps (UL)
GSM	GPRS: Max 107Kbps (DL)/Max 85.6Kbps (UL) EDGE: Max 296Kbps (DL)/Max 236.8Kbps (UL)
Command Set	Track protocol command
Transmit Protocol	TCP, UDP, SMS
Working Modes	Power saving mode for long standby time Continuous mode for emergency tracking
Scheduled Timing Report	Report position and status at preset time intervals
Geo-fences	Support up to 5 internal geo-fence regions
Low Power Alarm	Alarm when internal battery is low
Wakeup Report	Report when the device wakes up
Motion Detection	Motion detection based on internal 3-axis accelerometer
Reporting Frequency Adjustment	The device will increase the position reporting frequency when it turns a corner.

Electrical characteristics

- **Supply Voltage:**

Supply voltage(VCC)	9V~40V (9V~100V optional)
Solar voltage	Can be powered by solar (optional)

- **Power Out:**

VOUT(5V)	5V (When VCC is not connected,VOUT(5V) is supplied by internal battery)

- **Digital Output (Open Drain):**

Drain current (RELAY-Digital Output OFF)	≤100μA (Default use for RELAY control)
Drain current (DO1-Digital Output OFF)	≤100μA (Can be use for normal output)
Drain current (RELAY/DO1-Digital Output ON)	≤200mA

- **Digital Input:**

Input resistance (ACC)	≥370KΩ (Positive trigger input)
Input voltage(ACC)	≤VCC
Input voltage threshold (ACC)	≥7V

- **Configurable Input:**

Input resistance(DI1/AI1)	≥3MΩ
Digital input voltage(DI1)	≤VCC (Negative trigger input for normal use)
Digital input voltage threshold (DI1)	≤0.2V
Analog input voltage(AI1)	≤16V

* Under Development