

PM-350

Automotive Data Logger for SDV Testing

The PM-350 is a new addition to the Automotive Data Logger family for Software-Defined Vehicle (SDV) verification and validation, and the latest evolution of our PM-200.

This automotive data logger represents the latest advancement in capturing high-speed automotive Ethernet, ensuring vehicle safety by freedom from interference on the communication level. In addition, it supports the logging of traditional interfaces, including CAN FD, LIN, and FlexRay.

The PM-350 data logger can be equipped with two NVMe M.2 SSDs, each offering up to 4TB of industrial grade storage. The hot swap feature allows users to easily remove the SSD during active logging without any disruption or data loss. Additionally, the M.2 storage technology ensures high recording rates while minimizing power consumption.

Fully programmable with an open API and diagnostic protocol support, the PM-350 excels in SDV functional testing, fleet management, and test drives, offering customizable integration and control. Its software-defined device configuration enables remote data analysis and distribution, enhancing agility and reducing testing costs.

KEY BENEFITS

- High-speed data logging via Automotive Ethernet 100/1000Base-T1
- Capturing data via Ethernet up to 10GBase-T
- Ensures precise, synchronized data capture with centralized timestamp resolution below 100 ns
- Provides uninterrupted flexibility with hot-swappable removable storage
- Enables robust diagnostics with standard protocols like DLT over IPv4 and IPv6
- Facilitates fast data analysis and sharing through Remote Data Logger & Fleet Management
- Cascading multiple devices with unique timestamps

PROCESSING AND HANDLING DATA

- Recording speed of up to 12Gb/s (preliminary)
- Two slots for M.2 SSDs up to 4TB of industrial grade
- Hot sSwap during active logging without any disruption or data loss
- Data logging via 10GBase-T interface

DIAGNOSTIC PROTOCOLS

- Support of XCP over Ethernet / CAN / CAN FD / FlexRay
- ESO-Tracing, GN log
- Diagnostic Log and Trace (DLT) via IPv4 and IPv6



FILTER, TRIGGER, CLASSIFICATION FUNCTIONS

- Parallel to optional “get-it-all” logging, based on signal or bus
- Logging and analysis for all interfaces
- Trip recorder functions for periodic and results- based data logging
- Automatic and conditional data logging via defined trigger conditions
- Statistical data analysis with global (persistent) and measurement-related data in 3 dimensions

CONTROL AND DATA VISUALIZATION VIA WLAN

- Mobile application for control and configuration (virtual remote control)
- Freely configurable, real-time presentation of signals while logging
- Support for Windows & Android devices

GPS DATA

- Flexible selection of GPS devices (connect via USB)
- Logging of GPS data (position, time and speed) with a configurable update rate
- Synchronization system time for precise timestamping

REMOTE AND FLEET MANAGEMENT

- Download, update and activate data logger configuration
- Data logger monitoring and health check
- Remote access to filtered data during test drives

DEVICE SPECIFICATIONS

PC INTERFACES	4 x USB 3.0 (as Logging Medium) 2 x Ethernet 100/1000 Base-T
VEHICLE INTERFACES	14 x CAN FD 10 x LIN 1 x FlexRay (channels A/B) 4 x analog inputs (12 Bit) 2 x analog outputs 10 x RS232 1x Ethernet 10GBase-T
AUTOMOTIVE ETHERNET	4 Ports switchable 100BASE-T1 or 1000BASE-T1
OPERATING TEMPERATURE	-40°C to +70°C
POWER CONSUMPTION	Operating mode max 4.5A@12V (preliminary) Sleep mode (passiv) max. 29mA@12V (preliminary)
OPERATING VOLTAGE RANGE	6V to 32V (preliminary)
DIMENSIONS	200 x 280 x 80 mm (L x W x H)



ORDERING INSTRUCTIONS

HARDWARE

- 15162 PM-350 Automotive Data Logger
- 15066 PM-350 PS-0S (Empty cartridge for SSD)
- 15312 Option - 1 TB SSD Industrial Grade
- 15315 Option - 4 TB SSD Industrial Grade
- 15308 Option - Cable Harness Connector A
- 15309 Option - Cable Harness Connector B
- 15310 Option - Cable Harness CAN
- 15311 Option - Automotive Ethernet Cable Harness
- 13292 Quick Mounting Kit

SOFTWARE

- 15277 Option - Visualization
- 15278 Option - Extended protocols (XCP, GNLog)
- 15279 Option - FTC
- 15280 Option - DLT
- 15281 Option - Audio data logging
- 15282 Option - Video data logging
- 15283 Option - GPS data logging