



PIONEERING  
NEW MOBILITY



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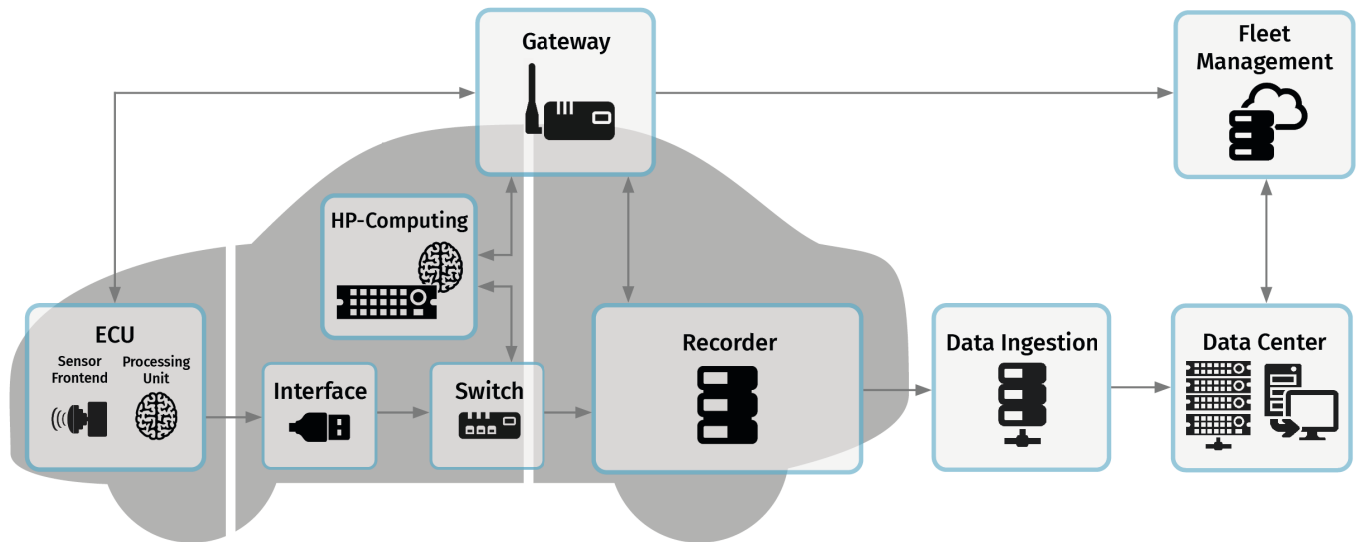


# Data Recording Tools

Efficient setup for your test carrier

# AVETO Toolbox

What is AVETO and how do each components work hand in hand?



For the development, test and validation of ECUs and vehicle systems for driver assistance (ADAS) and automated driving it is indispensable to harvest data and to realize real world test drives. Thanks to **expandable modularity**, the function blocks of our **AVETO Toolbox** deliver an **investment-safe solution** for vehicle data harvesting. It provides you with the **best data quality** through check sums and **synchronized time stamps** across the entire system, presenting **unique performance for the next generation of sensor technology**. We offer the complete portfolio with seamless integration - all from one source!

## MAX technology carrier

The maximum of next generation measurement technology

**MAX shows the next generation of AVETO measurement technology for camera, radar and lidar data in the vehicle.**

The extensive test setup including sensor technology is integrated into the technology carrier.

It demonstrates the latest technologies, hardware and software for the time- and cost-optimized development of driver assistance systems and autonomous driving.

