GADN Series Module

Features

- Built-in u-blox NEO-M8 GPS Module
- Optional Unterhered Dead Reckoning Technology
- Single Mini PCI Express Socket Services All Features
- Equips 2-Channel Individual CAN and 1-Channel J1708 Interfaces
- Sensor Integrated: 3D Gyroscope, 3D Accelerometer
- VehicleON[™], FleetON[™] and GpsON[™] SDK for Quick System Integration
- Vehicle Communication : CANbus 2.0 a/b, OBD-II, J1939 and J1708



Introduction

ANTZER TECH's GADN series are combo modules integrate FARO series and an extension GPS module. GADN series integrate CAN (CANbus 2.0 a/b, OBDII, J1939, J1708), 6 axis sensors, and GPS features all in one mini PCI-E slot.

GADN series' configuration is optional with UDR (Untethered Dead Reckoning) function. UDR combines inertial sensing data and GNSS signals (a.k.a. sensor fusion), and supports powerful positioning under the poor GPS signal and other situations, such as short signal loss in tunnels, driving in indoor parking facilities, urban canyons, and where obstructed GPS signals hinder positioning.

ANTZER TECH's GADN Series is the ideal solution for the Fleet Management, Public Transit, Law Enforcement, Digital Signage Player, Vehicle Data Collection, Vehicle Tracking, Telematics System, and etc.

Interface	Form Factor	Full PCI Express Mini Card with Extension Board
	Host Interface	USB 2.0 via PCI Express Mini Card Socket
		UART via PCIE Express Mini Card Socket (by project)
CAN/Sensor	Interface Number	CAN (ISO 11898) x 2 Individual Channels
		J1708 x 1
	Sensor	3D Gyroscope
		3D Accelerometer
	CAN	CANbus 2.0 a/b, OBD-II (ISO 15765-4), J1939 and J1708
	Identifier Filtering	Mask and Identifier List Mode
GPS	GPS Module	u-blox NEO-M8N/M8U
	Receive Type	72-channel u-blox M8 engine
		Concurrent reception of up to 3 GNSS (GPS, GLONASS, BeiDou)
	Dead Reckoning	GADN-FSxU series available
	Quick Hot Start	Support, Li-Coin Battery is Required
	GPS Antenna	External
Software	Driver Support	Microsoft Windows 7 / 10
		Linux Kernel 2.6, 3.13, and 4.4
		Linux Socket CAN
	SDK Support	Microsoft Windows 7 / 10
		Linux by Project
Environment	Operating Temp	-40°C ~ 85°C (without Li-Coin Battery)
		-20°C ~ 60°C (with Li-Coin Battery)
	Vibration Test	Pass 7.69G@ 20~2000Hz, compliant with MIL-STD-810G category 24
	ESD Protection	8kV Contact, 15kV air
	Certification	CE, FCC Class B
Dimension	L x W x H	50.9 x 30 x 13.2mm

Specifications

* Specifications are subject to change without prior notice.



Ordering Information

Part Number	Description	
GADN-FS1U0	2-Ch CAN 2.0 A/B, Gyroscope, Accelerometer, u-blox NEO-M8U GPS	
GADN-FS3U0	2-Ch CAN 2.0 A/B, OBDII, Gyroscope, Accelerometer, u-blox NEO-M8U GPS	
GADN-FS7U0	2-Ch CAN 2.0 A/B, OBDII, J1939, Gyroscope, Accelerometer, u-blox NEO-M8U GPS	
GADN-FS9U0	2-Ch CAN 2.0 A/B, OBDII, J1939, 1-Ch J1708, Gyroscope, Accelerometer, u-blox NEO-M8U GPS	
GADN-FS1N0	2-Ch CAN 2.0 A/B, Gyroscope, Accelerometer, u-blox NEO-M8N GPS	
GADN-FS3N0	2-Ch CAN 2.0 A/B, OBDII, Gyroscope, Accelerometer, u-blox NEO-M8N GPS	
GADN-FS7N0	2-Ch CAN 2.0 A/B, OBDII, J1939, Gyroscope, Accelerometer, u-blox NEO-M8N GPS	
GADN-FS9N0	2-Ch CAN 2.0 A/B, OBDII, J1939, 1-Ch J1708, Gyroscope, Accelerometer, u-blox NEO-M8N GPS	

VehicleON[™] SDK

ANTZER TECH VehicleON[™] is a convenient development kit to enable the CAN, J1708 and sensors hardware functions. Furthermore, the software features, such as the higher-layer protocols and identifier filtering, are also easy and flexible to be integrated to the applications. The included sample code is helpful to speed up the project schedule.

FleetON[™] SDK

ANTZER TECH FleetON[™] has integrated the various well-known cloud protocols. The hard work is not required. Only a couple of commands, all of the vehicle status are reported to the telematics center.

GpsON[™] SDK

NEMA code parsing is not hard work ever. ANTZER TECH GpsON™ is the SDK to get GPS information quickly, such as latitude, longitude and altitude parameters.