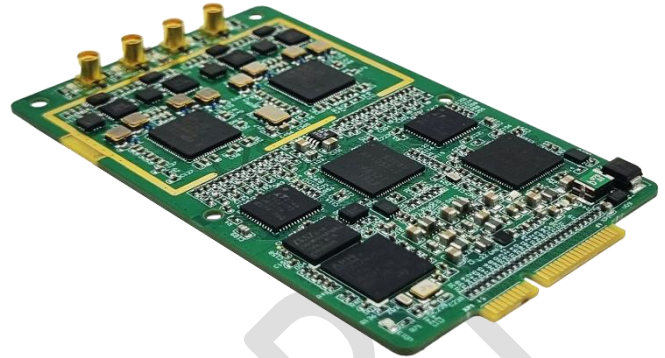


KV-AJ2.C-OEM**DUAL-BAND ANTI-JAMMING OEM mini-PCIE GNSS MODULE**

- Dual-band anti-jamming OEM module: up to 2 frequency bands simultaneously (consider specified options)
- Multi-system solution: GPS/ Galileo/ GLONASS/ NavIC (IRNSS) (consider specified options)
- Interference resistance up to 3 jammers simultaneously for each of frequency bands
- Up to 90 dB J/S performance
- Low power consumption: 5 W ... 7 W (depending on options)
- Compact form factor for easy integration in system



The purpose of using the KV-AJ2.C-OEM module is to ensure stable reception of the navigation signal in conditions of staged interference. The module can be used with the KV-AJA phased antenna array, and can be separately integrated into a third-party device. The product supports the GPS, GLONASS, Galileo, NavIC satellite constellations and can be employed for the land, sea, air platforms (including unmanned aerial systems) and fixed installations.

Coupled with the use of a multi-band 4-element antenna array (the module can be provided by Kosminis Vytis), dual-band solution allows to suppress interferences in up to 3 directions on two frequency plans simultaneously. This approach provides significantly higher protection against interference compared to single-frequency options.

KV-AJ2.C-OEM module is based on NTLab's high-performance ASICs: RFFE, baseband, anti-jamming processors.

TECHNICAL SPECIFICATION

Parameter	Description	Note
Supported GNSS constellations ¹⁾	Option 1: GPS L1(C/A), L2(CM); Galileo E1. Option 2: GPS L1(C/A); GLONASS L1(C/A). Option 3: GPS L1(C/A), L5; Galileo E1. Option 4: GPS L1(C/A); NavIC L5.	
Interference resistance:		
- single jammer	Up to 90 dB (J/S)	
- several jammers	Up to 82 dB (J/S)	Up to three directions
Number of channels	4	For each frequency band
Positioning accuracy (RMS) without interference ²⁾:		
- horizontal	< 2.1 m	Static mode
- vertical	< 3.8 m	Static mode
TTFF without interference:		
- cold start	< 90 sec	
- re-acquisition time	< 3 sec	Static mode
Data interfaces	3xUART, 1xUSB	
Peripheral interface	1xPPSout	Time accuracy ±20 ns
Data update rate	20 Hz (1, 2, 5, 10)	PVT data
Operation conditions:		
- altitude	18000 m	
- velocity	515 m/s	
Supply voltage	3.0 V ... 5.5 V	
Power consumption	5 W ... 7 W	Depending on option
Dimensions (TBD)	85 mm x 50 mm x 7,5 mm	
Weight	< 25 g	
Operating temperature	-40 °C ... +71 °C	
Storage temperature	-45 °C ... +85 °C	

¹⁾ Other GNSS signals available on request, including NavIC S band.

²⁾ Depends on atmospheric conditions, satellite visibility and geometry, multipath conditions.

CONTACTS

Kosminis Vytis UAB
 112 Svencioniu LT-15168 Nemencine, Vilnius, Lithuania
 e-mail: sales@kosminis-vytis.lt