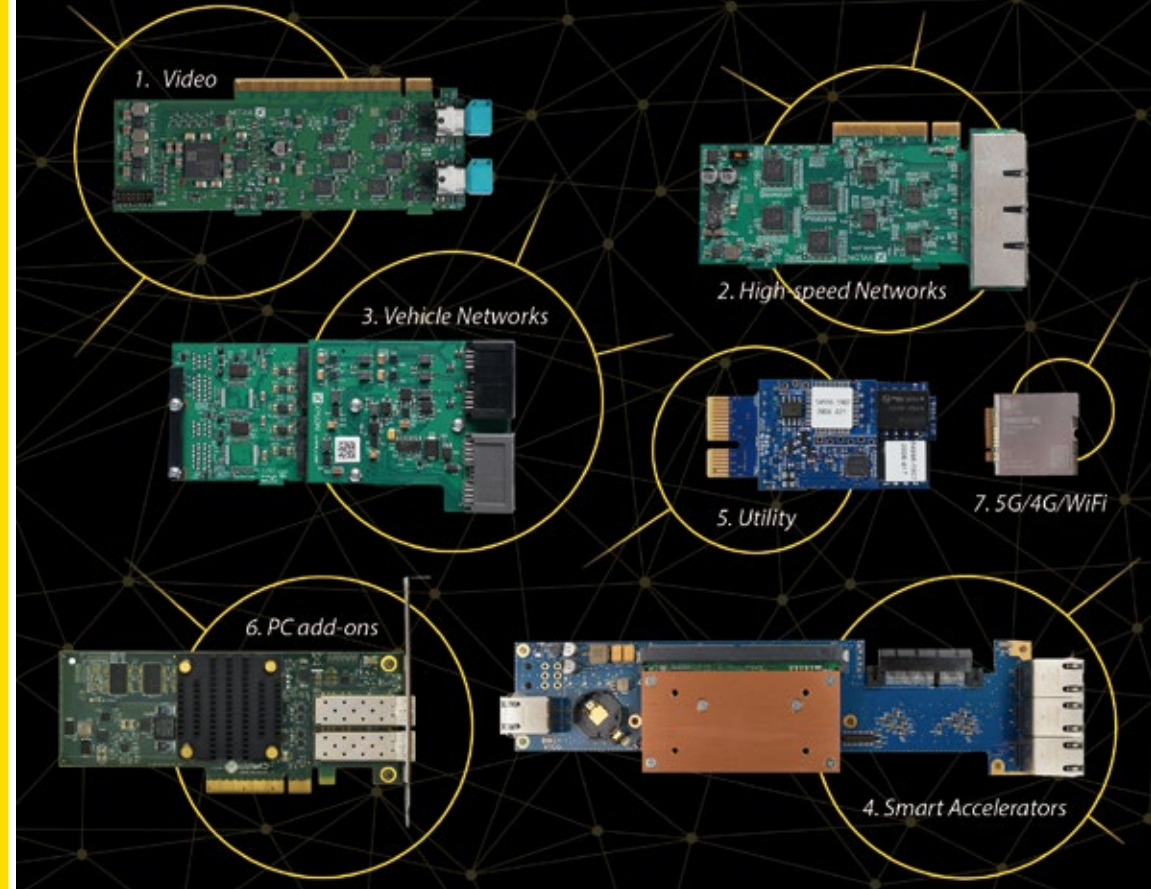


OVERTAKING THE FUTURE

XYLON I/O Modules For Data Logging and HIL Systems

RECORD + PLAYBACK + ANALYSIS

Easily connect all car sensors



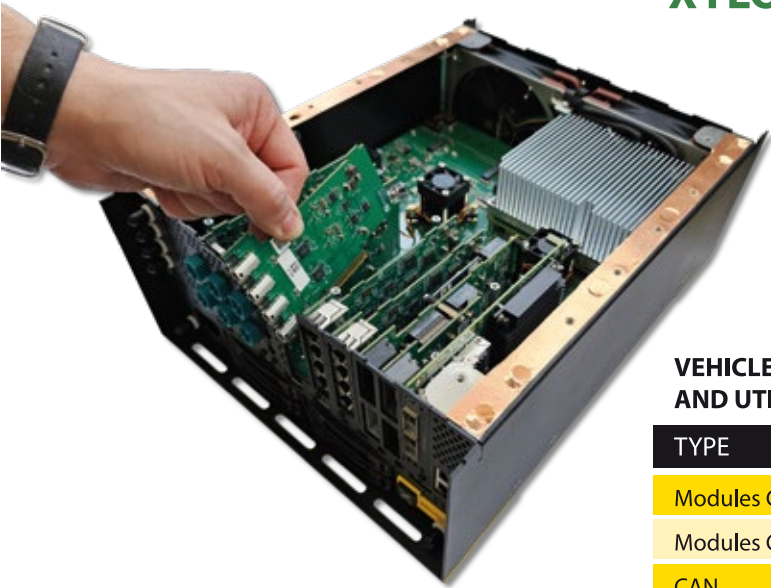
Xylon's modular data logging and HIL platforms support all types of sensors and communication interfaces in modern vehicles. Our in-house designed I/O modules integrate seamlessly with logiRECORDER and XYLON QUATTRO, ensuring advanced data acquisition, communication, and control. Our lineup includes modules for sensor interfaces, automotive networks, high-speed data acquisition, and real-time control, ensuring compatibility with a wide range of applications.

Designed and manufactured in-house, our I/O modules integrate flawlessly with logiRECORDER and XYLON QUATTRO. Unlike PC-based loggers, our high-performance embedded devices offer greater efficiency with lower power consumption. Strong industry partnerships and early access to technology keep Xylon at the forefront of innovation, delivering cutting-edge solutions for R&D, testing, and validation.

It enables us to offer customizations, and quickly design new I/O modules to tune the data logging and HIL equipment for your current and future projects.

**Xylon's I/O modules are designed to work exclusively with our devices and are not compatible with PC and third-party systems.*

XYLON QUATTRO



VIDEO I/O MODULES

TYPE	NAME
FPD Link-III	XQ-FPD3-4CH-953-954
FPD Link-IV	XQ-FPD4-4CH-971-9702
GMSL2	XQ-GMSL2-4CH-295A-296A-V2
GMSL2	XQ-GMSL2-4CH-717-716A-V2
GMSL3	XQ-GMSL3-4CH-793-792A

