

# TRX D8 1.0

Enabling hardware-in-the-loop (HIL) simulation for the development of autonomous vehicle algorithms requires access to real data generated in-vehicle.

Ethernet-connected video and lidar sensors produce high volumes of data but it's important to have access to traditional CAN interfaces to interleave throttle, V2X, and braking information.

With TRX D8 1.0, you can collect data from Ethernet and CAN and store up to 240 TB of encrypted data in a single, easy-to-remove storage cassette.



## Network Attached Storage With In-Built Compute

### KEY FEATURES

- Intel Xeon D 8-Core (D-1539)
  - 96 GB RAM
  - 500 GB CFX (VIK+) storage for KlasOS Keel
- Supports RAID levels 0, 1, 10, 5, 50, 6, 60
- Removable 8-drive cassette with SAS/SATA support, each with 12 Gbps or 6 Gbps respectively
- Support for 8 additional SSDs
- Supercap option for battery-backed cache
- Self-encrypting drive support
- Vehicle power adapter for 10-36 V operation



Trains



Autonomous



Fleet

# TRX D8 1.0

## Specifications



### Ordering Information

- Part No.: KLAS-TRX-D8-8C

### Physical Specifications

- 10.2" x 7.4" x 6.6" (259mm x 188mm x 168mm)
- 13.2 lb / 6 kg

### Electrical Specifications

- 10 – 36 VDC input
- 200 W power consumption
- Filter and surge protection to ISO 16750-2
- Connector type: Amphenol PT02E12-4AP

### Ports

- 2 x 10 Gb SFP  
(Optional retained transceiver for copper)
- 2 x 1 Gb RJ45 copper
- 4 CAN-FD interfaces
- 2 x USB 3.0
- 1 x VGA port
- 1 x RJ45 console
- 1 x VIK+ NVMe interface

### Temperature Range

- Operating: 0°C – 50°C (32°F to 122°F)
- Storage with supercap backup:  
0°C – 70°C (32°F to 158°F)
- Storage w/o supercap backup:  
–40°C – 85°C (–40°F to 185°F)
- Extended operating temperatures available

### CPU Options

- Intel® Xeon® Processor D-1539 8-Core with  
32 GB RAM (order time option of 96 GB RAM)
- Intel® Virtualization Technology (VT-x) &  
Intel® Virtualization Technology for  
Directed I/O (VT-d)
- 500 GB CFX storage for OS

### Storage

- RAID levels 0, 1, 10, 5, 50, 6, 60
- 8 x internal SAS/SATA connections each 12  
Gbps/6 Gbps respectively
- Additional 8 x SATA/SAS available
- Supercap option for battery-backed cache
- VIK+ NVMe 512 GB

### Construction

- Aluminum chassis

### Software Support

- KlasOS Keel KVM-based hypervisor
- Blackrock

### Compliance

Designed to:

- MIL-STD-810
- MIL-STD-461
- FCC Part 15 B
- CE
- RoHS, REACH

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