

TAU1105

GNSS Positioning Module

Industrial

PRODUCT DESCRIPTION

TAU1105 is a GNSS positioning module, which is based on the state of art CYNOSURE III architecture. It supports GPS, BeiDou, GLONASS, Galileo, and QZSS.

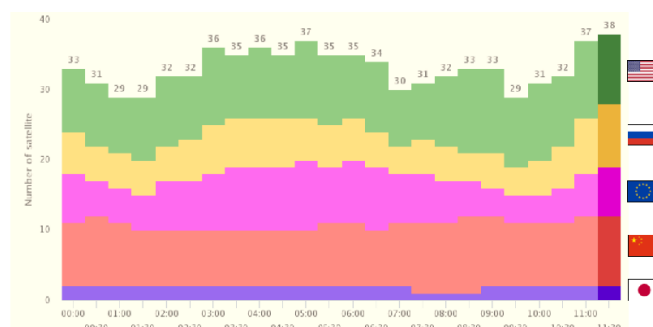
TAU1105 integrates efficient power management architecture, while providing high sensitivity and low power GNSS solutions which make it suitable for navigation applications on automotive and consumer electronics, and fleet management.



(10.1*9.7*2.5 mm)

HIGHLIGHTS

- Concurrent reception of GPS, BDS, GLONASS, Galileo, and QZSS
- High sensitivity design and low power management
- Smart jammer detection and suppression
- Highly integrated labelling module, the best cost-effective GNSS solution



APPLICATIONS



Automotive Navigation



Asset Tracking



Fleet Management



Bike Sharing



Battery Sharing

Product Selector

Product Model	GNSS							Feature				Interface				Accuracy			Grade		
	Band (S/D/T)	GPS	BDS	GLONASS	Galileo	NavIC	QZSS	Built-in LNA	Programmable (flash)	Data Logging	D-GNSS	Oscillator	UART	I2C	USB	SPI	Meter	Sub-meter	Centimeter	Industrial	Automotive
TAU1105	S	•	•	•	•		•	•	•	•	•	T	•	o			•			•	

T = TCXO

o = Supported upon request with special firmware

GENERAL SPECIFICATIONS

GNSS Engine

Cynosure III GNSS Engine
40 GNSS tracking channels
5 Hz maximum update rate

GNSS Reception

GPS/QZSS: L1C/A
BDS: B1I
GLONASS: G1
Galileo: E1

Position Accuracy

GNSS 1 m CEP

Time to First Fix (TTFF)

Hot start 1s
Cold start 28s

Sensitivity

Cold Start -148 dBm
Hot Start -155 dBm
Reacquisition -158 dBm
Tracking -162 dBm

Velocity & Time Accuracy

GNSS 0.1 m/s CEP
1PPS 20 ns

Interfaces

UART 1
I2C* 1

*: Supported upon request with special firmware.

Antenna

Active antenna
Passive antenna

Antenna Supervision

Antenna short circuit protection and open circuit detection

Operation Limit

Velocity 515 m/s
Altitude 18,000m

Operating Condition

Main voltage 2.0-3.6 V
Digital I/O voltage 1.8-3.6 V
Backup voltage 1.8-3.6 V

Power Consumption

Operating	GPS/QZSS	25 mA @ 3.3V
	GNSS	35 mA @ 3.3V
Standby	12 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

