

Document Information			
<b>Model</b>	V317	<b>Release Date</b>	2021-09-17
<b>Document Version</b>	Rev 1.0	<b>Last Updated</b>	2026-02-06
<b>Hardware Version</b>	V1.1	<b>Main MCU</b>	MM32L073PF

**Overview**

This document provides technical specifications and reference information for the V317 handheld OBD2 diagnostic instrument. It is intended for B2B wholesale, OEM/ODM customers for product evaluation and integration planning.

**Purpose of Document**

This document defines key functions, supported standards, electrical/mechanical specifications, packaging information, and storage/transportation requirements for V317.



**Key Features**

- 9 standard OBD-II/EOBD protocols
- Read/clear DTCs & turn off MIL
- Live data & Real-Time Curve
- Freeze frame information
- Data storage & playback
- I/M readiness inspection status
- Vehicle info reading
- O2 sensor & EVAP test (Mode 8)
- DTC Library (DTC Lib) lookup
- Multi-language UI (8 languages)

**Physical Specifications**

- Size: 168×90×24mm
- Weight: 204g
- Display: 2.8" TFT
- MCU: MM32L073

**LED Indicators**

- Red:** Power
- Yellow:** Fault code
- Green:** Link/compatible (off may indicate incompatibility)

- Supported OBD Functions**
- Read DTC
  - Clear DTC (turn off MIL)
  - Freeze Frame
  - EVAP Test (Mode 8)
  - Vehicle Information
  - Live Data / Real-Time Curve
  - O2 Sensor Test
  - Voltage Test
  - DTC Lookup (DTC Lib)
  - I/M Readiness

Technical Specifications			
<b>Main MCU</b>	MM32L073PF	<b>Display</b>	2.8-inch TFT color, 240×320
<b>Power Supply</b>	Vehicle DLC (12V nominal)	<b>Working Voltage</b>	DC 9-16 V (manual)
<b>Design Reference</b>	DC 9-16 V (with )	<b>Operating Current</b>	51 mA (typ.) / 50 mA (standby)
<b>Operating Temp.</b>	-20°C to 65°C (manual)	<b>Operating Temp. (spec)</b>	-30°C to 70°C
<b>Storage Temp. (spec)</b>	-30°C to 70°C	<b>Storage Temp. (manual)</b>	-30°C to 80°C
<b>Dimensions (spec)</b>	168 × 89.7 × 24 mm	<b>Dimensions (manual)</b>	168 × 89 × 25 mm
<b>Weight</b>	204 g (incl. cable)	<b>OBD Connector</b>	16-pin OBD-II / EOBD DLC
<b>Languages</b>	English, German, Italian, Dutch, French, Spanish, Chinese, Russian		

- Supported Protocols (9 Standard OBD-II/EOBD Protocols)**
- SAE J1850 PWM (41.6 Kbaud)
  - SAE J1850 VPW (10.4 Kbaud)
  - ISO 9141-2 (5 baud init, 10.4 Kbaud)
  - ISO 14230-4 KWP (5 baud init, 10.4 Kbaud)
  - ISO 14230-4 KWP (fast init, 10.4 Kbaud)
  - ISO 15765-4 CAN (11-bit ID, 500 Kbaud)
  - ISO 15765-4 CAN (29-bit ID, 500 Kbaud)
  - ISO 15765-4 CAN (11-bit ID, 250 Kbaud)
  - ISO 15765-4 CAN (29-bit ID, 250 Kbaud)
  - Automatic protocol detection

## Supported Data Items (Examples)

- Read Diagnostic Trouble Codes (DTCs)
- Intake air temperature
- Long-term fuel trim
- Intake manifold pressure
- Ignition timing advance
- Fuel pressure
- Engine RPM
- Clear DTCs (turn off MIL)
- Air flow rate
- Throttle absolute position
- Oxygen sensor voltage
- Fuel consumption monitoring
- Short-term fuel trim
- Calculated load value
- Engine coolant temperature
- Fuel system status
- Vehicle speed

## OBD-II 16-Pin Interface Definition

Pin	Description	Pin	Description
1	Reserved	9	Reserved
2	J1850+	10	J1850-
3	Reserved	11	Reserved
4	Chassis Ground	12	Reserved
5	Signal Ground	13	Reserved
6	CAN High (CANH)	14	CAN Low (CANL)
7	K-Line	15	L-Line
8	Reserved	16	Battery Power

## Package Contents

- ✓ V317 main unit (with OBD cable) × 1
- ✓ User manual × 1

## Packaging

Packaging details (box size, carton size, quantity per carton) may vary by program. Please confirm with your supplier/distributor.

## Transportation

- ✓ Avoid strong vibration, impact, extrusion
- ✓ Keep away from rain and direct sunlight

## Storage

- ✓ Store in clean, ventilated, cool and dry place
- ✓ Protect from moisture

## Safety Information

- Perform vehicle testing in safe environment. Apply parking brake and keep vehicle stationary
- Keep hands, hair and clothing away from moving or hot engine parts
- Operate in well-ventilated area. Exhaust gases are poisonous
- Do not connect or disconnect device while ignition is ON or engine is running
- Do not use device while driving

## Disclaimer

- Supports OBD-II / EOBD compliant vehicles with standard 16-pin diagnostic connector
- Not compatible with new energy vehicles, hybrid vehicles, and models that do not comply with OBD2 protocol (per user manual)
- OBD-II functions mainly cover engine/emissions. Coverage of other systems (ABS/SRS/Transmission) is not guaranteed
- Available data items and test functions depend on vehicle ECU and model year
- Language precedence: In case of discrepancies, the English version shall prevail