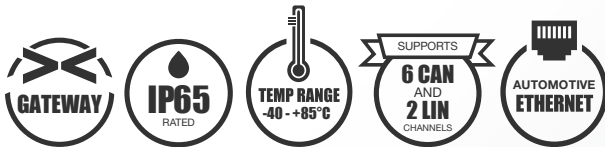


VCG-1

Intuitive Vehicle Communication Gateway



The VCG-1 Vehicle Communication Gateway is an easy to configure, multi-port, multi-bus message routing and data translation device. Designed to normally operate standalone, it can help bridge multiple modules as systems transition to newer communication busses and technologies, such as CAN-FD and Automotive Ethernet. It has the ability to run user written scripts to process the messages and data it routes, allowing it to connect multiple modules together using different protocols and physical layers.

- (6) CAN-FD channels for interfacing to standard CAN and CAN-FD devices
- (2) LIN channels
- (1) 100Base-T1 Automotive Ethernet channel
- Merge and convert data from LIN, CAN, CAN-FD and Automotive Ethernet
- Route messages between traditional CAN networks and new CAN-FD networks
- Physical switches per channel maintain CAN termination regardless of device power
- Galvanic isolation on all CAN channels
- Wide -40 to +85°C operating temperature for in-vehicle use including hot/cold weather testing
- Can be powered via USB 2.0 Type-C connector for easy PC-based configuration
- ECU-style weatherproof 26-pin sealed I/O connector
- Automotive surge tolerant wide operating voltage of 6 to 36VDC
- Waterproof sealed nylon enclosure with built-in mounting provisions



The sealed enclosure and wide -40 to +85°C operating temperature is suitable for use in-vehicle including hot and cold weather testing

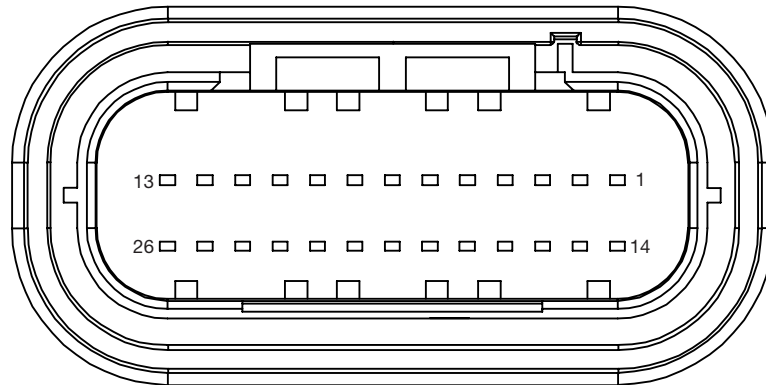


The VCG-1 uses well established and common technologies making configuration and operation straightforward. It loads user configurations and scripts from a FAT32 file system on an internal SD card which is compatible with all major computer operating systems. On Windows (via USB), the SD card is exposed as a USB Mass Storage Device so that it can easily be read and written without removal from the device. A built-in web interface can be enabled which allows convenient device configuration, monitoring and scripting without needing any additional PC-based configuration software.

VCG-1 Specifications

Features	
ECMAScript	Flexible data translation and routing between interfaces based on user configuration and scripts stored on internal SD card
Easy Configuration	Web-based and other easy methods for device configuration without requiring any PC software
Connectivity	(6) CAN-FD, (2) LIN, (1) Automotive Ethernet and (2) Digital I/O all available for user configuration and control
Hardware	
LEDs	Power indicator SDHC activity USB activity CAN1-CAN6 activity Ethernet activity LIN1-LIN2 activity
USB	Sealed USB 2.0 Type-C connector with dust cover
Ethernet	(1) 100Base-T1 Automotive Ethernet (OABR compatible)
CAN	(6) galvanically isolated CAN-FD channels Classic CAN 2.0B up to 1Mbps, CAN-FD up to 8Mbps Physical termination switches for each channel
LIN	(2) LIN channels
SDHC	Supports up to 32GB SDHC card
Configurable Digital I/O #1	Input mode: 0 to 36V input with internal Schmitt trigger Output mode: Voltage output – 3.3V logic level Open drain – 500mA low-side switch
Configurable Digital I/O #2	Input mode: -36V to 36V input with internal Schmitt trigger Output mode: Voltage output – 3.3V logic level
Sealed I/O Connector	26-pin weatherproof ECU-style connector for all I/O (except USB) JAE Electronics P/N MX23A26NF1
Power	6 to 36VDC, automotive surge tolerant on I/O connector (or) USB-C Power (for PC-based device configuration)
Operating Temperature	-40°C to +85°C / -40°F to +185°F
Mechanical	
Construction	Water resistant sealed IP67 nylon enclosure
Mounting Options	Integrated mounting tabs
Dimensions	92.0mm x 87.0mm x 42.0mm / 3.62in x 3.43in x 1.65in
Weight	144.4g / 5.1oz
Warranty	1 year

