

Vehicle Interface Adaptor Comparison

Networks / Inputs	ValueCAN3	ValueCAN3 Ltd	neoVI YELLOW	neoVI RED	neoVI FIRE	neoVI FIRE 40V	neoVI ION	neoVI PLASMA	
Dual Wire CAN	All baud rates supported	2	1	2	1-2 ²	4	4	6-12 ⁶	6-18 ⁶
Single Wire CAN	Also referred to as GMLAN	-	-	-	1 ²	1	1	1-2 ⁶	1-3 ⁶
LSFT CAN	Low Speed Fault Tolerant	-	-	-	1 ²	1	1	1-2 ⁶	1-3 ⁶
LIN	Local Interconnect Network	-	-	1 ²	2 ⁴	4 ⁴	4 ⁴	5-10 ^{6,4}	5-15 ^{6,4}
Kline/ISO9141/Keyword		-	-	1	2 ⁴	4 ⁴	-	5-10 ^{6,4}	5-15 ^{6,4}
GM CGI	General Motors CGI bus	-	-	-	-	1 ³	1 ³	-	-
Low Range Analog Inputs (FIREVNET)	0-3.3V Range, 12 bit single ended analog inputs with +/-5% error, 1K Samples per second	-	-	3 ⁸ 10 Bit	4 ⁸ 10 Bit	4 ⁸ 10 Bit	4 ⁸ 10 Bit	3-6 ^{6,8}	3-9 ^{6,8}
Low Range Digital Inputs / Outputs (FIREVNET)	0-3.3V Range, Digital IO	1	1	3 ⁸	6 ⁸ 2 - 5V Tolerant	3 ⁸	6 ⁸	2-4 ^{6,8}	2-6 ^{6,8}
Environmental	ValueCAN3	ValueCAN3 Ltd	neoVI YELLOW	neoVI RED	neoVI FIRE	neoVI FIRE 40V	neoVI ION	neoVI PLASMA	
Voltage Input	6.5-40 VDC	6.5-40 VDC	6-32 VDC	6V - 27V	6V - 27V	6V - 40V	4.5V - 40V	4.5V - 36V	
Temperature	-40 to +70 Deg C	-40 to +70 Deg C	-40 to +85 Deg C	-40 to +85 Deg C	-40 to +85 Deg C	-40 to +85 Deg C	-40 to +85 Deg C	-40 to +70 Deg C with Display	
Dimensions	45" (1.14 m)	45" (1.14 m)	2.92cm X 7.62cm X 12.95cm (1.15in)	2.92cm X 7.62cm X 12.95cm (1.15in)	2.92cm X 7.62cm X 12.95cm (1.15in)	2.92cm X 7.62cm X 12.95cm (1.15in X	3.88cm X 11.12cm X 18.67cm (1.524in X	4.2cm X 12.7cm X 27.18cm (1.65in X 5in	
Expansion	ValueCAN3	ValueCAN3 Ltd	neoVI YELLOW	neoVI RED	neoVI FIRE	neoVI FIRE 40V	neoVI ION	neoVI PLASMA	
Number of Expansion Slots	-	-	-	-	-	-	1	2	
Add'l FIRE VNET	-	-	-	-	-	-	1	2	
MOST 25 OPHY (MOST 0 VNET)	MOST25 - 48 or 44.1Khz Rx only	-	-	-	-	-	1 Ch	1-2 Ch	
MOST 50 EPHY (MOST E VNET)	Rx Only	-	-	-	-	-	1 Ch	1-2 Ch	
FLEXRAY (FLEXRAY VNET)	Rx only	-	-	-	-	-	2 Ch	2-4 Ch	
High Range Analog Inputs (AIVNET)	-10 to 27V Range, 16 bit differential analog input, 250K Samples per second per channel, 2000Hz 3db single pole cutoff, 100V protection, 1Mohm impedance (currently software supports 40 - 10,00Hz)	-	-	-	-	-	7 Ch	7-14 Ch ⁷	
Oscope Analog Inputs (AIVNET)	+/-10V Range, 10 bit single ended, 10M samples per second with Oscope capability, -55db SNR, (currently software supports 40 - 10,00Hz)	-	-	-	-	-	2 Ch	2-4 Ch ^{6,7}	
High Range Digital PWM I/O (AIVNET)	0-60V Range low side DIO with PWM support up to 100Khz	-	-	-	-	-	8 Ch	8-16 Ch ^{6,7}	
Hardware features	ValueCAN3	ValueCAN3 Ltd	neoVI YELLOW	neoVI RED	neoVI FIRE	neoVI FIRE 40V	neoVI ION	neoVI PLASMA	
USB Isolation	USB is isolated from the PC. When there is a large ground offset between the a connected PC and the device, USB will not function properly but will not destroy the device or PC	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Storage medium / capacity	Physical storage medium / max capacity	-	-	4GB microSD Included. Available up to 64GB	4GB microSD Included. Available up to 64GB	4GB microSD Included. Available up to 64GB	4GB microSD Included. Available up to 64GB	32GB Full Size SD included. Available up to 128GB	32GB Full Size SD included. Available up to 128GB
WiFi Hotspot	Connect to hardware over WiFi with J2534, RP1210, Vehicle Spy (no wires needed). Walk up to a vehicle with a laptop and connect to its BUS.	-	-	-	-	-	-	Yes	Yes
LED's	User programmable LED's	1red/1green	1red/1green	1red/1green	1red/1green	1red/1green	1red/1green	8 red	10 multi-color, 2 bi-color
LCD Touch Screen (Android GUI)	Google based Android graphical user interface, sunlight readable	-	-	-	-	-	-	-	Yes
Buttons	User programmable buttons	-	-	-	-	-	-	-	23 backlit
Ambient Light Sensor	Adapted to human eye responsivity	-	-	-	-	-	-	-	Yes
Speaker		-	-	-	-	-	-	-	Yes

