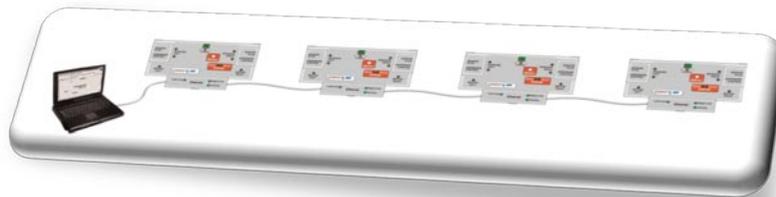
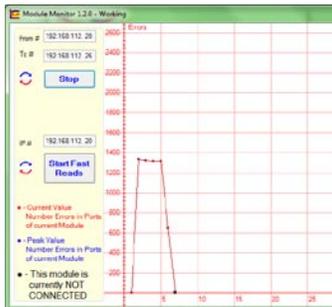


# Network Monitor Tool

Version 1.2

January 2016



Publication ERSC-1300

**ConveyLinX module firmware and functionality is protected by U.S. and international patents. For complete patent information visit [www.pulseroller.com/patents](http://www.pulseroller.com/patents)**

## SYMBOL CONVENTIONS



This symbol indicates that special attention should be paid in order to ensure correct use as well as to avoid danger, incorrect application of product, or potential for unexpected results



This symbol indicates important directions, notes, or other useful information for the proper use of the products and software described herein.

## IMPORTANT USER INFORMATION

*ConveyLinx ERSC* modules contain ESD (Electrostatic Discharge) sensitive parts and components. Static control precautions are required when installing, testing, servicing or replacing these modules. Component damage may result if ESD control procedures are not followed. If you are not familiar with static control procedures, reference any applicable ESD protection handbook. Basic guidelines are:



- Touch a grounded object to discharge potential static
- Wear an approved grounding wrist strap
- Do not touch connectors or pins on component boards
- Do not touch circuit components inside the equipment
- Use a static-safe workstation, if available
- Store the equipment in appropriate static-safe packaging when not in use

Because of the variety of uses for the products described in this publication, those responsible for the application and use of this control equipment must satisfy themselves that all necessary steps have been taken to assure that each application and use meets all performance and safety requirements, including any applicable laws, regulations, codes, and standards



The illustrations, charts, sample programs and layout examples shown in this guide are intended solely for purposes of example. Since there are many variables and requirements associated with any particular installation, Insight Automation Inc. does not assume responsibility or liability (to include intellectual property liability) for actual use based on the examples shown in this publication



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## SUMMARY OF CHANGES

The following table summarizes the changes and updates made to this document since the last revision

Revision	Date	Change / Update
1.0	September 2014	Initial Release
1.2	January 2016	Formatting change and added patent information

