

Chameleon RS-232 Network Interface Module (NIM-4)

High-Performance Programmable Controllers for Extreme Environments



The Chameleon RS-232 Network Interface Module (NIM-4) offers communications using FairNET, Modbus ASCII (master or slave), Modbus RTU (master or slave), Custom ASCII, or Custom Binary protocols. FairNET provides both deterministic and non-deterministic messaging, automatic bus mediation, and a robust master-slave architecture.

As with all Chameleon modules, NIM-4 units are hot-swappable: should the need arise to replace one, you can simply swap the front panel (with attached processing board) and the unit is back online—there is no need to shut off the power and there is no need to detach connectors. They also provide unequalled ruggedness. They are specifically designed for sustained operation in severe environments, including those characterized by extreme shock, vibration, electro-magnetic interference, temperature, and/or humidity. Its fully-sealed enclosure (sealing end-caps not pictured) ensures long-lasting operation in the grimmest settings.

ENVIRONMENTAL CHARACTERISTICS

Operating Ambient Temperature Range	-40°C to 65°C
Storage/Transport Ambient Temperature Range	-40°C to 85°C
High Impact Shock	MIL-STD-901D
Mechanical Vibration	MIL-STD-167B
Electro-Magnetic Interference	MIL-STD-461E (Pending)
Facial/Housing Protection	NEMA 1,2,4,4X,5,6,12,12K,13
Operating Humidity	100% RH, Condensing

ELECTRICAL CHARACTERISTICS

Maximum Power Consumption	2.8W
Max baud rate	256 kbit / second
Electrostatic Discharge Protection	+/- 15 KV Human Body model
Signal Electrical Isolation from Control Circuitry	1500 VDC
Handshaking Signals	CTS, RTS, DTR, and DSR
Supported Cable Diameters / Wire Gauges	Two glands 0.24"-0.47" and two glands 0.16"-0.31" / 16-28 AWG

OPERATOR INTERFACE

Status Readout	Three-color (red/yellow/green) Indicator
IrDA Wireless Interface	115KBPS SIR

PHYSICAL CHARACTERISTICS

Weight	1.35 pounds
Front Panel Dimensions	2.5" W x 6" L
Enclosure Height	3" H