PCIe I/O MODULE

TYPE	NAME
100 GbE HIL	XQ-100G-2CH
5G Modem	Contact us
Wi-Fi Module	Contact us
Ext. PCIe Adapter	XQ-EXT-PCIE-ADAPTER

VEHICLE NETWORK AND UTILITY I/O MODULES

TYPE	NAME
Modules Carrier	XQ-IO-CARRIER
Modules Carrier-V2	XQ-IO-CARRIER2
CAN	logiR-CANFD
CAN	logiR-CANSW
CAN	logiR-CANLS
LIN	logiR-LIN
UART	logiR-UART

** I/O Module Carrier comes with integrated 8 CAN FD, 6 Digital I/O, 3 Analog I/O, PPS Sync I/O, Tacho In, and Power Out. It can also be expanded with additional modules*

HIGH-SPEED NETWORK I/O MODULES

TYPE	NAME
Ethernet	XQ-1000B-T-4CH
Automotiv Eth	XQ-1000B-T1-4CH
Ethernet 10 GbE	XQ-10G-SFP+-2CH
Ethernet	XQ-1000B-2.5GB-T-4CH

Xylon data loggers feature hardware-based Ethernet TAP (bridge support), enabling low-latency bypass and logging. This eliminates the need for costly external fast Ethernet switches!

logiRECORDER 3.5

VEHICLE NETWORK AND UTILITY I/O MODULES

TYPE	NAME
CAN	logiR-CANFD
CAN	logiR-CANSW
CAN	logiR-CANLS
LIN	logiR-LIN
UART	logiR-UART
FlexRay	logiR-FLEX2
FlexRay	logiR-FLEX4
Interconnection	logiR-CONN1
Interconnection	logiR-CONN2
Analog/Digital	logiR-ADIO
Time Sync	logiR-SYNC

HIGH-SPEED NETWORK I/O MODULES

TYPE	NAME
Ethernet	logiR-1GETH3
BroadR-Reach	logiR-OABR4
Ethernet	logiR-SMARTE-1000B-T
Ethernet	logiR-SMARTE-1000B-T1
Ethernet	Integrated 10 GbE

SMART ACCELERATOR I/O MODULE

TYPE	NAME
Ethernet TAPI	logiR-SMARTE-CPU
GigE Vision	
XCP	
LIDAR visualization	

Select the right I/O modules and modify the data logger to perfectly suit your project needs – no external adapter boxes required!