## GLOBAL CONTACT INFORMATION



**PULSE ROLLER**

**WWW.PULSEROLLER.COM  
SALES@PULSEROLLER.COM  
SUPPORT@PULSEROLLER.COM**

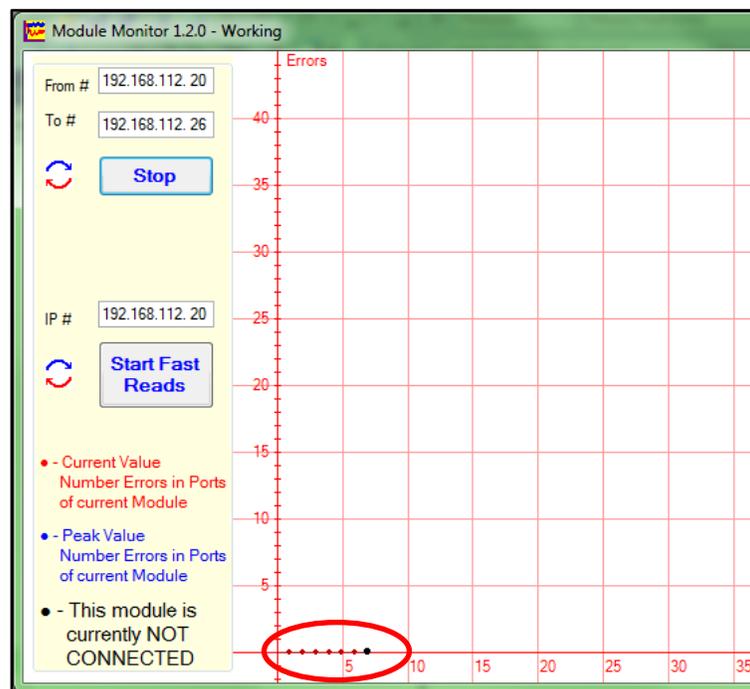
## MONITORING CONVEYLINX MODULES

The Network Monitoring Tool allows you to connect your PC to a ConveyLinX module network and receive a graphical representation of Ethernet Port communication errors for each ConveyLinX module. You can capture the monitoring data for a period of time and then export the details to view in Excel spreadsheet format. You can also select a single module and get a "OK" or "Not OK" quick test.

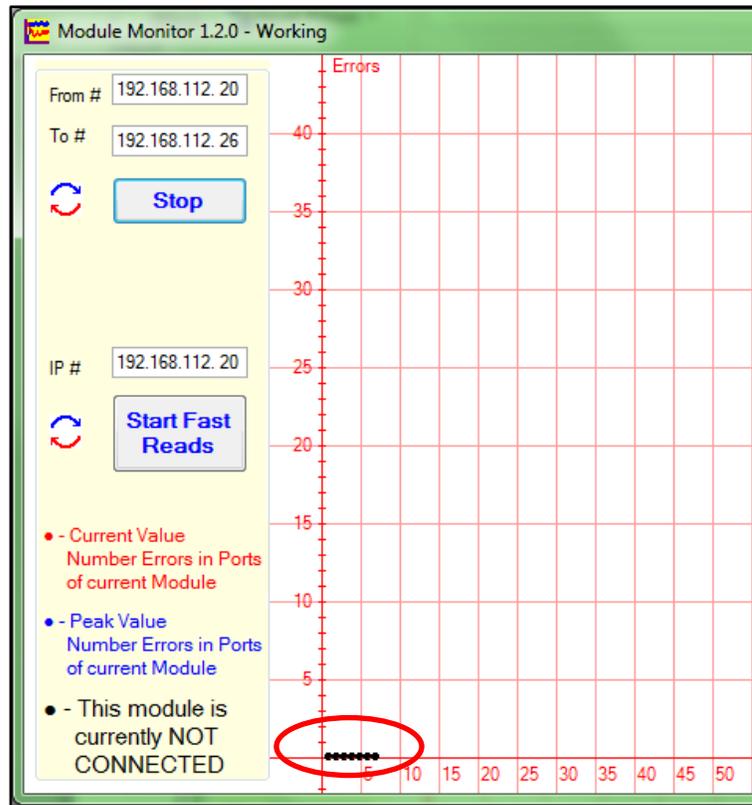
Once you have opened the ConveyLinX Monitoring Tool, enter the start and end IP addresses of the modules you wish to monitor. Click the "Start" button to begin the data capture. Once the data capture has started, the graph area to the right will display data and the "Start" button will change to be a "Stop" button



Once the capture has started, a dot will appear for each module in your IP address range. Red dots indicate a connected state and a large black dot indicates a non-connected state due to network cable not connected, module powered off, or some other problem. This particular example shows modules #1 thru #6 being connected with 0 errors and module #7 not connected.