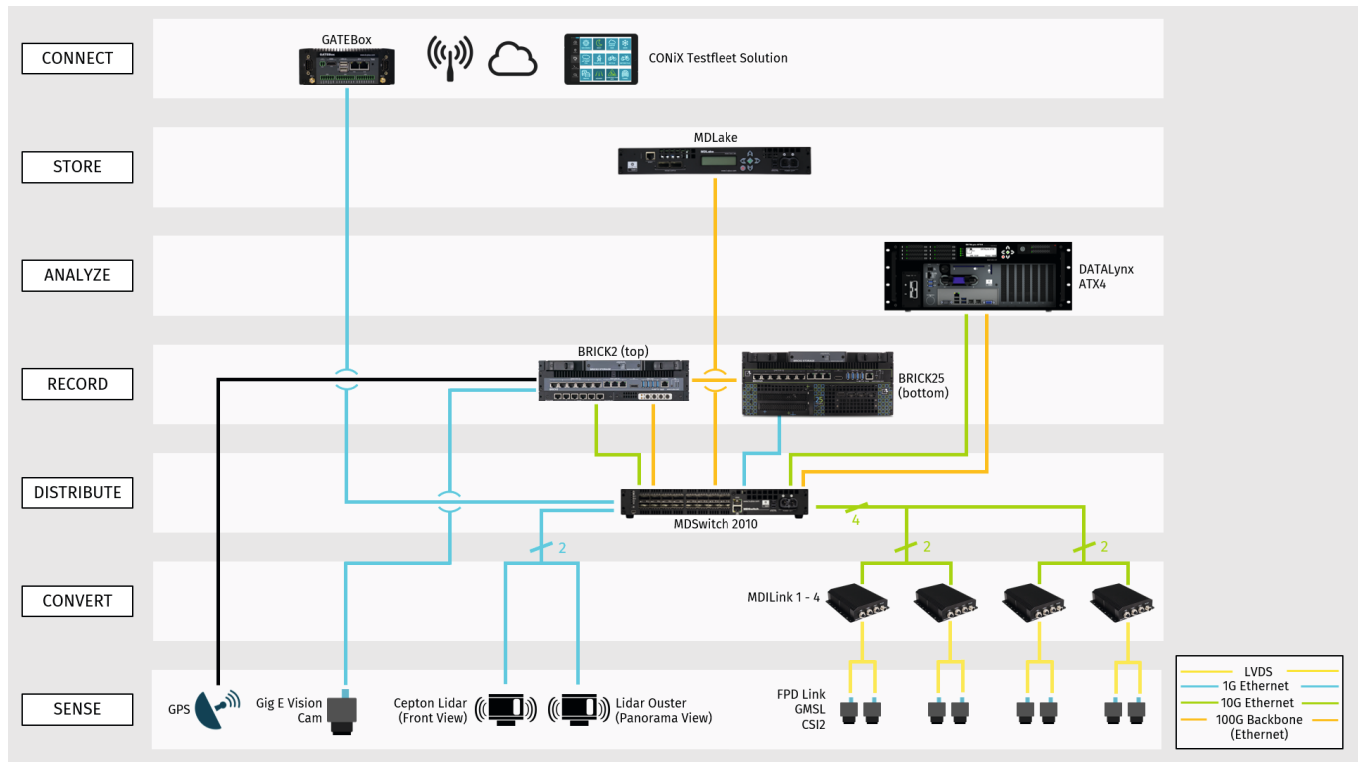
The modular design ensures a customized solution and further expandability. As a technology carrier, MAX shows what is feasible from today's state of the art and that of tomorrow.



**Experience the drive!**  
Scan for more information about  
technology carrier MAX

# Example for a complex recording setup

For ADAS and Autonomous Driving



## AVETO Starter Kit

The easy entry into the world of sensor validation



### KEY FEATURES

- modular and compact system
- data integrity
- visualization software
- XTSS time sync

The AVETO Starter Kit offers a complete system for recording, analysis and processing of many sensors, such as cameras, lidar or radars.

From the beginning with a small setup up to highly complex measurement setup, the modular system can be scaled according to requirements, thus offering a future-proof investment.

You receive a complete setup for validation of two camera systems. Of course, you can also expand this setup afterwards and adapt it to your needs.

Get started!  
with your own AVETO Starter Kit



# BRICK2

Measurement platform for driver assistance and autonomous driving



The BRICK2 measurement platform was specially developed for the acquisition of raw data from sensors or ECUs during test drives.

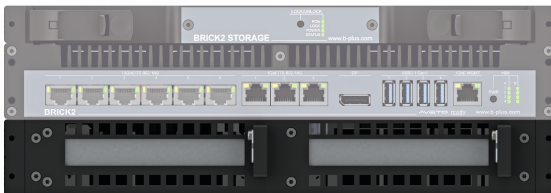
The system meets growing requirements with XTSS time-synchronized data recording, high performance computing and its flexible open platform architecture. In combination with the BRICK2 STORAGE NVMe Add-On, the BRICK2 achieves logging speeds of up to 32 Gbit/s and can store up to 60 TB.

The entire ADAS system solution can be installed in the vehicle without taking up any space or wiring thanks to the compact rack installation.



BRING HIGH-SPEED INTO YOUR SETUP.

## BRICK2 Add-ons



### Add-on SPC

- + Active cooled PCIe 3.0 Extension
- + Two PCIe x8 slots
- + 60W powered by BRICK2



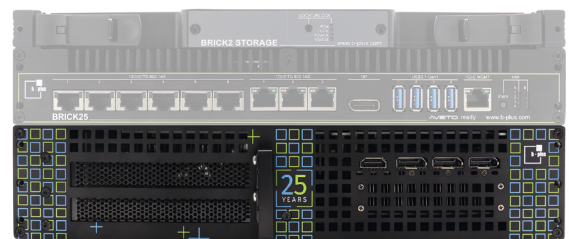
### Add-on BMC

- + Active cooled BMC extension
- + 22/44mm for 2/4 BMC slots
- + XTSS Hardware time sync

## BRICK2 + PCIe GPU = BRICK25

The compact and intelligent recorder is specifically designed to handle demanding AI-accelerated recordings and high-bandwidth data processing.

It now offers a massive performance with 3584 CUDA® cores and 3rd generation tensor units, delivering powerful AI computing power.



### Add-on PCIe GPU

- + GPU Add-On for AI and image processing
- + Integrated Industrial GeForce RTX3060
- + 2x PCIe x4 slots free, 30W each

# DATAlynx ATX4

High End Server Performance for in-vehicle computing



DATAlynx, the b-plus series for high performance computing solutions, achieves the next level for in-vehicle applications.

