

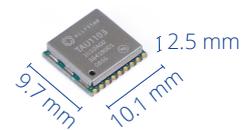
# TAU1103

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	•	◦				•			•	

T = TCXO

◦ = 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  
I<sup>2</sup>C\* 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

