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Modicon Read-Me-First for the 416 NHM 212 34 Modbus Plus Plug & Play PCMCIA Card

Part No. 31002004 Revision 01

Operating System and Hardware Requirements

This table provides you with information concerning the operating system requirements and hardware requirements.

Type	Requirement
Operating System	• Windows 95® • Windows 98® • Windows NT®
Hardware	• 486, 66 mHz with 16 meg of RAM • Available Type III PCMCIA socket that supports Plug & Play

Operating Systems that are not Supported

The following operating systems are not supported.

- DOS
- Window 3.1®

Note: The Schneider Automation 416 NHM 212 34 Modbus Plus Plug & Play PCMCIA Card is only supported with driver Version 4.2.

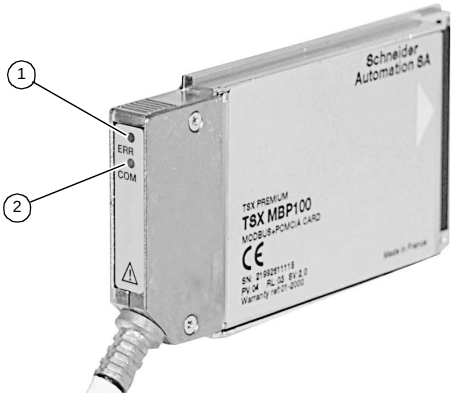
Windows PNP ID

The Windows PNP ID for the Schneider Automation 416 NHM 212 34 Modbus Plus Plug & Play PCMCIA Card is: **TSXMBP100**

Diagnostics

Diagnostic Indicator Lamps

The following illustration provides you with the location of the diagnostic indicator lamps. Also included is a description of the diagnostic lamps.



1. Red (normally off) - error codes. See following.
2. Green - Communications. See following.

Diagnostic Lamp Error Code Table

The following table provides you with the indicator lamp error codes.

Indicators	Meaning	Corrective Action
Error Lamp off, Comm lamp off	Device switched off	Check power supply / connection
Error Lamp off, Comm lamp flashing for six seconds	Normal operation	-
Error Lamp on, Comm lamp N/A	Serious error	Change the card
Error Lamp flashing, Comm lamp off	Operational error. Card not configured. Communication on the network cannot start	Reload the driver
Error Lamp flashing, Comm lamp flashing	Operational error	Check the configuration. Check the connection to the MB+ network. The COMM LED flashing pattern indicates the problem. See Table 2, following.

Continued on next page

Diagnostics, Continued

LED Patterns Flashing Indications

The following table describes what the LED flashing patterns are and what the patterns mean.

LED Pattern	Color	Indication / Status
6 flashes / second	Green	● Normal operation for the node. ● It is successfully receiving and passing the token. ● All nodes on a healthy network flash this pattern.
1 flash / second	Green	● The node is off-line just after power-up or after exiting the **4 flashes / second mode**. ● In this state, the node monitors the network and builds a table of active nodes and token-holding nodes. ● After being in this state for 5 seconds, the node attempts to go to its normal operating state (indicated by **6 flashes / second**).
2 flashes, then off for **2** seconds	Green	● The node hears the token being passed among the other nodes, but never receives the token itself.
3 flashes, then off for **1.7** seconds	Green	● The node does not hear the token being passed among the other nodes. ● It claims the token periodically, but cannot find another node to pass it. ● Check the network for an open circuit or defective termination.
4 flashes, then off for **1.4** seconds	Green	● The node has heard a valid message from a node using a network address identical to its own address. ● The node remains in this state as long as it continues to hear the duplicate address. ● If the duplicate address is not heard for **5** seconds, the node changes to **1 flash / second mode**.
6 flashes / second	Green	● Driver loaded successfully; application not running, (i.e., no calls to the driver)
4 flashes / second	Red	

Power Consumption

The following table provides the current usage of the 416 NHM 212 34.

Card References	Voltage	Typical Current	Maximum Current
416 NHM 212 34	5V	220mA	310mA

Hot Swapping

Hot swapping is not supported by the 416 NHM 212 34 PCMCIA card.

Special Information

This section provides information about your NW-RR-00X Modbus Plus Repeater.



CAUTION

If you are using repeaters in a Modbus Plus network, read this document.

Failure to observe this precaution can result in injury or equipment damage.

Subject

NW-RR85-000
Modbus Plus Repeaters
NW-RR85-001

New ASIC

Modicon has introduced a new ASIC, Part Number 44-SP00-003 into some of our products to improve performance.

This sheet is being inserted with all products that contain this new ASIC.

Compatibility

The new ASIC is compatible with all Modicon Modbus Plus products except the NW-RR85-000 Modbus Plus Repeater.

Upgrades

All NW-RR85-000 Repeaters can be returned to Modicon Customer Service to be upgraded to the NW-RR85-001, which is compatible with the new ASIC.

Return Authorization

Please telephone Customer Service, at 800/468-5342, and get a Return Authorization (RA) number before returning your NW-RR85-000 for the upgrade.

Thank you for your continued interest in Modicon products.

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