


VEHICLE DATA RECORDER



Compact DEUTSCH circuit board enclosure that accept snap-in headers. Radial flange seal provides environmental sealing to the enclosure. Specially designed for harsh environmental challenges and common industrial markets that require advanced performance.

Durability, physical shock resistance, fluid resistance, insulation resistance, moisture resistance, etc are some of the key features.

Part Number	AVDR-J1A4-001	VEHICLE DATA RECORDER

	Package
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Length	8.0" (204 mm)
Height	6.3" (160 mm)
Depth	2.2" (55 mm)
Frame Material	Thermoplastic
	Environmental
Operating / Storage Temp	-40°C to 85°C / -50°C to 85°C
Normal Operating Condition	24°C
	Electrical
Operating Voltage	7V - 36V
	Communication
Protocols	CAN / J1939
Baud Rate	Flexible from 5kBit/sec to 1MBit/sec

Data Logger:	AVDR-J1A4-001-x				AVDR-J1A4-002-x	
Data Logger H/W modification	A	B	C	D	C	D
CPU	ARM11 800 Mhz 32-bit RISC ARM	ARM Cortex-A7 900 Mhz 32-bit quad-core	ARM Cortex-A53 1.4 GHz 64-bit quad core	ARM Cortex-A72 1.5 GHz 64-bit quad core	ARM Cortex-A53 1.4 GHz 64-bit quad core	ARM Cortex-A72 1.5 GHz 64-bit quad core
RAM	512 MB	1 GB	1 GB	2 GB	1 GB	2 GB
Storage	8 Gb	8 Gb	8 Gb	8 Gb	8 Gb	8 Gb
# of hours of PPMx Data	12000 Hours					
Physical Ports/Connections	- CAN J1939 – Connection to the Vehicle data stream / collected data downloading - Ethernet 10/100/1000 - for device settings interface access /collected data downloading. - USB (2.0x2, 3.0x2) - for technical support no regular access					
Wireless Connections	N/A				b/g/n single band 2.4 Ghz	b/g/n/ac dual band 2.4/5 GHz
Encryption	N/A				FIPS 140-2	
Power Consumption	12 Volt - 250 mA (3 W) average when idle, 520 mA (6.25 W)maximum under stress					
Other Sensors	N/A					
Software						
Data Logger:	VDR Firmware 1.0.0.005				VDR Firmware 1.1.0.001	
Operating System	Based on Debian GNU/Linux v.10					
Wired Data Downloading	VDR GUI 1.0.0.006				VDR GUI 1.1.0.001	
Wireless Data Downloading	N/A					
CAN BUS Data Downloading	VDR Data Downloader v.2.0.1.1					
Software Update	To update the VDR firmware, connect the VDR to your computer using the Ethernet cable and access the embedded interface. The new firmware can be downloaded from the company website and can be uploaded onto the device using the embedded interface.					

PERFORMANCE SPECIFICATIONS

TEMPERATURE

Operating at temperatures from -40° C to +85° C continuous at rated current.

DURABILITY

No electrical or mechanical defects after 100 cycles of engagement and disengagement.

VIBRATION

No unlocking or unconnected and exhibits no mechanical or physical damage after sinusoidal vibration levels of 20 G's at 10 to 2000 Hz in each of the three mutually perpendicular planes. No electrical discontinuities longer than 1 microsecond.

PHYSICAL SHOCK

No unlocking, unconnected or other unsatisfactory result during or after 50 G's in each of three mutually perpendicular planes. No electrical discontinuities longer than 1 microsecond. MIL-STD 202, Method 213, Condition "C".

FLUID RESISTANCE

Connectors show no damage when exposed to most fluids used in industrial applications.

INSULATION RESISTANCE

1000 meg ohms minimum at 25° C.

MOISTURE RESISTANCE

Properly wired and mated connections will withstand immersion under three feet of water without loss of electronic qualities or leakage.

DIELECTRIC WITHSTANDING VOLTAGE

Current leakage less than 2 milliamps at 1500 VAC.

THERMAL CYCLE

No cracking, chipping or leaking after 20 test cycles from -55° C to +125° C.