

Document Information

Model	V015	Release Date	2020-04-24
Document Version	Rev 1.0	Firmware	V1.5

Scope

This specification applies to the V015 Bluetooth 4.0 OBD-II adapter. It is intended for OEM/ODM and wholesale customers for product evaluation, integration planning, and quality verification.

Purpose of Document

This document defines key hardware and interface characteristics, typical OBD-II functions, packaging information, and storage/transportation requirements for design review and quality verification.



Bluetooth 4.0 (BLE)

Wireless connectivity for iOS & Android devices with low power consumption



9 OBD-II Protocols

Universal support for all standard vehicle protocols and manufacturers



Real-Time Data Stream

Live vehicle parameters and diagnostic streaming via standard PIDs



DTC Management

Read and clear diagnostic trouble codes where permitted by vehicle



Wide Temperature Range

-20°C to +60°C operating range for harsh environments



Vehicle Powered

9-16V DC direct power from vehicle OBD-II port

Physical Specifications

57 × 46.2 × 24.2 mm
Weight: 38 g
OBD-II 16-pin Male Connector



App Compatible

Works with third-party OBD-II apps or custom software



Compact Design

Only 38g, fits discreetly in vehicle OBD-II port

OBD-II Diagnostic Features & Capabilities

- Read & Clear DTCs:** Reads and clears engine/emissions Diagnostic Trouble Codes (subject to vehicle conditions and regulations)
- OBD-II Standard Modes:** Access to live data, freeze frame, I/M readiness, O2 sensor test, Mode 6, and vehicle information (VIN/CID where supported)
- Real-Time Data Stream:** Supports standard PIDs including engine RPM, vehicle speed, coolant temperature, fuel trim, throttle position, and more (PID availability depends on vehicle)
- App Compatibility:** Works with compatible third-party OBD-II apps or customer-developed applications (app not included)

Note: Advanced diagnostics (ABS/SRS/TPMS/body modules, etc.) require vehicle- and app-specific support and are not part of the OBD-II standard.

Supported OBD-II Protocols (Vehicle Side)

- 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)

Supported Vehicle Data (Typical Standard PIDs)

- Diagnostic Trouble Codes (DTC)
- Clear DTCs / Turn off MIL
- Engine Speed (RPM)
- Vehicle Speed
- Coolant Temperature
- Calculated Load Value
- Fuel System Status
- Short-Term Fuel Trim
- Long-Term Fuel Trim
- Intake Manifold Pressure
- Ignition Timing Advance
- Intake Air Temperature
- Mass Air Flow Rate
- Throttle Position (Absolute)
- Oxygen Sensor Voltage/Trim
- Fuel Pressure (where supported)

* PID availability varies by vehicle make, model, year, and ECU implementation. Not all vehicles support all PIDs.

Technical Specifications (Detailed)

GENERAL

Product Model	V015
Product Type	Bluetooth 4.0 (BLE) OBD-II Diagnostic Adapter
Target Application	Vehicle diagnostics, real-time monitoring, OEM/ODM integration

COMMUNICATION

Wireless Technology	Bluetooth Low Energy (BLE) / Bluetooth 4.0+
Supported Devices	iOS (iPhone, iPad) and Android smartphones/tablets with BLE support
Vehicle Connection	OBD-II 16-pin male connector (SAE J1962 standard)
Wireless Range	Up to 10 meters (33 feet) typical, varies by environment

ELECTRICAL

Operating Voltage	DC 9V to 16V (powered from vehicle OBD-II port, Pin 16)
Operating Current	32 mA

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)
Humidity	5% to 95% RH (non-condensing)

PHYSICAL

Dimensions (L x W x H)	57 x 46.2 x 24.2 mm (2.24 x 1.82 x 0.95 in)
Weight (Device Only)	28 g (0.99 oz)
Weight (with Packaging)	38 g (1.34 oz)
Housing Material	ABS plastic, automotive-grade

SOFTWARE & COMPATIBILITY

Supported Systems	iOS, Android, Windows (depends on app)
Compatible Apps	Third-party OBD-II apps or customer-developed applications (app not included with device)
Supported Languages	English, German, French, Spanish, Italian, Russian, Chinese, Japanese, Portuguese, Korean (app-dependent)

CERTIFICATIONS & COMPLIANCE

Standards Compliance	CE, FCC, RoHS compliant
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OBD-II Interface Definition (16-pin SAE J1962)

Pin	Signal Description	Pin	Signal Description
1	Reserved	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

Contents: Adapter ×1, Manual ×1, Box ×1

Package Size: 100*63*25.5mm

Carton Size: 42x27x34cm

Qty per Carton: 200 pcs

Net Weight: 28 g

Gross Weight: 38 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 (10)

- English
- German
- French
- Chinese
- Japanese
- Spanish
- Italian
- Russian
- Portuguese
- Korean

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.