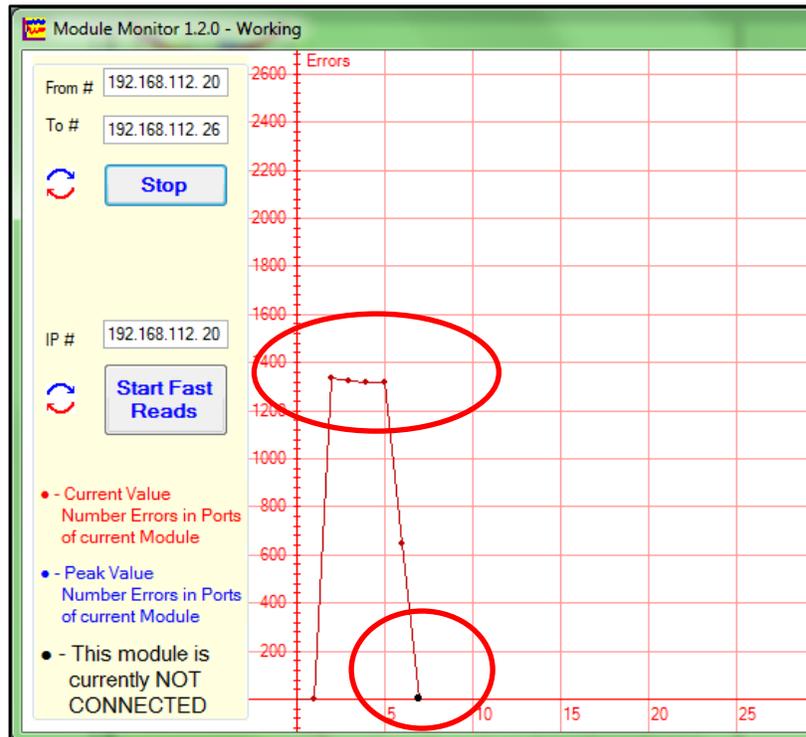


In this example the graph shows 7 black dots all at the “0” error line on the graph. This indicates that either module #1 has a problem (or is not powered) and the PC cannot gather data for modules #2 thru #7 or that your PC has an overall problem with seeing these addresses on the network.

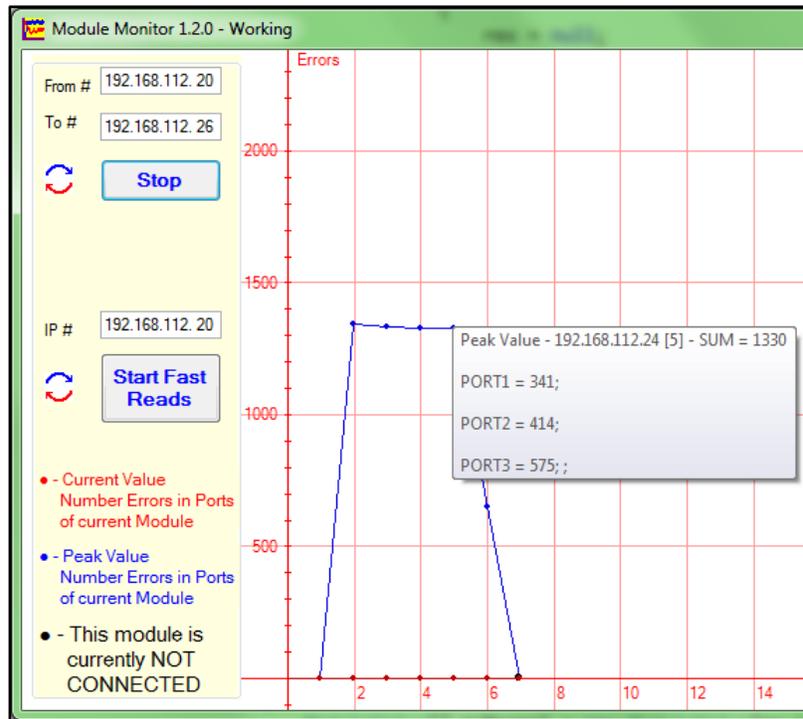


The graph shows the current running total of communication errors discovered. As long as no reset or disconnect/reconnect with any module occurs, the peak value of errors matches the current value of errors and the graph will be red.

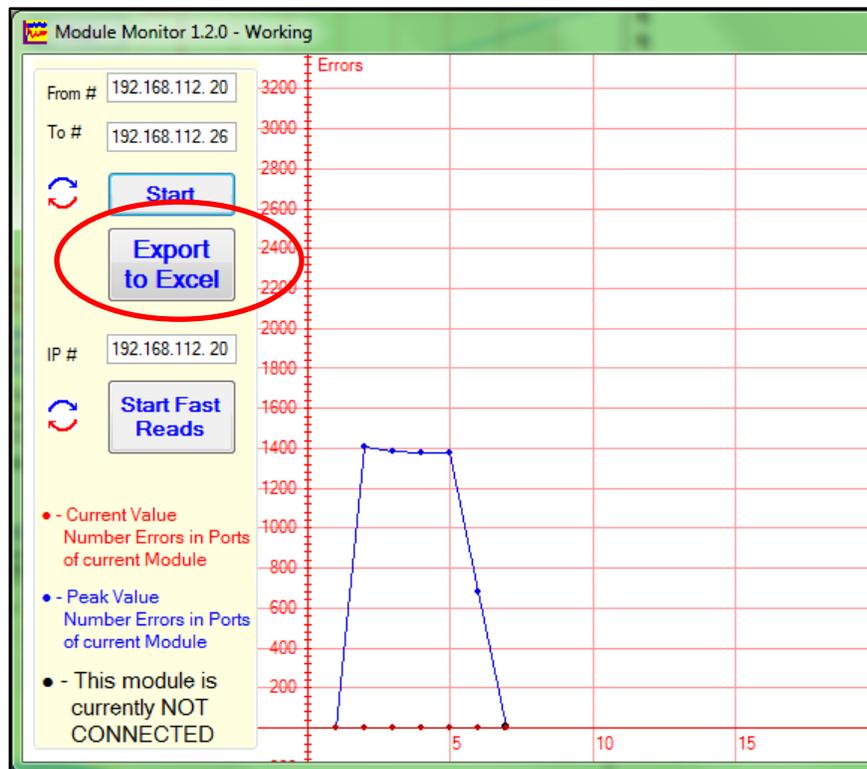
Note that in this example that all modules except #7 are connected, module #1 has no errors, modules #2 thru #5 have between 1200 and 1400 errors, and module #6 has between 600 and 800 errors.



