

PCAN-miniDiag FD (IPEH-003070) – Det



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Data Sheet

Product Description

The PCAN-miniDiag FD is a compact, low-cost handheld device designed for basic diagnosis and testing of CAN and CAN FD buses. Service technicians and developers can easily access vehicle, machine, or industrial networks even if their configuration is unknown. The device measures the nominal bit rate for CAN and the data bit rate for CAN FD using precise bit timing analysis. Additional functions include measurements of termination resistance, bus load, and voltage levels at the CAN connector. It features a robust membrane keypad and IP42-rated plastic casing for increased protection, powered by three replaceable AAA batteries.

Technical Specifications

Feature	Specification
CAN Connection	High-speed CAN (ISO 11898-2), compliant with CAN 2.0 A/B and CAN FD
CAN FD Support	ISO and Non-ISO standards, 64-byte data field
CAN FD Bit Rates	66.6 kbit/s to 10 Mbit/s
Classic CAN Bit Rates	10 kbit/s to 1 Mbit/s
CAN Transceiver	Microchip MCP2558FD
Connector	D-Sub 9-pin (CiA® 106 compliant)

Listen-Only Mode	Permanent, no influence on the CAN bus
Display	OLED, 128 × 128 pixels
Power Supply	3 × Micro AAA batteries (1.2 V or 1.5 V)
Operation	Membrane keypad with four keys
Casing	Plastic casing, ingress protection IP42
Dimensions	122 × 69 × 44 mm
Operating Temperature	-10 to +50 °C (14 to 122 °F)

Device and Measuring Functions

- System Info: Displays firmware version, hardware version, serial number, and battery voltage.
- D-Sub Voltages: Voltage measurement at pins 6 and 9 (-40 to +43 V).
- CAN Min/Max: Measures min/max voltage for CAN-High and CAN-Low (-5 to +8 V).
- CAN Voltages: Measures dominant and recessive levels for CAN-High and CAN-Low (-5 to +8 V).
- CAN Voltages 2: Measures minimum, mean, and maximum values of dominant and recessive levels.
- Termination: Measures termination resistance on the CAN bus.
- Bit Rate: Automatically detects bit rates via bit timing or allows manual configuration.
- Bus Load: Measures and displays CAN bus load as a diagram.
- Statistics: Counts CAN, CAN FD, and error frames.

Scope of Supply

- PCAN-miniDiag FD device in plastic casing
- 4 × 1.5 V Micro AAA batteries
- PDF manual
- Printed quick start guide

Ordering Information

- PCAN-miniDiag FD – Part No.: IPEH-003070