

# BB-LD3-1939P1D

## OBDDII to SAE J1939 Converter



### Features

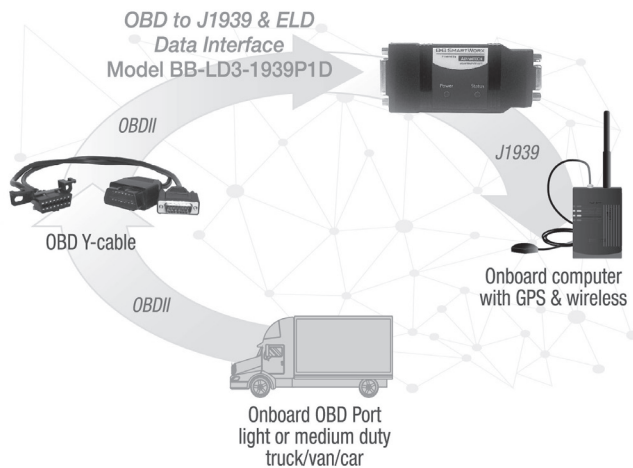
- Connects ELD/EDR, PC, on-board computer to OBD
- Vehicle detection, ignition sensing, bus ID parameters within converter
- Supports popular telematics parameters
- Status LEDs for vehicle connection and power
- Configure data send on request or automatically
- Retrieval of parameter data required by FMCSA (or similar mandates in other countries)
- No additional software required in ELD devices
- Expansive vehicle parameter monitoring and support
- Schedule services for preventative maintenance
- Versatile data access for faster response and savings

### Overview

Model BB-LD3-1939P1D, OBD to J1939 data converter, connects your ELD, ELR, PC, driver terminal or other on-board computing device to the OBD diagnostic bus of light and medium duty vehicles. It enables the retrieval of the parameters required by the FMCSA ELD mandate, along with the most commonly used parameters in telematics and fleet management applications.

The BB-LD3-1939P1D provides a direct translation between the OBD buses found on 2008 and newer light and medium duty vehicles and the J1939 protocol built into the service providers' ELD.

Vehicle Detection, Ignition Sensing, Bus Identification and Supported Parameters are all handled automatically in the data converter, so no additional software is required in the ELD.



### Specifications

- **Vehicle Interfaces** ISO 15765 (CAN), LSGMLAN, Ford Secondary CAN
- **OBDDII Data Support** 2008 light-duty vehicles
- **Host Connection** J1939: DB9 female
- **Operating Temperature** -40 to +85 °C
- **Power Consumption** 2W in Operating Mode.  
0.1W in Automatic Sleep Mode (Key Off)
- **Operating Voltage** 8 to 30 V<sub>DC</sub>
- **MTBF (calculated)** 111440 hours
- **Dimensions** 104.1 x 43.2 x 20.3 mm

### EMC TESTING

- **Radiated RF Interference** SAE J1113/41
- **Load Dump and Transient Protection** SAE J1113/11
- **ESD Immunity** SAE J1113/13

### ENVIRONMENTAL TESTING

- **Temperature Test** Ten (10) Temperature Cycles, as follows, With Unit Operating Normally:
  1. Room (25 °C) to T<sub>min</sub> in 15 minutes.
  2. Soak at T<sub>min</sub> 1 hour with power removed from unit.
  3. Start unit at T<sub>min</sub>, confirm successful start by executing a command/response. Power-down unit. Maintain unit, un-powered, for one minute between power-ups.
  4. Repeat Step 3 three times.
  5. Start unit at T<sub>min</sub> and ramp T<sub>min</sub> to T<sub>max</sub> in 30 minutes.
  6. Operate at T<sub>max</sub> for 1 hour.
  7. Ramp T<sub>max</sub> to T<sub>min</sub> in 15 minutes.
  8. Repeat steps 1 through 7 nine times for a total of 10 cycles:
    - a. 5 cycles at V<sub>min</sub> input.
    - b. 5 cycles at V<sub>max</sub> input.
- **Vibration Test** IEC 60068-2-6  
10 sweeps of 10 to 500 to 10Hz at rate 0.5 oct/min. each axis.  
Level to be 10 to 36Hz, 0.06 in DA 36 to 500Hz, 4g's. Unit must remain operational during and after the test.
- **Shock Test** IEC 60068-2-27  
18 to 50g's, 11ms, ½ sine pulses, 3 each direction each axis.  
Unit must remain operational during and after the test.
- **Drop Test** IEC 60068-2-32  
10 freefall drops from 1 meter onto concrete surface. Drop 1 time one each face (6), 1 on a corner and the 3 edges of this corner.  
Dropped unit shall return to normal operation without physical damage.

### Ordering Information

- **BB-LD3-1939P1D** OBDDII to SAE J1939 Converter

### Accessories – sold separately

- **BB-LDVYCBL** OBD Y-cable, LDV-DB15 Male to J1962 / ISO 15031 Type B