

ANNA GNSS PCIe Mini Card

Features

- Built-in u-blox M8 GNSS module (GPS, GLONASS, BeiDou, Galileo, QZSS and SBAS)
- Support Dead Reckoning Features: UDR or ADR
- Optionally Support Automotive Dead Reckoning (CAN-to-ADR) Technology (The card needs to be connected to the vehicle CAN bus)
- Optional SKU with Sensors Integrated: 3D Gyroscope, 3D Accelerometer.



Introduction

ANTZER TECH's ANNA Mini-PCIe card integrates high performing u-blox M8 module that have concurrent reception of up to 3 GNSS (GPS/Galileo together with GLONASS or BeiDou). ANNA series has optional configurations which support Dead Reckoning Technology: UDR (Untethered Dead Reckoning), ADR (Automotive Dead Reckoning) or Antzer Tech patented CAN-to-ADR solution. ANNA Mini-PCIe card provides outstanding positioning accuracy which is the ideal solution for industrial and automotive applications.

Specifications

Interface	Form Factor	Full Sized PCI Express Mini Card
	Host Interface	USB 2.0 via PCI Express Mini Card Socket <i>* Optional SKU with sensors via I²C or USB 2.0 on PCI Express Mini Card Socket</i>
GNSS	GNSS Module	u-blox, NEO-M8U, NEO-M8L
	Receiver Type	72-channel u-blox M8 engine Concurrent reception of up to 3 GNSS (GPS, Galileo, GLONASS, BeiDou)
	Position Accuracy	2.0m CEP
	Dead Reckoning	UDR / ADR / CAN-to-ADR
	Quick Hot Start	Support (Li-Coin Battery is Required)
	GNSS Antenna	External, IPEX connector onboard (Default Support Active Antenna) <i>* Optional SKU Support Passive Antenna</i>
	Input Connector	Wheel-tick and Direction Inputs for the ADR SKU
CAN/Sensor	Sensor (Optional SKU)	3D Gyroscope 3D Accelerometer
	CAN (Only for CAN-to-ADR SKU)	Support ISO15765-4 On-Board Diagnostic or J1939 Protocol to Get Speed from Vehicle CAN Bus for CAN-to-ADR Application.
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 6.45mm

Ordering Information

Form Factor	Sensors ^[1]	GNSS Feature		
		UDR	ADR	CAN-to-ADR
Full-sized mPCIe	●	ANNA-F00U0	ANNA-F00L1	ANNA-FG0L1 ^[2]
		ANNA-F00U1		

[1] The interface of the sensors on the list is I²C on the mPCIe socket. Please contact our sales representative if you need the SKU with USB 2.0 interface for the sensors.

[2] For the SKU with CAN-to-ADR function, the default interface of the sensors would be USB 2.0 on the mPCIe socket.