

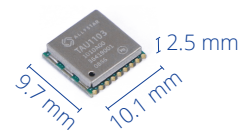
TAU1103

GNSS Positioning Module

Industrial

PRODUCT DESCRIPTION

TAU1103 is a cost-effective GNSS positioning module which is based on CYNOSURE II GNSS SoC chip. It supports GPS/QZSS, Galileo, and GLONASS. With a compact size and high integrated design, TAU1103 is easy to apply to navigation applications, especially friendly to a solution requiring a strict cost.



HIGHLIGHTS

- Low power consumption design
- Active antenna short circuit protection and open circuit detection
- Supports single system independent positioning and multi-system joint positioning
- Supports A-GNSS feature
- Compatible with mainstream GPS modules
- Highly integrated labelling module, the best cost-effective GNSS solution

APPLICATIONS



Bike Sharing



Asset Tracking



Fleet Management



Telematics

Product Selector:

Product Model	GNSS						Feature					Interface				Accuracy		Grade			
	Band(S/D/T)	GPS	BDS	GLONASS	Galileo	NavIC	QZSS	Built-in LNA	Data Logging	Programmable (Flash)	D-GNSS	Oscillator	UART	I2C	USB	SPI	Meter	Sub-meter	Centimeter	Industrial	Automotive
TAU1103	S	•		•	•		•	•	•	•	T	•	o			•				•	

T = TCXO

o = Supported upon request with special firmware

GENERAL SPECIFICATIONS

GNSS Engine

Cynosure II GNSS Engine
Total 72 GNSS channels
5 Hz maximum update rate

GNSS Reception

GPS/QZSS: L1C/A
Galileo: E1
GLONASS: G1
SBAS: L1

Position Accuracy

GNSS 2.5m CEP

Sensitivity

Cold Start -148 dBm
Hot Start -158 dBm
Reacquisition -159 dBm
Tracking -162 dBm

Velocity & Time Accuracy

GNSS 0.1 m/s CEP
1PPS 25 ns

Interfaces

UART 1
I²C* 1

* Supported upon request with special firmware

Antenna

Active antenna
Passive antenna

Time to First Fix (TTFF)

Hot start 1s
Cold start 28s

Operation Limit

Velocity 515 m/s
Altitude 18,000m

Operating Condition

Main voltage 3.0 - 3.6 V
Digital I/O voltage 3.0 - 3.6 V
Backup voltage 1.6 - 3.6 V

Antenna Supervision

Antenna short circuit protection and open circuit detection

Power Consumption

Operating (GNSS) 33 mA @ 3.3V
Standby 14 uA

ENVIRONMENT DATA

Operation temperature -40°C to +85°C
Storage temperature -40°C to +85°C
Certification RoHS, REACH, FCC, CE-RED

PACKAGE

Package 18 PIN LCC
Dimensions 10.1*9.7*2.5 mm

