



**ELECTRONIC
INNOVATION Inc.**

**DN100-PFE
DN100-SSE**

Control Processor

The Electronic Innovation Inc. "DN" line of modules is intended to provide rugged, reliable, *DeviceNet*[™] I/O capability in unusually harsh environments. These include applications such as on-board control of heavy mobile equipment.

The DN line has been designed from the ground up to survive these environments with special attention in the following areas:

- Mechanical design for high shock, vibration, and concussion tolerance, resistance to liquids such as water or oil, and most forms of corrosion, along with wide operating temperature ranges.
- Electrical design to ensure reliable operation in the face of severe electrical transients, which can occur on vehicle electrical systems. All modules have been designed and tested according to automotive standard SAE J1113 and mil spec QSTAG-307
- Electronic design to minimize electromagnetic emissions and provide low susceptibility to external electromagnetic interference.
- Extensive design effort has been expended to ensure that hardware, software, or network faults, if and when they occur, will result in a predictable and timely transition of the module to the safest achievable state.

The DN100 Control Processor is intended for the control of a *DeviceNet*[™] network in a mobile equipment environment. This processor will interface to external equipment through Electronic Innovation or third party *DeviceNet*[™] I/O blocks. The standard module is configured by EII to perform the required functions on customer equipment. Optionally, an IEC1131 software package is available that will allow the end user to develop the control algorithm and program the DN100.

The built in display and keypad allow the operator of the equipment to set basic parameters to their required or preferred values.



DN100-PFE

DeviceNet Communications

Default MAC ID:	63, Software Selectable
Data Rates Supported:	125, 250, 500 kbps, Software Selectable
Master/Slave Connection Set:	Supported, Group 2 Only Server
Dynamic Connections (UCMM):	Not Supported
Fragmented Explicit Messaging:	Not Supported

DeviceNet Power Supply

Power Supply Voltage:	9 V to 65 V, continuous operating
Power Supply Isolation:	1.2 kV rms
Current Consumption:	300 mA @ 8.8 V Supply 225 mA @ 11.0 V Supply 120 mA @ 25.0 V Supply
Overvoltage Withstand:	120V, 20 seconds
Applicable Standards:	Exceeds QSTAG-307 & SAE 1113

Display

Type:	Vacuum Fluorescent Dot Matrix
Size:	2 x 20 characters

Keypad

Type:	Fully sealed, metal casing and keys
Size:	4 keys (arrow keys)

Environmental

Operating Temperature:	-40 °C to +85 °C
Storage Temperature:	-55 °C to +125 °C

Ordering Information

DN100-PFE	Potted into Polyurethane enclosure, Mini-style DeviceNet Connectors
DN100-SSE	Potted into Stainless Steel Enclosure, Mini-style DeviceNet Connectors



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