



TR-2S AJ

OEM GNSS Board



Key Features

- In-Band Interference Rejection
- Spoofing & Jamming Detection
- Advanced Multipath Mitigation
- MIL-STD-810G Shock & Vibration
- Fast Acquisition Channels
- Up to 200 Hz Output

TR-2S AJ is a compact GNSS board with patented anti-spoofing and jamming detection and suppression. Ready for any application requiring high precision, small size, and operation in the most demanding environments.

TR-2S AJ utilizes all GNSS constellations with multifrequency tracking for robust PVT. JAVAD NetView software provides intuitive configuration and status monitoring, with full command-line interface support for embedded system deployment.

TR-2S AJ Specifications



Tracking	Total Channels	874	
	GPS	L1 C/A, L1C, P1, P2, L2C, L5	
	GLONASS	L1 C/A, P1, P2, L2 C/A, L3	
	Galileo	E1, E5, E5A, E5B, E6	
	BeiDou	B1, B1C, B2B, B2, B2A, B3	
	QZSS	L1C C/A, L1C, L2C, L5, L6, L1S, L1Sb, L5S	
	SBAS	L1, L5	
	NavIC	L1, L5, S	
	L-Band	1525-1560 Mhz	
Performance		Horizontal (m)	Vertical (m)
	Standalone	1.000	1.500
	SBAS	0.500	0.850
	DGPS	0.250	0.500
	JStar (PPP)	0.025	0.050
	RTK	0.008 + 1 ppm	0.015 + 1 ppm
	Network RTK	0.008 + 0.5 ppm	0.015 + 0.5 ppm
	Static / Fast Static	0.003 + 0.1 ppm	0.004 + 0.4 ppm
Anti-Jamming	Jamming Suppression	Up to 30 dB IBIR	
	Jammer-to-Signal Ratio	Up to 90 dB	
Time to First Fix	Cold Start	< 35 s	
	Warm Start	< 5 s	
	Reacquisition	< 1 s	
	RTK Initialization	2 - 6 s	
Output Rate	Position	up to 200 Hz	
	Measurements	up to 200 Hz	
Wired I/O	Main Connector	40-pin Micro Header, 2 x 20 pos, 0.050" pitch	
	GNSS Antenna	1 x MMCX, +5 VDC Ports (0.16A max)	
	Serial	1 x RS232 up to 460.8 kbps 2 x RS232/RS422 up to 460.8 kbps	
	USB	1 x USB 2.0 Full Speed. Up to 3.0 Mbps UART	
	CAN	1 x CAN 2.0	
	Event Marker	1 x Event Marker	
	GPIO	2 x Configurable Logic-Level GPIO Ports	
	Frequency Output	20 MHz	
	1PPS	1 x 1PPS output synchronized to GPS or UTC	
Storage	Internal Memory	Up to 16 GB	
Status/Interface	LEDs	1 x LED on board, 4 x External LED Drivers	
Power	Input	+4 to +40 VDC	
	Power Consumption	2.7 W (AJ mode off) / 3.1 W (AJ mode on)	
Physical	Dimensions	55 x 40 x 11 mm	
	Weight	20 g	
Environmental	Operating Temperature	-40°C to +80°C	
	Storage Temperature	-40°C to +85°C	
	Shock & Vibration	MIL-STD-810G ISO-9022-31-06 Shock, Severity 5 IEC 60068-2-6 Sine Vibration	

GNSS performance is dependent on signal quality, satellite geometry, ionospheric and tropospheric conditions, baseline length, multipath effects and RF interference. Specifications may be changed without notice.