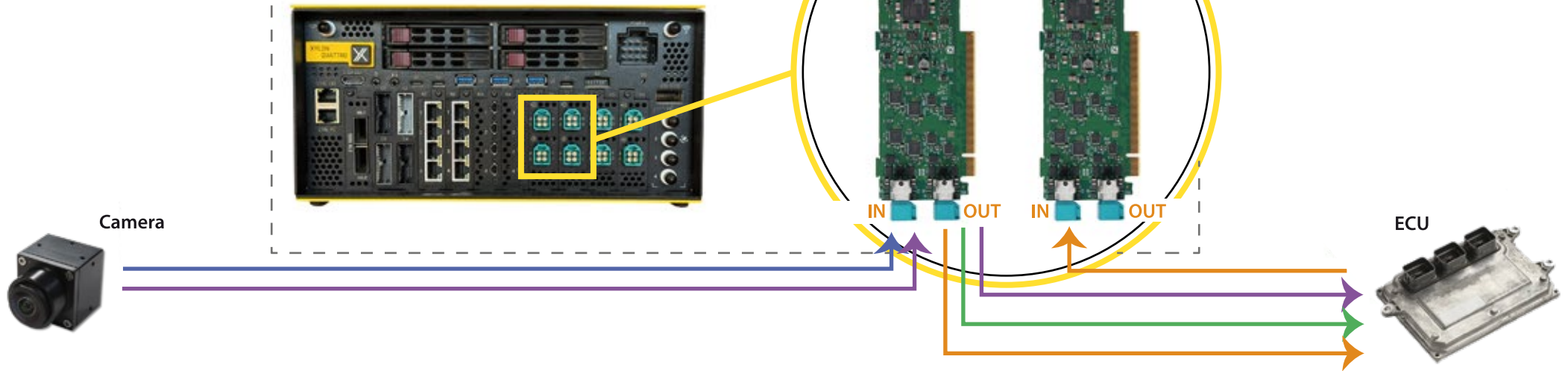
VIDEO I/O MODULES

TYPE	NAME
FPD Link-III	logiR-FPD3C-933-934
FPD Link-III	logiR-FPD3C-953-954-V2
FPD Link-IV	logiR-FPD4-971-9702
GMSL	logiR-GMSLC-705-706
GMSL2	logiR-GMSL2C-295A-296A-V2
GMSL2	logiR-GMSL2C-295A-296A-V3
GMSL2	logiR-GMSL2C-717-716A
GMSL2	logiR-GMSL2C-717F-716F
GMSL3	Available in 3Q2025
HDMI	logiR-HDMI-511-613
Aurora	logiR-AURORA- DS25BR110
Aurora	logiR-AURORA- DS25BR110-V2
GVIF2	logiR-GVIF2-4960-4963

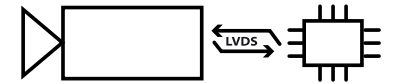
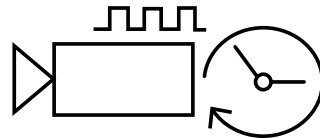
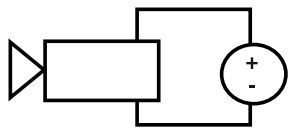


