

Document Information

Model	M601D	Release Date	2024-12-02
Document Version	Rev 1.0	Last Updated	2026-02-05
Hardware Version	V2.1	Software Version	V1.0

Scope

This specification applies to the M601D handheld OBD-II scanner. It is intended for B2B wholesale, OEM/ODM customers for product evaluation and quality verification.

Purpose of Document

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



Reset All Modules' Fault Lights

Diagnose and reset fault lights for major vehicle systems, including Engine, ABS, SRS, and Transmission etc.



40,000+ DTC Library

Built-in diagnostic trouble code lookup and definitions



9 OBD-II + 5 Proprietary

OBDII/EOBD standard protocol support for most vehicles



One-Touch Access

I/M Readiness and DTC shortcut keys for quick access



Service Functions

EPB/ maintenance light reset, Playback function



Cloud Print

Share diagnostic reports instantly via cloud



Battery Test

Monitor vehicle battery health and performance



Comprehensive Tests

Mode 6, Mode 8, O2 sensor testing, Freeze Frame, I/M Readiness

Physical Specifications

195 × 106 × 35 mm
Weight: 375.8 g (net) 576 g (gross)
2.8-inch Color Display

Supported Diagnostic Functions (Complete List)

- Read Diagnostic Trouble Codes (DTC)
- Erase/Clear DTCs and turn off MIL
- Freeze Frame Data
- I/M Readiness Check
- Vehicle Information (VIN/CID/CVN where supported)
- Live Data Stream (Real-time PID monitoring)
- O2 Sensor Test
- On-Board Monitor Test
- Component Test (Mode 8)
- Mode 6 Test (Test results from vehicle ECU)
- DTC Lookup (Built-in library with 40,000+ definitions)
- Software Update via USB
- Cloud Print (Diagnostic report sharing/printing)
- One-touch Shortcut Keys (I/M and DTC)
- Service Function: Oil/Maintenance Light Reset

Standard OBD-II Protocols (9 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)

Proprietary / Supplier-Specific Protocols

- CAN_500K** – High-speed CAN at 500 Kbaud
- CAN_50K** – Low-speed CAN at 50 Kbaud
- CAN_125K** – Medium-speed CAN at 125 Kbaud
- TP20** – Transport Protocol 2.0 (VAG group)
- KWP** – Keyword Protocol (various manufacturers)

* Proprietary protocol support enables extended diagnostics beyond standard OBD-II for specific vehicle manufacturers

Technical Specifications (Detailed)	
GENERAL	
Model	M601D
Product Type	Handheld OBD-II Diagnostic Scanner
Target Application	Automotive workshops, vehicle diagnostics
HARDWARE	
Main Control Chip	CY100 (LQFP100 package)
Display	2.8-inch TFT color display, high contrast for workshop visibility
User Interface	Navigation buttons, one-touch shortcut keys (I/M, DTC)
ELECTRICAL	
Operating Voltage	DC 9V to 16V (powered from vehicle OBD-II port)
Operating Current	40 mA to 60 mA (typical during operation)
Standby Current	45 mA (typical)
COMMUNICATION	
Vehicle Communication	Wired communication via OBD-II connector (16-pin)
Update Interface	USB (software update, program-dependent authorization may be required)
ENVIRONMENTAL	
Operating Temperature	-20°C to +60°C (-4°F to +140°F)
Storage Temperature	-20°C to +60°C (-4°F to +140°F)
PHYSICAL	
Dimensions (L × W × H)	195 mm × 106 mm × 35 mm (7.68 in × 4.17 in × 1.38 in)
NET Weight	375.8 g (13.26 oz)
Gross Weight	576 g (20.32 oz)

OBD-II Connector Pinout (16-pin SAE J1962)			
Pin	Signal Description	Pin	Signal Description
1	Single Wire CAN (optional)	9	Reserved
2	J1850+ Bus Positive	10	J1850- Bus Negative
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 (ISO 9141-2 / ISO 14230-4)	15	L-Line (ISO 9141-2 / ISO 14230-4)
8	Reserved	16	Battery Power (+12V)

Packaging Information

Package Size: 201 × 269 × 43 mm

Carton Size: 55.2 × 28.5 × 42.6 cm

Qty per Carton: 24 pcs

Net Weight: 375.8 g

Gross Packaged: 576 g

Storage & Transportation

Storage: Store in a clean, ventilated, cool and dry environment. Moisture protection is required.

Handling: Handle with care during loading and unloading. Avoid strong vibration, impact, compression, contamination, or packaging damage.

Transport: Protect from rain and direct sunlight. Suitable for road, railway, sea, or air transport.

Supported Languages (11)

- English
- Français
- Italiano
- Korean
- Japanese
- Polish
- Deutsch
- Español
- Russian
- Chinese
- Portuguese

Warnings & Precautions

- ▶ Do not clean the product with abrasive or corrosive detergents
- ▶ Do not expose the product to direct sunlight for extended periods
- ▶ Do not use the product in rain or under excessive moisture conditions
- ▶ Do not expose the product to heat sources or open flames
- ▶ Do not attempt to disassemble, modify, or repair the product
- ▶ Store in dry environment away from extreme temperatures and dust when not in use

 There are no user-serviceable parts inside. For technical support, contact authorized service centers only.