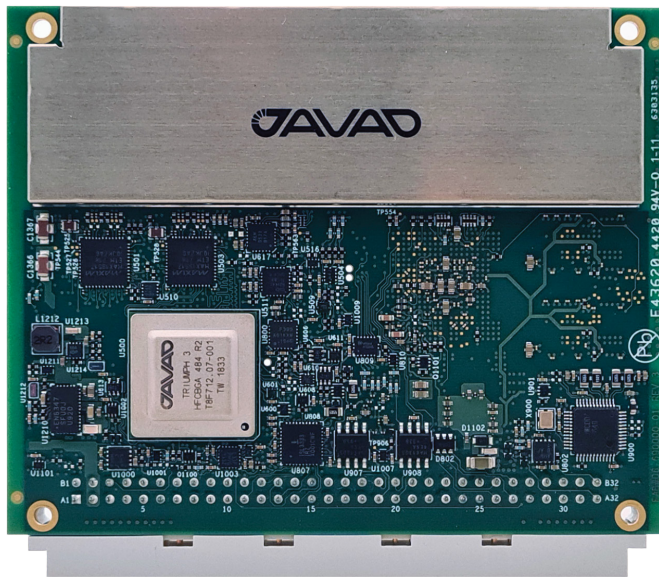




TRE-3S

OEM Board



Key Features

- Up to 200 Hz RTK performance
- 874 GNSS channels
- QZSS L6 tracking
- Stable digital filters
- Multipath rejection
- Built-in calibrator and netBrowser

The TRE-3S OEM board is built on the heritage of TRIUMPH Technology and delivers up to 200 Hz RTK performance.

With 874 GNSS channels, it tracks current and future satellite signals, including QZSS L6, L61, and L62 messages.

The onboard Anti-Jamming Module provides unmatched signal protection, ensuring reliable positioning even in the most challenging environments.

Built-in calibration, netBrowser configuration, and world-class support direct from the JAVAD team make integration as easy as possible.

TRE-3S Specifications



Tracking	Total Channels	874	
	GPS	C/A, L1C, P1, P2, L2C, L5	
	GLONASS	C/A, P1, P2, L2C, L3	
	Galileo	E1, E5A, E5B, AltBOC, E6	
	BeiDou	B1, B1C, B2B, B2, B2A, AltBOC, B3	
	QZSS	C/A, L1C, L2C, L5, L6, L1S, L1Sb, L5S	
	SBAS	L1, L5	
	NavIC	L5, S	
	L-Band	1525-1560 Mhz	
Performance		Horizontal (m)	Vertical (m)
	DGPS	0.250	0.500
	RTK	0.01 + 1 ppm	0.015 + 1 ppm
	Static / Fast Static	0.003 + 0.1 ppm	0.0035 cm + 0.4 ppm
	Autonomous	< 2 m	
	Heading	< 0.09 deg (2m baseline)	
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 and Raw Data	Up to 200 Hz	
Network	NTRIP Caster	Up to 256 NTRIP Clients	
	TCP / TCPO / UDP Server	5 / 256 / Unlimited Clients	
	NTRIP / TCP Client	2 / 2 Connections	
	NTRIP Server	2 NTRIP Caster Connections	
	HTTP(S) Server	1 Client	
	FTP Server / Push / SFTP	1 Client / 1 / 1 Connection	
Wired I/O	Main Connector	64-pin DIN41612 type B, Right Angle	
	GNSS Antenna	1 x MMCX, +5 VDC, 0.12 A max	
	Serial	2 x RS232 up to 460.8 kbps 2 x RS232/RS422 up to 460.8 kbps	
	USB	2 x USB 2.0 Dual-Role Ports	
	Ethernet	10BASE-T / 100BASE-TX	
	CAN	2 x CAN 2.0 A/B	
	Event Marker	2 x Event Marker	
	1PPS	2 x 1PPS	
	IRIG	IRIG timecode output	
	External Reference	Frequency Input / Output	
	GPIO	4 x Logic-Level GPIO, 3.3 V	
Storage	Internal Memory	Up to 64 GB	
Status/Interface	Keys	Power ON/OFF, External Command Inputs (Function)	
	LEDs	4 x External LED Drivers	
Power	Input	+4.5 to +40 VDC	
	Power Consumption	3.7–5.6 W, depending on mode	

TRE-3S Specifications



Physical	Dimensions	100 x 80 x 13mm
	Weight	87g
Environmental	Operating Temperature	-40°C to +80° C
	Storage Temperature	-40°C to +85°C
	Humidity	MIL-STD- 810D (method 507.2)
	Shock & Vibration	MIL-STD-810H (methods 514.8 & 516.8)

GNSS performance is dependent on signal quality, satellite geometry, ionospheric and tropospheric conditions, baseline length, multipath effects and RF interference. Refer to the user manual for full specifications. Specifications may be changed without notice.