Operation Modes

- 1 DATA LOGGING (CAPTURE)
- 2 PASS-THROUGH DATA LOGGING
- 3 DATA REPLAY (INJECTION)
- 4 SIMULTANEOUS REPLAY & LOGGING



Main Video Logging Challenges



Power Video Cameras	Sync Video Cameras	Timestamp Data	Initialize Video Cameras
✓ Cameras can be powered by the adjustable power regulator integrated in the Xylon data logger ✓ Each video card can be powered at the different voltage level; for example, a 4-channel card powers four video cameras at the same voltage level ✓ Cameras can be also powered by the ECU in Power-over-Coax (PoC) bypass mode	✓ The ECU video sync signal can bypass the Xylon data logger individually to any connected video camera ✓ The Xylon data logger can generate a sync signal for each video channel, with the Dashboard application used to configure its period, pulse width and polarity ✓ All sync signals starts at a same and predefined time ✓ Internally generated sync signals are transferd as GPIO via the back-channel of the video serial link	✓ Xylon data loggers centrally timestamp all connected sensory channels, including video, Ethernet, CAN, LIN and others ✓ Each MIPI video data packet is timestamped ✓ Hardware-based timestamping is ensured by a 64-bit counter, with 32 bits counting seconds and 32 bits counting nanoseconds ✓ The hardware timestamping source can be re-synchronized using GPS PPS and PTP/gPTP ✓ Re-synchronization enables fully synchronous timestamping accross complete remote test fleets	✓ Xylon data loggers can independently initialize automotive serial links (SerDes) and video sensors for each video channel ✓ Initialization scripts can be stored, viewed, and edited using the Dashboard application ✓ The ECU can initialize all video channels in bypass (TAP) data logging and HIL modes ✓ Xylon provides skilled technical support with extensive experience in configuring various SerDes links and video sensor setups

XYLON Dashboard

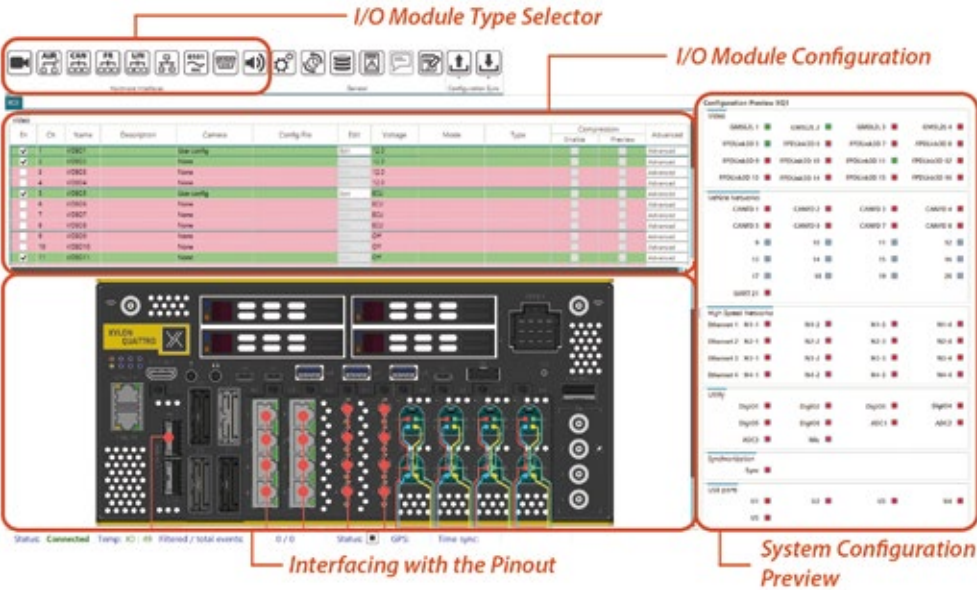
Managing Xylon's I/O modules is effortless with the Dashboard application, included with every device at no extra cost. This intuitive interface provides a comprehensive overview of the configured data logging and HIL system, enabling seamless control and initialization of each I/O module, video channel, and communication channel.

With Xylon's integrated system, all measurement channels operate smoothly—eliminating the hassle of third-party drivers, complex OS integrations, and low-level software modifications whenever a device configuration changes. The Dashboard simplifies system management, allowing users to adjust camera settings, power control, sensor synchronization, network speeds, and more with just a few clicks.

Additionally, the system automatically generates a graphical pinout view of all active interfaces based on the current device configuration. This feature significantly streamlines wire harness design and debugging for both measurement and simulation setups, ensuring a more efficient workflow.

Beyond system management, the Xylon Dashboard application enhances smart data logging with advanced triggering and filtering options, real-time video and network previews, and storage media management, optimizing performance and usability.

Multi-OS Support: Windows & Linux



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www.xylon-lab.com

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