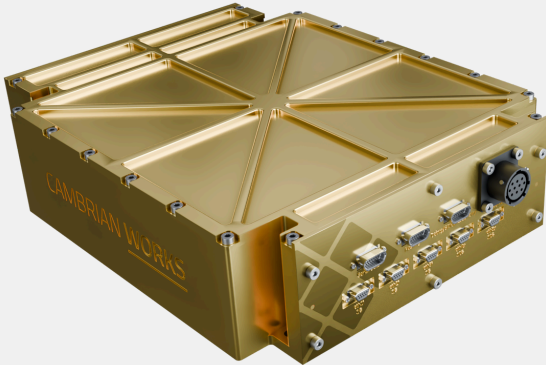


GigRouter

Model GR-002007



AI and Machine Learning Ready

GigRouter is built with an NVIDIA AGX Orin processor for state-of-the-art AI/ML computing coupled with K3S app container management. This allows apps to be deployed in parallel.

Networking Ready

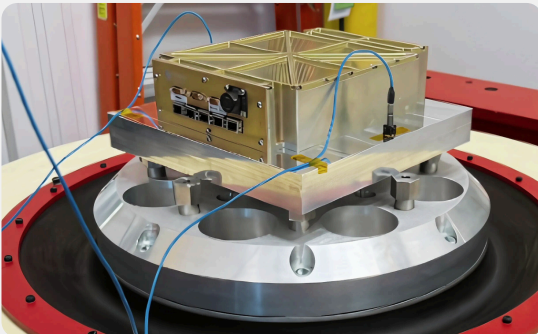
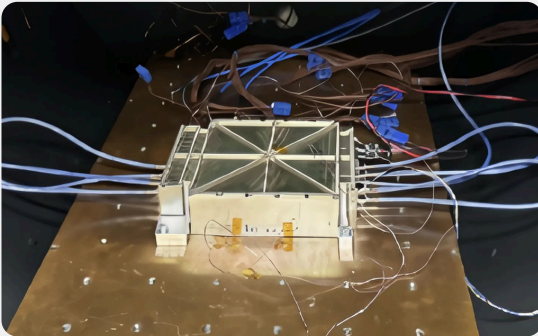
Network software packages for internal satellite routing and inter-satellite communications are available. Compatible with many protocols such as MPLS, IPv4, and IPv6. No need to rewrite software for data routing through space.

Space Ready

GigRouter is TRL 9 with multiple units operating on orbit. GigRouter has completed NASA GEVs vibration and thermal vacuum testing.

Rapid Development

The multitude of standard interfaces, like 2x 10-GigE, 7x 1-GigE, and Serial, allows you to develop rapidly and focus on your mission and schedule.



Dimensions 267 x 200 x 61 mm	Mass (with enclosure) 3.23 kg (Measured)	OS Yocto-based optimized BSP	Input Voltage Range 18 V to 36 V
Data Interfaces 2x 10-Gbps Ethernet 7x 1-Gbps Ethernet 1x RS-422 1x RS-422 (Debug) 4x GPIOs	Storage Flash Memory • 64 GB eMMC • 2x 8 TB SSD (16 TB total)	Power Consumption* 26 Watts (Idle) 38 Watts (Max Data) 40 Watts (Max CPU) 65 Watts (Max GPU) 94 Watts (Max) *Power Mode Adjustable	Container Orchestration Kubernetes (K3S)
CPU 12-core Arm Cortex-A78AE 64-bit	RAM 64 GB 256-bit LPDDR5	Radiation Lifetime 24 Years in 550 km 90° 8 Years in 1000 km 90° 5 Years in GEO with added 2 mm shielding	
GPU 2048-core NVIDIA Ampere architecture GPU with 64 Tensor Cores		Base plate temperature (in vacuum) < 60 °C to maintain CPU temperature < 75 °C at 35 W nominal power	



Seamless Space Links