DynaCOR 61-10 – ADAS/HIL Logger Edition

AUTOMOTIVE LOGGER - 4U - AMD EPYC - 28GByte/s Sustained Writing - Hot Swap - 100GbE

- **High Performance ADAS/HIL Logger**
- **Up to 28GByte/s Sustained Write**
- **Up to 192TByte NVMe, Hot-Swappable**
- **AMD EPYC 7003 Series**
- **Liquid and Air Cooling**
- **Configuration Service**

Features

High Performance ADAS/HIL Logger : Designed for in-vehicle and in-lab HIL datalogging, with massive storage capacity and outstanding sustained writing performance. Built with reliable components and ruggedized for Road Vehicle deployments

Vehicle Data Harvesting and Ingestion : Meets the most demanding requirements of Autonomous Driving projects: it supports up to 28GByte/s sustained write speed for uninterrupted data/video multi stream recording

Direct Sensor Attach : Allows direct attach (switchless) to vehicle sensors, with up to 4x100GbE + 2x 10GbE (or 18x 10GbE) interfaces enabling

Large Storage Capacity : Supports up to 192TB with three hot-swappable NVME data cartridges, each providing up to 64TB (large configurations require the expansion box). Data cartridges eliminate the need to deal with individual disks when data is transferred to the data center, making the process fast and error-proof

A Data Center on the Wheels : Plenty of computational power thanks to the AMD EPYC 7003 Series CPU and up to 1TB RAM supporting advanced data fusion and filtering workloads. Check out also the ADAS/HIL AI Server family for GPU accelerated variants

Hybrid Cooling : Combined liquid and air-cooling, to meet a range of development needs, both in the vehicle and in the lab/data center

Configuration Service : Highly modular design, allows for personalized configurations, including hybrid Logger – Inference (GPU) server ones.

Description

The DynaCOR 61-10 is a high performance ADAS/HIL logger that provides cutting edge sustained writing speed and storage capacity.

Designed for road vehicles, it offers reliable operation thanks to automotive grade ruggedization; it is also available in non-rugged configurations to enable HIL and vehicle digital twins in the lab and the data center.

The internal fabric provides full PCIe Gen 4 bandwidth between the NVMEs and the 100GbE network cards, to support a sustained write performance of up to 28GByte/s to allow capturing data intensive streams without any glitch.

The storage system capacity reaches 192TB on 12 U.2 disks (large configurations require an expansion box). Up to three hot swappable data cartridges pack 4 disks in convenient data units that can be easily moved from the device in the vehicle to an equivalent unit in the lab / data center, greatly improving the speed and reliability of the data transfer for further processing.

The DynaCOR 61-10 offers a large number of high-performance network interfaces, with 2x 10G/5/2.5/1GbE (RJ45) and up to 4x 100/50/25/10GbE (QSFP28). The 100GbE ports are particularly versatile, since they support precision timing, allow for different types of media (fiber, copper) and can be split each in up to 4 25/10GbE ports, bringing the total count to 18 10GbE ports that can be used to interface directly to sensors.

Thanks to the powerful AMD EPYC 7003 Series CPU, the DynaCOR 61-10 can perform on the fly data analysis, filtering and compression, enabling sophisticated data fusion and pre-processing strategies. For even more capacity and computational capabilities it is also possible to cluster multiple DynaCOR 61-10 with other Eurotech ADAS products, including the AI ADAS servers for inference and training.

Eurotech configuration management service allows fine tuning the DynaCOR 61-10 to meet and exceed your project requirements; call us for more information for more options.

Note: The information in this document may be subject to change without notice and should not be construed as a commitment by Eurotech.
While responsible precautions have been taken, Eurotech assumes no responsibility for any error that may appear in this document.
All trademarks or registered trademarks are property of their respective companies

DynaCOR 61-10 – ADAS/HIL Logger Edition

AUTOMOTIVE LOGGER - 4U - AMD EPYC - 28GByte/s Sustained Writing - Hot Swap - 100GbE

Ordering Code: DYCOR-61-10-XX				
XX		-01	-02	-03
PROCESSOR	CPU	AMD EPYC™ 7313P 16 Cores / 32 Threads 3.00GHz / 3.70GHz	AMD EPYC™ 7443P 24 Cores / 48 Threads 2.80GHz / 4.00 GHz	
ACCELERATORS	GPU	Factory Option		
MEMORY	RAM	64GB DDR4 ECC	128GB DDR4 ECC	256GB DDR4 ECC
STORAGE	OS Disk	500GB NVMe (PCIe x4)		
	Data	64TB (4x U.2 G4) RAW; 1x Data Cartridge	128TB (8x U.2 G4) RAW; 2x Data Cartridge, Hot Swap	192TB (12x U.2 G4) RAW; 3x Data Cartridge, Hot Swap
	RAID	RAID 0/1/5/10 Hardware RAID	RAID 0/1/10 Hardware RAID	
I/O INTERFACES	Ethernet	2x 100/50/25/10GbE (QSFP28), 2x 10G/5/2.5/1GbE (RJ45), Each 100GbE can be Split in 4x 25/10GbE Ports		4x 100/50/25/10GbE (QSFP28), 2x 10G/5/2.5/1GbE (RJ45), Each 100GbE can be Split in 4x 25/10GbE Ports
	Timing Support on Ethernet	IEEE 1588 PTP v1 and v2 Support		
	USB	2x USB 3.1 Gen1 (Type A), 1x USB 3.1 Gen 2 (Type C), 2x USB 2.0		
	CAN	4x CAN-FD bus (ISO 11898-2) (DB9, CiA® 303-1) Galvanic Isolation up to 500V		
	Serial	1x RS-232 (DB9 Connector)		
	Video Out	1x VGA		
CYBERSECURITY (HARDWARE)	TPM	TPM 2.0 Support		
SYSTEM MANAGEMENT	BMC	Yes		
	BMC LAN	Yes		
EXPANSIONS	Internal Expansion	2x M.2 (x4 G4), 7x PCIe (x16 G4), 2x SlimSAS (x8 G4); Expansion Availability Depends on Product Configuration		
COOLING	Technology	Hybrid Liquid (CPU)		
	Accessories	External Radiator with Reservoir and Pump		
POWER	Input	Automotive Grade: 9 - 18VDC / 1000Watt; Factory Option: 110/230V AC; Screw Terminals for Ring Eyelets (DC)		
ENVIRONMENTAL	Operating Temp	-20 to +70°C		
	Storage Temp	-20 to +70°C		
	Humidity	10 to 90% Relative Humidity (Non-condensing) at +40°C		
CERTIFICATIONS	Regulatory	EU/UK: CE, UKCA; North America: Factory Option; Japan: Factory Option; Other Countries (Factory Option)		
	Safety	Low voltage safety (2014/35/EU); EN 62368, UL 60950 (§)		
	Road	CE (93/68/EWG); EMV (2014/30/EU)		
	Environment	RoHS3, REACH		
	Ingress	IP20		
MECHANICAL	Enclosure	Material: Metal; Color: Black		
	Dimensions	430 x 177 x 401 mm (W x H x D)	430 x 292 x 417 mm (W x H x D)	

§ UL, NRTL listing Factory Option.

SOFTWARE		
SOFTWARE	OS	Linux; Win 10/11/Server

Note: The information in this document may be subject to change without notice and should not be construed as a commitment by Eurotech.
While responsible precautions have been taken, Eurotech assumes no responsibility for any error that may appear in this document.
All trademarks or registered trademarks are property of their respective companies