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Data Acquisition Ethernet	Ethernet support for ETAS XETK / XCP Ethernet	-	-	-	-	-	-	Yes/future	Yes/future
Data Acquisition USB Host	USB Host support for USB based memory emulators and data acquisition systems	-	-	-	-	-	-	Yes/future	Yes/future
Real-time clock	Battery backed real-time clock to timestamp data for year/month/day/hour/second	-	-	Yes	Yes	Yes	Yes	Yes	Yes
Power Management/Sleep		ValueCAN3	ValueCAN3 Ltd	neoVI YELLOW	neoVI RED	neoVI FIRE	neoVI FIRE 40V	neoVI ION	neoVI PLASMA
Fully Awake / Running @ 12V		-	-	100mA	180ma/0ms	180ma/0ms	180ma/0ms	500ma/0ms	600ma/0ms 800ma/0ms w/ screen
Drowsy Mode	Miss no messages sleep, scripting runs during sleep, data storage and message transmit is enabled during sleep. Sleep current/wakeup time. Add 50ma for MOST VNET.	-	-	-	180ma/0ms	180ma/0ms	180ma/0ms	180ma/0ms	180ma/0ms
Instant Mode	Miss no messages sleep, wakeup on CAN, LIN, MOST, MiscIO only. Sleep current/wakeup time. Add 50ma for MOST VNET.	-	-	-	50ma/0ms	50ma/0ms	50ma/0ms	27ma/0ms	27ma/0ms
Normal Sleep Mode	Full featured sleep wakeup on CAN, LIN, MOST, MiscIO, SMS (Text message), Alarm (date/time), sleep current/wakeup time	-	-	8mA @ 12.0 VDC	8ma/260ms	8ma/260ms	8ma/260ms	6.5ma/100ms	6.5ma/100ms
Coma Mode	Low power sleep wakeup on CAN only. Sleep current/wakeup time	-	-	-	-	-	-	80ua/500ms	80ua/500ms
GPS Support		ValueCAN3	ValueCAN3 Ltd	neoVI YELLOW	neoVI RED	neoVI FIRE	neoVI FIRE 40V	neoVI ION	neoVI PLASMA
5Hz GPS Support		-	-	-	-	-	-	Yes	Yes
Software Support		ValueCAN3	ValueCAN3 Ltd	neoVI YELLOW	neoVI RED	neoVI FIRE	neoVI FIRE 40V	neoVI ION	neoVI PLASMA
Vehicle Spy	Configuration GUI, extractor, exporter to multiple file formats, online analysis.	-	-	-	Logger configuration and Extract free	Logger configuration and Extract free	Logger configuration and Extract free	See Sales for details	See Sales for details
Software API's	GM DPS, Ford DET, J2534/pass-thru, RP1210, Visual Basic, Visual C++, C#, VB.NET, LabVIEW, LINUX	Included	Included	Included	Included	Included	Included	Included	Included
Wireless neoVI Software	Fleet management, data repository and data logger management software	-	-	-	-	-	-	Additional license required	Additional license required
Wireless Support		ValueCAN3	ValueCAN3 Ltd	neoVI YELLOW	neoVI RED	neoVI FIRE	neoVI FIRE 40V	neoVI ION	neoVI PLASMA
3G Modem (CDMA / GSM)		-	-	-	-	-	-	Yes ⁹	Yes ⁹
WiFi (802.11 b,g)		-	-	-	-	-	-	Yes	Yes
Bluetooth	Bluetooth v2.0 + EDR	-	-	-	-	-	-	-	-
SSL Security	SSL Security between data logger and Wireless neoVI	-	-	-	-	-	-	Yes	Yes
Data Encryption Security	Data Encryption between data logger and Wireless neoVI	-	-	-	-	-	-	Yes	Yes
Protocol Support		ValueCAN3	ValueCAN3 Ltd	neoVI YELLOW	neoVI RED	neoVI FIRE	neoVI FIRE 40V	neoVI ION	neoVI PLASMA
OBD		-	-	-	Yes	Yes	Yes	Yes	Yes
J1939	Includes J1939 DBC, BAM, RTS/CTS	-	-	Yes	Yes	Yes	Yes	Yes	Yes
GMLAN	Services include: \$19, \$22, \$23, \$AA, \$2C, Includes: DBC, A2L (ASAP2 File) and ODX, and PID file support	-	-	-	Yes	Yes	Yes	Yes	Yes
UDS (ISO14229)	Services include: \$19, \$22, \$23, \$2A, \$2C, Includes: DBC, A2L (ASAP2 File), GDX, MDX, ODX support	-	-	-	Yes	Yes	Yes	Yes	Yes
CCP	Includes A2L (ASAP2 file) and ROB support	-	-	-	Yes	Yes	Yes	Yes	Yes
XCP	Includes A2L (ASAP2 file) and ROB support	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes

- 1 - One CAN Channel is shared with J1850 VPW and ISO lines
- 2 - One channel is set to DW CAN; other selectable from DW/SW/LSFT CAN
- 3 - Receive only; transmit is available as an extra charge
- 4 - Uses K-Line Transceiver (simultaneous K-Line and LIN for one network not supported)
- 5 - 24V LIN & 24V power system support

- 6 - 1 VNET included, up to 3 supported for 3x network interfaces
- 7 - Requires an optional analog input card
- 8 - Analog Input pins are shared with 4 Digital Input pins
- 9 - Requires a local service provider contract or SIM card not included in the price
- 10 - For customer locations within 50 miles of an ICS office. Travel expense charged "at cost"

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