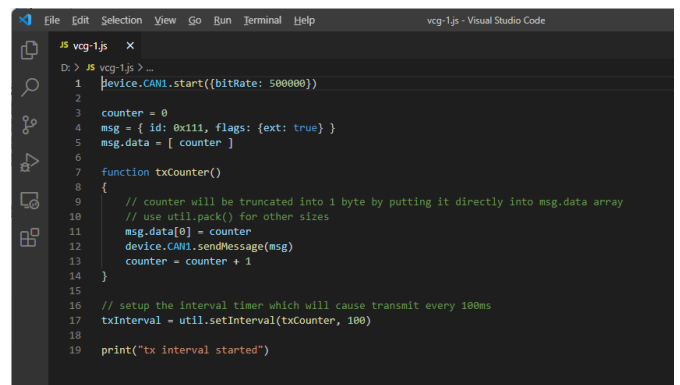
VCG-1 Pinout



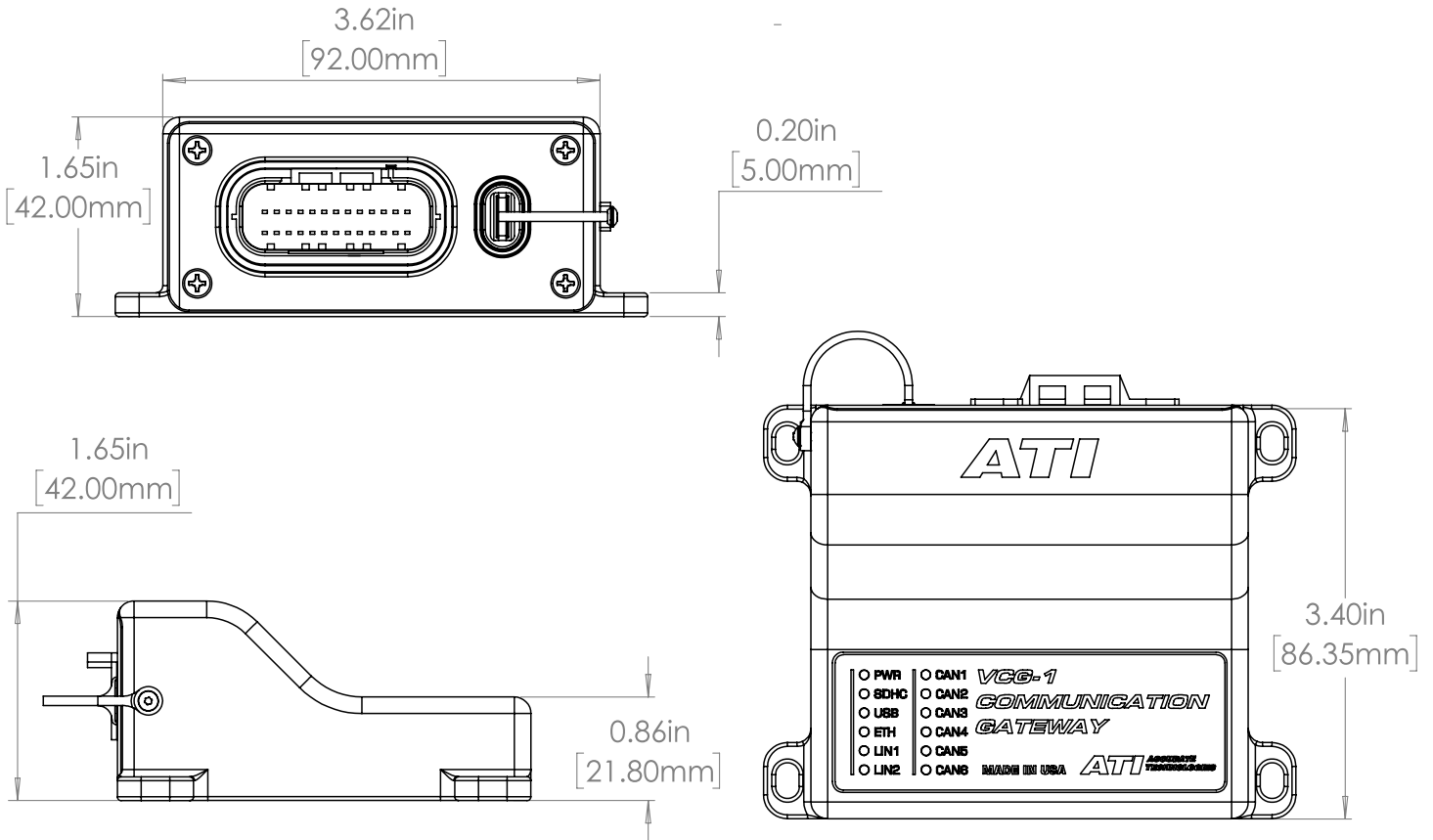
13	12	11	10	9	8	7	6	5	4	3	2	1
A_ETH-	CAN2_L	CAN1_H	CAN1_GND	CAN4_L	CAN3_GND	CAN3_H	CAN6_H	CAN5_GND	CAN5_H	LIN2	DIO1	GND
26	25	24	23	22	21	20	19	18	17	16	15	14
A_ETH+	CAN2_H	CAN1_L	CAN2_GND	CAN4_H	CAN4_GND	CAN3_L	CAN6_L	CAN6_GND	CAN5_L	LIN1	VPWR	DIO2

VCG-1 Configuration Interfaces

Configure the VCG-1 via ATI's web-based platform or other easy methods such as editing files on a mass storage drive over USB which allows device configuration without requiring the need for PC software.



VCG-1 Specifications



VCG-1 Order Information

Product	
Part Numbers	Description
153-0013	Standard VCG-1 Vehicle Communication Gateway

Accessories	
Part Numbers	Description
150-0258	Cable VCG-1 BOC unterminated
150-0259	Cable VCG-1 BOC to 6xDB9, banana plugs
150-0260	USB cable
151-0053	ACC KIT VCG-1 Connector Kit, 26 pin

