The W5-JDC4 is a DeviceNet-to-serial link communications gateway that provides a flexible DeviceNet interface to as many as four different channels of ASCII devices. A wide variety of serial ASCII devices can be easily connected as DeviceNet slaves, with independent communications to and set up for each channel.

The W5-JDC4 does not interpret the data being transmitted across it, and so the transferred messages may contain data of any nature or definition. This allows you to use the same gateway for a many different DeviceNet-serial interface applications.

Packaging is a metal enclosure designed to meet the requirements of the Semiconductor Special Interest Group and designed for panel mounting using tabs.

Using the W5-JDC4 you may communicate with the connected peripheral devices in the same fashion as the other DeviceNet products in the system. Data may be read/written using either I/O or explicit messaging. Typically real-time data is read and written as I/O by the DeviceNet Master via Polled, Change-of-State or Cyclic I/O and parameters are read and written with the Explicit Messaging technique. However, you may also read and write serial data via explicit messages.

The W5-JDC4 is defined as a Communications Adapter device on the DeviceNet system. It has four 9-pin D-sub connectors for connection to the RS232 interface port on your devices and two 5-pin "micro" connectors for connections to the DeviceNet network. The W5-JDC4 has one assigned DeviceNet address, which is set by two 10-position rotary switches on the unit. There is also one rotary switch for the DeviceNet baud rate.

Other W5-JDC4 parameters are software-configurable. Each W5-JDC4 has 2 standard green/red DeviceNet LED's for module status and network status and two green LED's for each serial port to indicate RS232 transmit and receive activity.

The W5-JDC4 has the following features:

- Translates messages and data between DeviceNet and a serial peripheral device
- Up to 4 serial devices can be connected simultaneously
- ODVA Group 2 Only Slave
- ODVA Conformance tested to DeviceNet Spec 2.0
- Defined as a DeviceNet Communications Device Profile 12 (Chex)
- Autobaud operation on DeviceNet
- I/O Messaging of Serial Data
- Poll
- COS
- Cyclic
- Explicit Messaging
- Serial data
- Configuration data
- Pad mode option
- Byte swapping option
- Transaction header or data only mode option
- Master-Slave handshake option
- Software Configurable Parameters for serial port operation
- Address selection via DIP switches
- Panel mount with stand-offs
- 2 micro DeviceNet connectors — 1 male and 1 female
- 4 DB9 RS-232 Connectors – male

W5-JDC4 features —*continued*

- 2 standard DeviceNet module and network status LED's
- 8 serial transmit and receive LED's

WRC is one of the original members of ODVA Your source for Blue-Collar Electronics.

WRC is a Rockwell Automation Encompass Partner for Gateway, Bus Extender and signal conditioning products.

- Powered from DeviceNet 11- 25 Vdc network power
- ASCII string length up to 50 bytes
- Serial port baud rate up to 115.2k baud Typical Applications
- Weigh scales
- Bar code readers and scanners
- Display panels
- Robots

- Drives
- Motion controllers
- Operator stations / HMI

Specifications

Product:	W5-JDC4 4-Port DeviceNet-Serial Gateway
Description:	Communications gateway between a serial capable device over an RS232 interface and a DeviceNet network.
Device Type:	Communications Adapter, 12 (0C hex)
Device Profile:	Identity Object
Vendor ID:	9
DeviceNet Conformance:	Designed to conform to the ODVA DeviceNet Specification Volume I and II, Version 2.0.
DeviceNet Communications:	Predefined Master/Slave Connection Set, Group 2 Only Server
DeviceNet:	Baud rate selection: rotary switch or software
Address selection:	rotary switch or software
Cable Connection:	Micro-connector
Status Indicators:	Network Status, Module Status
Serial port:	- configurable per port
Baud rate:	1200, 2400, 4800, 9600, 19.2k, 38.4k, 57.6k, 115.2k baud (software selectable)
Parity:	Odd/even/none (software selectable)
Data bits:	7 or 8 (software selectable)
Serial port connection:	9-Pin D-Sub
Status Indicators:	Rx, TX
Network Isolation:	500V
Max Power:	3.75 watts: 340 mA @ 11 Vdc – 150 mA @ 25 Vdc unregulated power supply
Mounting:	Panel Mount 4 hole positions on side—mounting tabs
Size:	Length: 7.00", width: 4.25", height: 1.85" to the top of the connectors
Operating Temp:	0-60 oC
Humidity:	0-95% RH, non-condensing