In this example, the blue graph shows the peak values for errors for each module since the current capture began. The red graph shows the current count of errors. The appearance of separate blue and red graphs indicates that there has been a disconnect or module restart that has reset the error counters.



Once you are done with your capture, click the “Stop” button to stop the capture. At this point, the “Export to Excel” button appears. If desired, click this button to open a file save dialog window to save the data file.



## START FAST READ

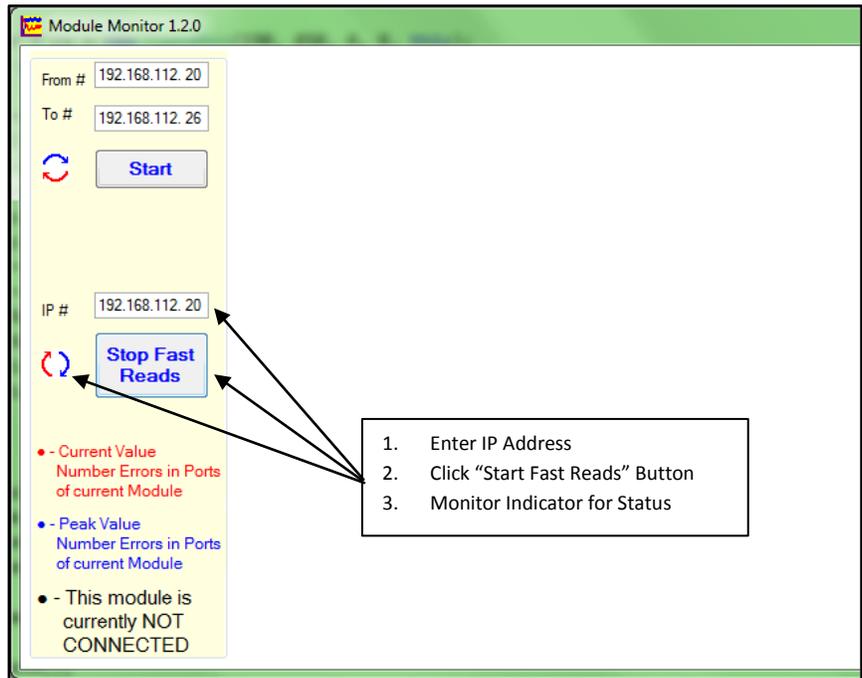
The “Fast Read” function allows for a quick “ALL OK” or “Something is Wrong” test for a single module.

To monitor a single module; you first have to stop capturing data from the group of modules you defined in the “From #” and “To #” text boxes.

You then the IP address of the module you want to monitor in the “IP #” text box and then click the “Start Fast Reads” button.

