



CNOS-001

TSX Compact Serial Option Module

“...add much needed serial ports to the Compact PLC...”

The CNOS-001 is a serial port expansion module for Schneider Automation's TSX Compact™. It has two Modbus serial ports which are switch selectable RS-232 or RS-485. It is configurable as either an option module or an I/O module.

At the heart of the CNOS-001 runs CRPC (Compact Routing and Protocol Conversion). RPC is the engine in Niobrara's EPE5, MEB, and QUCM. It is well tested in thousands of applications.

The serial ports

The two serial ports on the CNOS-001 are switch selectable RS-232 or RS-485. They use Modicon's pinouts, so standard cables work well. They are independently configurable as to baud rate, parity, data bits, stop bits and protocol.

- Configure ports as Modbus RTU or ASCII, Master or Slave
No expensive loadable required!
- Multidrop up to 32 Modbus slave devices off of either port
- Auto-scanning tables for each port
- Read Powerlogic equipment
- Be an RNIM Master or Slave
- Use as a Protocol Converter
- Use as a Data Concentrator

CNOS as an option module

The CNOS-001 configured as an option module uses the communication channel to communicate with the Compact PLC which give it many capabilities:

- Serial ports are equivalent to processor serial ports
Add much needed serial ports to the Compact
- The PLC can issue 0x, 1x, 3x and 4x MSTR reads.
- The PLC can issue 0x and 4x MSTR writes.
- A PC can program the PLC from either port.
- Configure the CNOS using MSTRs from the PLC.
- The PLC can issue RNIM, PNIM or SY/MAX commands using standard MSTRs.

Requires TSX Compact PLC (with '386 processor), free slot in the main rack (slots 3, 4 or 5)

“PLC can issue Modbus, SY/MAX, PNIM & RNIM reads and writes using standard MSTRs”

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and Compact PLC Executive version 2.07 or greater.

CNOS as an I/O module

CNOS can be used in any slot in any rack. Up to 32 registers in and 32 registers out. Requires TSX Compact PLC (with '386 processor) and Compact executive* that supports option modules.

Miscellaneous

Multiple CNOSs can work in a single rack. Modules come with a user manual, configuration software, a 1-year warranty* and 1-year free firmware upgrades.

Part Numbers for related products

BB85 DIN-rail mount breakout box, RJ45 to screw-terminal connector w/ MM0 cable
DDC2I Optically-isolated RS-232 to RS-485 converter, DIN-rail mount w/ MM0 cable
MM1 PC to CNOS configuration cable
CUCM-O User programmable ASCII module for the Compact

Contact Factory for availability.

* See Niobrara's Standard Terms and Conditions of Sale for warranty information.

SPECIFICATIONS:

<i>Dimensions</i>	Single-width Compact module. 1.6" wide by 5.5" tall by 4.5" deep (40 x 140 x 114 mm).
<i>Power Requirements</i>	From Compact bus; 5 VDC, 350-550 mA.
<i>Operating Conditions</i>	0 to 60 degrees C; humidity up to 90% noncondensing; pressure altitude -200 to +10,000 feet MSL.
<i>Serial Ports</i>	Two front-mounted RJ45 connectors; Switch-selectable RS-232 or RS-485. 50, 75 110, 134.5, 150, 300, 600, 1200, 1800, 2400, 4800, 7200, 9600 or 19,200 baud. 7 or 8 data bits; odd, even or no parity; 1 or 2 stop bits.
<i>Serial Protocols</i>	Modbus (RTU or ASCII, Master or Slave), SY/MAX, Net-to-net, PNIM, RNIM (Master or Slave), Chevron, Peripheral, Multidrop, IDEC, Gateway, Transparent, Share, Transfer.
<i>Indicators</i>	LED indicators for Module Power, Busy, Run, Error; Tx & Rx for each port; PLC Run and Backplane Comms Active. 18 total indicators.
<i>Mailbox Registers</i>	2,048 4x registers. Available at Modbus address 255 (configurable). Non-volatile.
<i>Setup Registers</i>	Non-volatile 4x registers accessible by PLC across backplane or by external device through serial port.
<i>PLC Interface</i>	Configurable as either an option module or an I/O module. As an I/O module up to 32 words in, 32 words out in any rack.