# Streamer InTelematix Intelligent OBDII Data Interface

- with integrated Y-cable

**Model LD3IC-S** 



**ADVANTECH** 



- Retrieve, translate and analyze data from vehicle's onboard diagnostics (OBDII) bus
   Enhance fleet efficiencies, monitor driver behavior, cut operating costs
- Used in fleet management systems from Telematics Service Providers (TSPs)
- · Available form-factors: device, embedded software

#### PRODUCT FEATURES

The Intelligent OBDII Data Interface, Model LD3IC-S, from B+B SmartWorx connects your PC, driver terminal, Java-enabled phone, or other on-board computing device to the OBDII diagnostic bus of light and medium duty vehicles. It enables the retrieval of the most commonly used parameters in telematics and fleet management applications. Now, with an integrated Y-Cable, Model LD3IC-S greatly simplifies installation by plugging directly into the OBDII port.

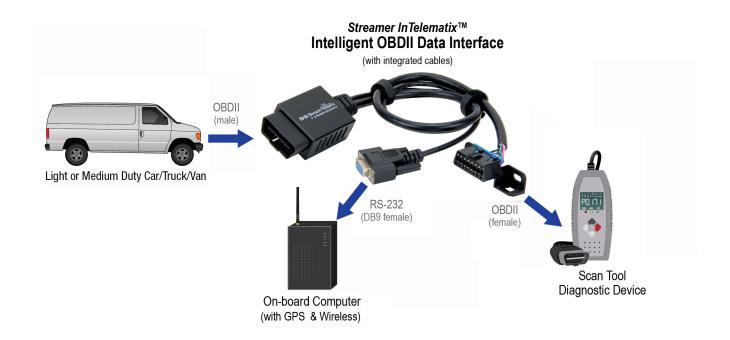
With over 16 years of OBDII development and 500,000 units deployed, B+B has engineered the Streamer InTelematix software subsystem to support select OEM generic and most desired enhanced parameters in one single platform. Streamer's vehicle information platform is comprised of the needed parameters, vehicle specific communication requirements, and B+B's unique algorithms that provide parameter data in a consistent unit of measure across manufacturers. B+B's API or communications protocol is simple and easy to integrate into your fleet management system.

Containing the Streamer InTelematix database and algorithms, Model LD3IC-S provides a simple operational protocol to communicate to the OBDII bus. The Command and Response Protocol Manual is available on B+B's website, under Documentation/Downloads:

http://advantech-bb.com/Products/Telematics-MRM-Solutions/OBDIl-Converters-Gateways/OBDIl-Converters.aspx.

#### **ORDERING INFORMATION**

MODEL NUMBER	DESCRIPTION Telematics OBDII Data Converter	
LD3IC-S		



## Streamer InTelematix Intelligent OBDII Data Interface

### - with integrated Y-cable

Model LD3IC-S



#### SPECIFICATIONS

SUPPORTED VEHICL	.ES	
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OBDII Streamer supports any 2008 or newer vehicles that comply with the SAE's J1979 OBDII specification.

#### SUPPORTED PARAMETERS

Vehicle Identification Number

Vehicle Speed - Monitor aggressive driving

Engine Speed – Monitor idle time and engine abuse

Throttle Position

Odometer/Distance Traveled – Monitor trip distance and HOS

Instantaneous Fuel Rate in Gallons per Hour

Total Fuel - Monitor MPG and protect against theft

Ignition Status - Track idle time

Battery Voltage - Watch for charging system failures

PTO Status - Automatically calculate fuel tax savings

Diagnostic Trouble Codes

MIL Status

Emissions Readiness Monitors - Check remotely if vehicles are ready for emissions certification

Brake Switch Status & Seatbelt Fastened - available on most Ford & GM trucks/

Other parameters available on a custom basis.

#### SUPPORTED PROTOCOLS

SAE J2284/ISO 15765

Ford MSCAN

Low Speed GMLAN

#### ADDITIONAL FEATURES

Ignition-On Signal Output | OV to 5V pulses, 1 kOhm output impedance.

Automatic low power mode senses when vehicle speed & engine speed is zero.

Automatic disconnect when technician scan tool is connected.

Proprietary vehicle detection algorithm and embedded database lets the same hardware work on all compliant vehicles

Configurable parameter reporting by polling, at a fixed rate, or when a threshold is exceeded.

Wide Operating Temperature: -40 to 85 °C (-40 to 185 °F)

Low Power Consumption:

0.2W in Operating Mode; 0.15W in Automatic Sleep Mode (Key Off)

	Enclosure Dimensions	2.7 x 1.9 x 1.0 in (68.6 x 48.3 x 25.4 mm)
	Cable Dimensions	21 in (533 mm) integrated Y-cabl
	Operating Voltage Range	8 to 30 VDC
	Calculated MTBF	174,465 hours (19.9 years)

PORT CONNECTIONS		
RS-232 Connection:	DB9 Female, DCE	
Pins 1, 4, 6	Connected together	
Pin 2	RD	
Pin 3	TD	
Pin 5	Ground	
Pin 7	RTS	
Pin 8	CTS (Vehicle Ignition Status)	
Pin 9	VBAT Power in, VBAT Power out (3 separate build options) Default = None	

COMPLIANCES		
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 Tmin in 15 minutes.
- 2. Soak at Tmin 1 Hour with power removed from unit
- 3. Start unit at Tmin, 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 Tmin and ramp Tmin to Tmax in 30 minutes
- 6. Operate at Tmax for 1 hour
- 7. Ramp Tmax to Tmin in 15 minutes
- 8. Repeat steps 1 through 7 nine times for a total of 10 cycles:

a. 5 c	ycles at V	min input
b. 5 c	ycles at V	max input

#### **Vibration Testing**

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 Testing**

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 Testing**

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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.

The drop unit shall return to normal operation without physical damage.