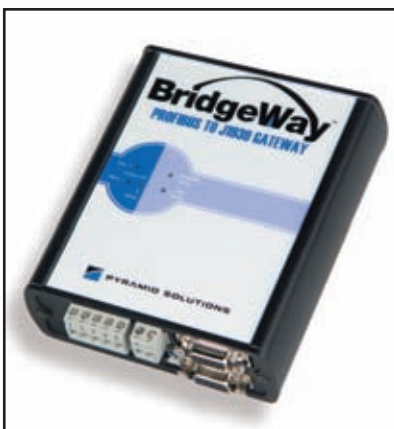




**BridgeWay™**

**PROFIBUS to J1939  
Gateway**



 **PYRAMID SOLUTIONS**



**Seamless connectivity & control.**

# TRANSPARENT MONITORING AND CONTROL

## TYPICAL APPLICATIONS

**Truck and Bus**

**Marine**

**Mining**

**Construction**

**Agriculture**

**Power generation**

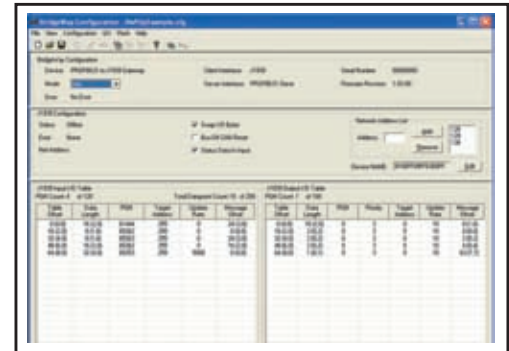


**Simple. Reliable. Cost-effective.**

# Seamless PROFIBUS to J1939 connectivity

The BridgeWay PROFIBUS to J1939 Gateway is a compact device that bridges the gap between PROFIBUS automation networks and SAE J1939 (CAN) networks. The unit enables a PROFIBUS DP Master to read and write J1939 network data for automation, operator control, real-time monitoring and communication of critical performance and fault data.

BridgeWay is designed for use across a wide variety of applications and industries. These include heavy duty equipment and vehicles used for agriculture, construction, fire and rescue, oil and gas, mining, power generation, motor controls, materials handling, trucking, mass-transportation and marine applications.



Sample BWConfig software screen

**How it works.** The PROFIBUS to J1939 Gateway is easily configured through Pyramid's BWConfig software, an intuitive Windows-based software configuration tool. Users can map J1939 parameter (PGN) data into the PROFIBUS to J1939 Gateway input and output tables. This enables a PROFIBUS DP Master to read and write J1939 network data, since the PROFIBUS to J1939 Gateway operates simultaneously as a PROFIBUS DP Slave node on a PROFIBUS DP network and a CAN node on a J1939 network.

Unlike other devices that are statically configured and limit the number and types of data, BridgeWay is configurable to enable access to as much or as little data as is required for your unique application.

**Easy to integrate.** BridgeWay is designed to integrate easily and operate reliably in virtually any PROFIBUS to J1939 compatible application. Ruggedly built, the device is DIN rail mountable and can be deployed in applications and environments where industrial automation products are typically used.

With no true accessibility between PROFIBUS networks and J1939 networks, the device provides a cost effective solution for connectivity. The PROFIBUS to J1939 Gateway sits between the two networks, limiting the need for additional PCs, software and network cards.

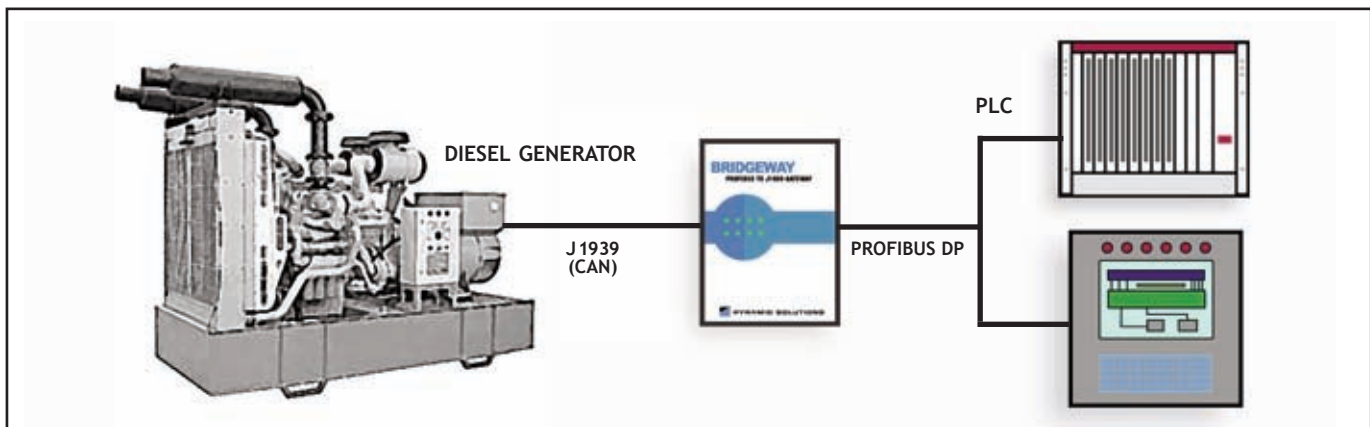


## Key benefits

- Highly configurable and flexible
- Feature-rich, cost-effective solution
- Replaces higher cost computer gateways and PLC scanners
- Rapid installation and configuration
- Low risk, reliable operation
- Superior product support

## Key features

- Supports SAE J1939 vehicle protocol over CAN and PROFIBUS DP (Slave) Industrial Automation protocol
- Configuration via a Windows-based PC software tool (BWConfig)
- Supports FLASH field upgrades
- LED network and module status indicators
- DIN rail mountable rugged aluminum enclosure
- Brand label/OEM options



# PROFIBUS to J1939 Gateway

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## PROTOCOLS SUPPORTED

### J1939

- Transmission and reception of all types of J1939 messages, including PDU1, PDU2, broadcast and destination specific.
- Complete network address management including address claim, protection, and yield on higher priority conflict.
- Monitoring of DM1 (active diagnostics) and DM2 (previously active diagnostics) messages.
- Network address can be self-configurable over a range of addresses.
- J1939 Transport Protocol for transmission and reception of large messages (9 - 1785 bytes). Both connection based (RTS/CTS) and broadcast (BAM) are supported.
- Configurable CAN bus-off reset option will reset the network interface and attempt to return to online when a CAN bus-off condition is detected.

### PROFIBUS DP

- PROFIBUS DP Slave functionality (EN 50170)
- Cyclic I/O data transmission
- Device diagnostic message transmission
- Based on Siemens SPC3 controller
- Up to 244 bytes of Input data, 244 bytes of Output data. Maximum 400 bytes combined I/O total.
- Auto baud rate detection: 9.6 Kbs – 12Mbs

#### Specifications

Mechanical Dimensions: L = 4.96" (126mm); W = 4.30 " (109mm); H = 1.65" (42mm)

Operating Voltage: 12–30 V DC

Current Draw: 24 V DC, 300 mA typical

Operating Temperature 0°C – 70°C

EMC Compliance: EN50081-2 and EN50082-2

Certifications: CE & cULus

Mechanical Rating: IP20 / NEMA 1

