

DACAN - ISO

CAN & ISO9141 Vehicle Interface Network Communications Adaptor



OVERVIEW

The DACAN-ISO is a low-cost CAN & ISO9141 vehicle interface communications adaptor that will allow the user to communicate concurrently on three CAN channels (a dual CAN physical interface, plus a Fault Tolerant CAN physical interface), and the ISO9141 serial interface.

The adaptor is compliant (with exceptions) to the current SAE J2534 standards allowing 'pass-thru' communications support for all J2534 related applications communicating over a CAN and ISO9141 physical interface.

Connection to the adaptor is straightforward, with only two physical connections required, one to the vehicle via a J1962 'diagnostic' connector and the other to a PC or mobile device, via a standard USB (A/B) cable.

The adaptor comes with a J2534 compliant development API to allow rapid and generic production of diagnostic services to support your vehicle development programmes.

FEATURES

An on-board Freescale X-Gate processor takes care of all local processing on the adaptor rather than leave it for the host machine to deal with, freeing up the connection between host and client to maximise data acquisition.

The adaptor has an SD (Secure Digital) card slot to allow SD cards to be inserted to allow data to be written to or from the card during firmware execution.

Features at a Glance

- **Dual CAN physical vehicle interface**
- **Fault Tolerant CAN physical vehicle interface**
- **ISO9141 physical vehicle interface**
- **8MB on-board memory**
- **PC connection via USB**
- **SD Card Interface**
- **Industry standard API (J2534)**
- **Rugged compact enclosure**
- **All cables supplied**

8MB of on-board serial flash memory allows buffering of data for transmission or reception, and to allow data to be stored locally on the device (i.e. flight recording or software download into ECU's).

The adaptor has a 'client' self powered USB 2.0 compatible connection allowing connection to a 'host' controlling device such as a desktop, laptop or PDA, using the relevant operating system drivers and cables.

All adaptor firmware upgrades can be undertaken via the host PC USB connection. Firmware upgrades are published and available on the Diagnostic Associates firmware update website. A Windows based PC application is provided to facilitate the firmware update process.

The adaptor is equipped with various visual LED aids to indicate device status, vehicle power, SD card status and USB PC power.

The adaptor has a wide input voltage range allowing usage on 12V and 24V voltage systems (car & commercial vehicle).

TYPICAL APPLICATION USAGE

- EU5 (Euro5) hardware support
- In-shop vehicle programming
- Flight recorder
- Network monitoring
- Custom diagnostic applications
- End-of-line testing
- ECU diagnostic compliance testing
- ECU programming (car park re-flashing)

SOFTWARE PLATFORM SUPPORT

- Windows XP / Vista
- Windows CE / CE.Net
- Windows Mobile / Pocket PC
- Linux (on request)

THE DELIVERED PACKAGE

When you purchase a DACAN-ISO you will receive the following:

- DACAN-ISO communications adaptor
- USB A/B cable
- Fully populated J1962 cable
- Software containing the J2534 API installation and Firmware updaters PC application
- Access to the firmware upgrade website
- 12 months technical support

ADDITIONAL ACCESSORIES / SERVICES

- Ruggedised plastic carry-case
- 2GB SD Card
- Advanced network monitor software
- Proprietary low level communications API
- Development of diagnostic communication services
- Development of diagnostic and configuration application software

PRODUCT RANGE REFERENCE

The table shows how these device features compare with features in the other Diagnostic Associates communication device product lines.

PRODUCT / FEATURE	500K CAN	250K CAN	FT CAN	ISO 9141	SCP PWM/VPW	Mux	FEPS Voltage Control	1A Gnd Control	SD Card Socket	Serial Flash Memory	USB Client	USB Host	WiFi/Ethernet	Digital I/O	LEDs	J1962 Connection
DACAN-ISO	Yes	Yes	Yes	Yes	No	No	No	No	Standard	8MB	Standard (removable)	No	No	x3 (internal)	Vehicle Power Status (x2) SD Activity USB Power	Fixed Cable
DA-DONGLE	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes (x3)	Micro	16MB	Standard (removable)	No	No	x2 (via interface connector)	Vehicle Power Status (x2) Line Activity	Direct Connection
DAVINA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (x3)	Standard	32MB	Standard (removable)	Yes	No	x2 (via interface connector)	Vehicle Power Status (x2) SD Activity USB Power Line Activity	Removable Cable
DA-WCD	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Standard	8MB	Standard (removable)	No	Yes (optional)	x8 (via interface connector)	Vehicle Power Status (x2) SD Activity USB Power WiFi Activity	Removable Cable

TECHNICAL DATA

Dimensions (LxWxH)	85 x 55 x 25 (mm) 3.5 x 2.25 x 1.0 (in)
Weight	350g / 0.77 lbs
Power Supply	9 to 36 VDC Supplied through J1962
Current Consumption	80 to 110 mA
Operating Temperature	-25°C to +85 °C
PC / PDA Interface	Client USB 2.0 (full speed)
Memory	8MB Serial flash
SAE J2534 Compliant	J2534-2 (with exceptions)
Current Supported Networks	ISO 14229 CAN ISO 15765-2 CAN ISO 15765-4 CAN ISO 11898-3 FT CAN ISO 9141 ISO 14230 (KWP2000)
Other Interfaces	SD Card interface 4 LED indicators
Cables	Fully populated J1962 cable (2m long) USB-A to USB-B cable (0.5m long)
Miscellaneous	Firmware upgrade via USB Robust, small form factor aluminium case

Contact Information

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