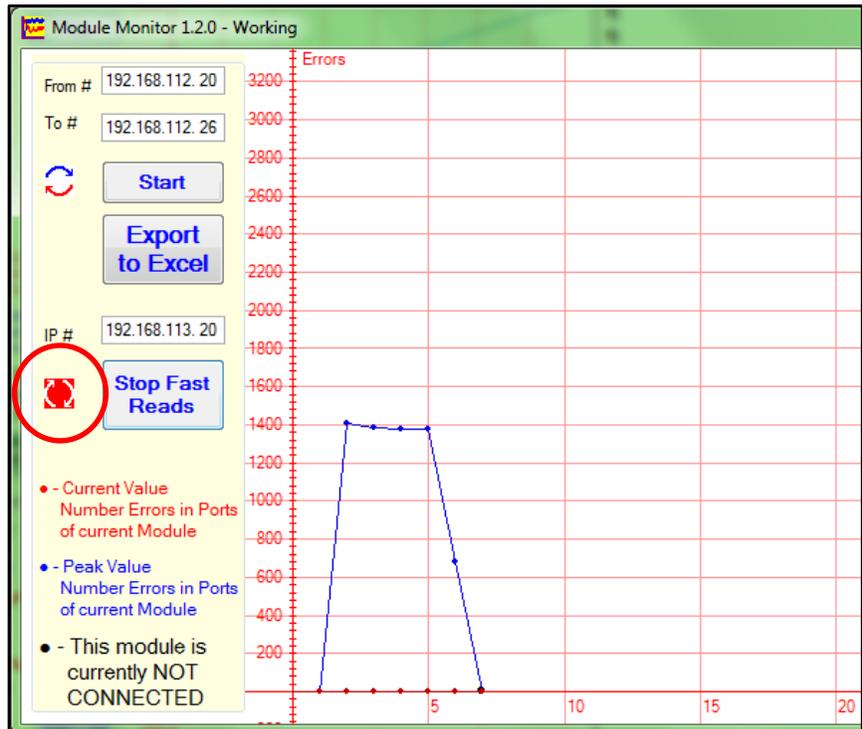
In this example, the PC will send packets of data to module at 192.168.112.20 at a high rate.

During the fast read, an indicator on the left of the button will spin to let you know that the fast writing/reading is functioning OK



If indicator is RED then there is a problem with the Fast Reads such as loss of connection with the module.

Click the “Stop Fast Reads” button to stop the function.



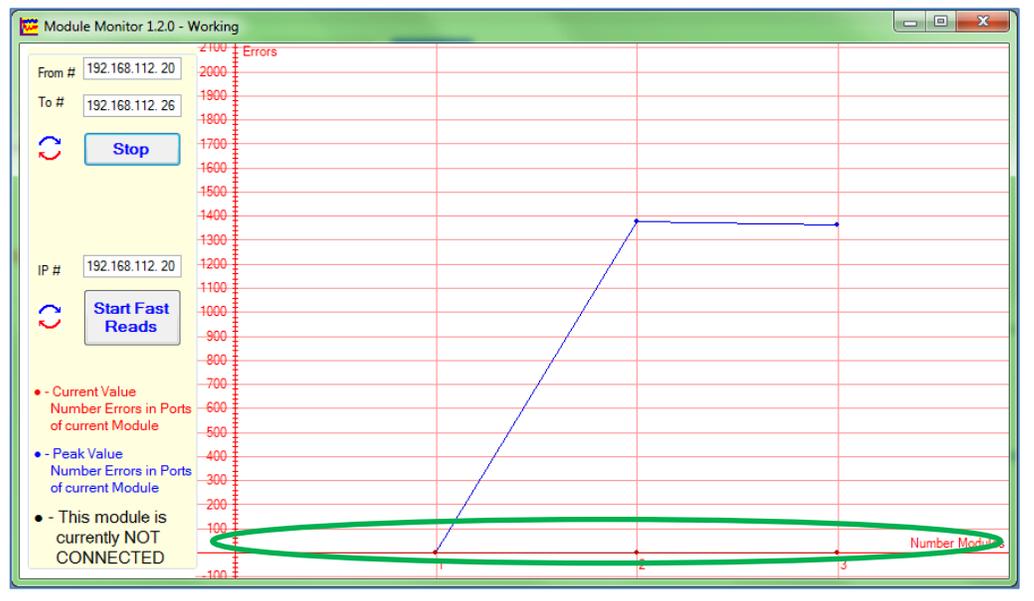
## ZOOM CONTROLS

If the data points on the graphs appear to be out of the screen window, you may need to adjust the zoom factor on the particular axis.

Hover your mouse pointer over the Y axis and then use your scroll wheel to zoom in or zoom out the scale of the Y axis values.



Hover your mouse pointer over the X axis and then use your scroll wheel to zoom in or zoom out the scale of the X axis values.



Here both the X and Y axes have to be zoomed out so you can see all modules and data points.