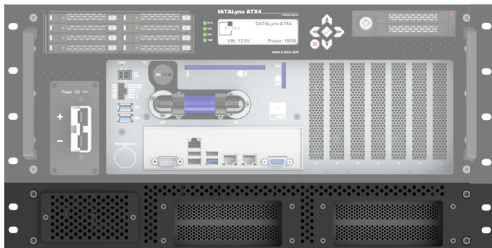
With a completely new designed b-plus 100A DC Power Supply and an extremely powerful liquid cooling setup it enables maximum CPU and GPU performance from -10°C to +60°C operating without throttling.

With several PCI express slots and 1.5U Add-ons the system can be configured as a multi-I/O recording setup or a deep learning and AI platform with 5 GPUs (e.g. NVIDIA®).

UNLEASH THE POWER ONTO THE ROAD.

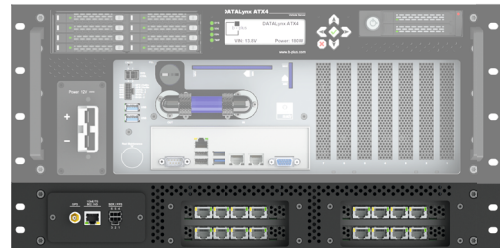


## DATAlynx ATX4 Add-ons



### Add-on PCIe

- + Active cooled PCIe 4.0 Add-on
- + 2x PCIe 4.0 x8 or 4x PCIe 4.0 x4



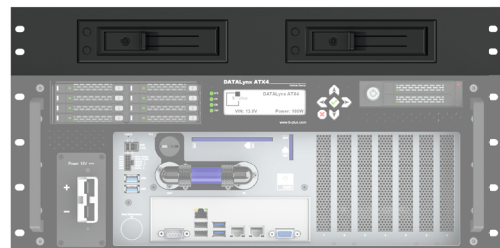
### Add-on XTSS

- + Active cooled Add-on with 4x PCIe 4.0
- + b-plus 802.1AS XTSS TSN Extension
- + up to 16x 10GbE XTSS Capture Ports



### Add-on B2S

- + Active cooled PCIe 3.0 Add-on with Switch
- + 2x BRICK2 STORAGE Slot (NVMe & SATA)
- + Compatible to BRICK STORAGEs with adapter



### Add-on 5.25"

- + Passive Add-on with 2x 5.25" bay
- + 2x swap bay for 3.5" HDD

## STORAGE SOLUTIONS

- **BRICK STORAGEplus**  
Removable storage unit with up to 32 TB capacity and 16 Gbit/s write performance



- **BRICK2 STORAGE**  
Removable storage unit with up to 32 TB capacity and 24 Gbit/s write performance



- **BRICK2 STORAGE NVMe**  
Removable storage unit with up to 60 TB capacity and 48 Gbit/s write performance



- **MDLake**  
Stand-alone storage unit of the data center class with up to 128 Gbit/s write performance



## DATA INGEST

- **BRICK Thunder Dock**  
Thunderbolt (TM) 3 Docking Station for BRICK STORAGE



- **COPYLynx**  
Automated Data Ingest Platform designed for BRICK STORAGE and BRICK2 STORAGE



## POWER MANAGEMENT

- **BRICK UPS**  
Uninterruptible power supply for vehicle systems



## DATA DISTRIBUTION

- **EDSwitch 10G**  
10G PoE switch for high performance data distribution with PTP time sync
- **MDSwitch**  
Vehicle-grade Ethernet switch with interfaces up to 100G and gPTP time sync
- **NETLion**  
Automotive Ethernet development tool for 100/1000BASE-T1 or 2.5G/5G/10GBASE-T1



## MEASUREMENT DATA INTERFACE

- **MDILink**  
measurement data interface when raw sensor data is decoupled



### MDILink



GMSL2 TAP



GMSL2 STP



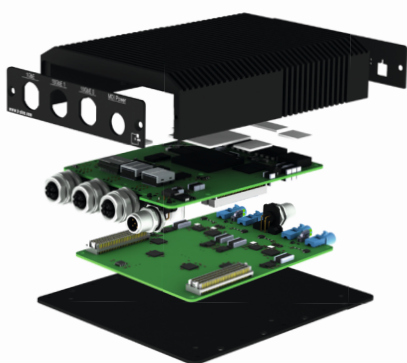
GMSL2 4EP



FPD-Link III



CSI-2

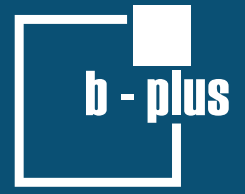


### CUSTOM MDILink

One of our core competences is the highly flexible Custom MDI technology, which offers you individual adaptation to your requirements.

It can be a connection to various interfaces as well as the input and output of different data formats.

Data compression, conversion and encryption can also be individually adjusted.



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# Contact us

## **b-plus Group**

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b-plus technologies GmbH  
Ulrichsberger Str. 17  
94469 Deggendorf, Germany

Phone +49 991 270302-0  
Fax +49 991 270302-99  
services@b-plus.com  
www.b-plus.com

