

## Title: Connecting SigmaWin+ Ver.7 to SERVOPACKS through an MPiec Controller

**Product(s):** MP3000iec Series Controllers, SigmaWin+ Ver. 7

**Doc. No.** AN.MPIEC.20

### Application Overview

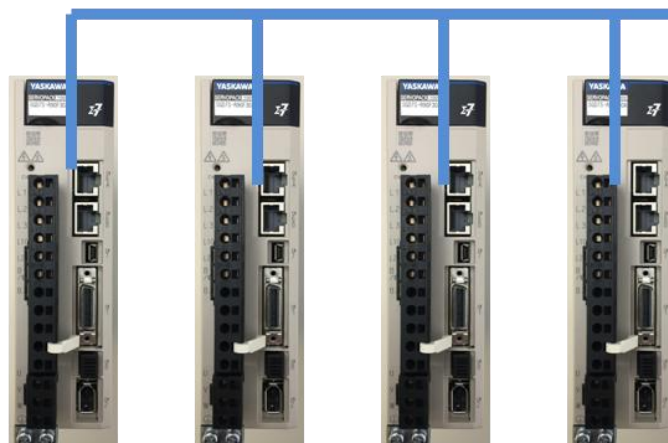
With the release of MotionWorks IEC Version 3.3 and Firmware 3.3, it is now possible to use SigmaWin+ Version 7 to connect to multiple SERVOPACK axes over the MECHATROLINK-III network.



IP Address:  
192.168.1.62



IP Address:  
192.168.1.1



## Title: Connecting SigmaWin+ Ver.7 to SERVOPACKS through an MPiec Controller

**Product(s):** MP3000iec Series Controllers, SigmaWin+ Ver. 7

**Doc. No.** AN.MPIEC.20

### Products Used

| Component  | Product and Model Number        |
|------------|---------------------------------|
| Servopack  | Sigma-7 Series Mechatrolink-III |
| Motor      | Sigma-7 Series Servomotors      |
| Controller | MP3000iec Series Controllers    |
| Software   | SigmaWin+ Version 7.20          |

### Application Requirements

MP3000iec Series Firmware 3.3 or greater

SigmaWin+ Ver. 7.11 or greater

MECHATROLINK-III Sigma-7 SERVOPACKS

### Application Solution and Benefits

Generally the user will connect with SigmaWin+ Version 7 for advanced tuning of axes, allowing traces down to 125 microseconds. Along with this, the many features of SigmaWin+ Version 7 allow identifying the inertia mismatch, finding notch filter frequencies through the use of the Easy FFT feature, running a Mechanical Analysis of a system, performing Auto-Tuning and utilizing One Parameter Tuning with many others to name.

With this feature, the user can now connect to all SERVOPACKS via the MP3000iec series controller instead of connecting/disconnecting to each SERVOPACKS as needed. Connecting to SigmaWin+ Version 7 from the MP3000iec controller is a big time saver and allows the user to perform all of the actions without the USB cable.

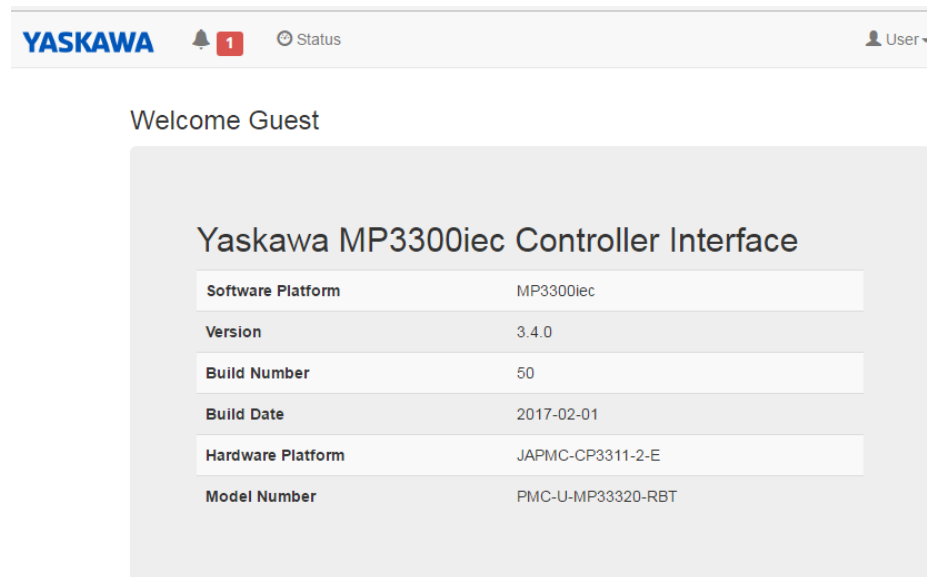
**Title: Connecting SigmaWin+ Ver.7 to SERVOPACKS through an MPiec Controller****Product(s):** MP3000iec Series Controllers, SigmaWin+ Ver. 7**Doc. No.** AN.MPIEC.20**Implementation**

Download the latest below:

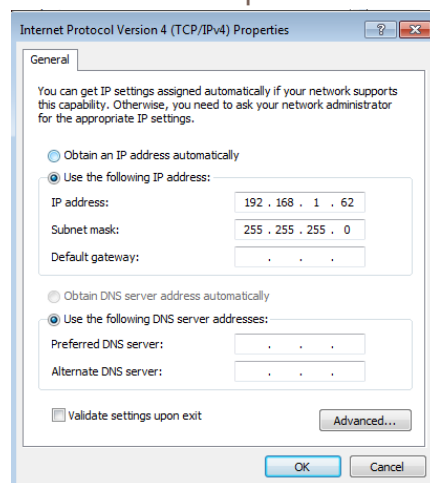
- [SigmaWin+ Version 7](#)
- [MotionWorks IEC](#) (must have partner login)

Steps:

1. Establish IP Address on MP3000iec Series Controller



- a.
2. Establish IP Address on pc



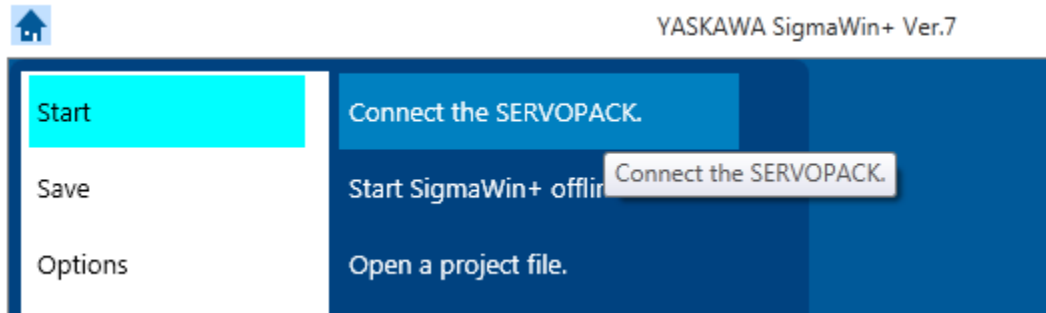
a.

## Title: Connecting SigmaWin+ Ver.7 to SERVOPACKS through an MPiec Controller

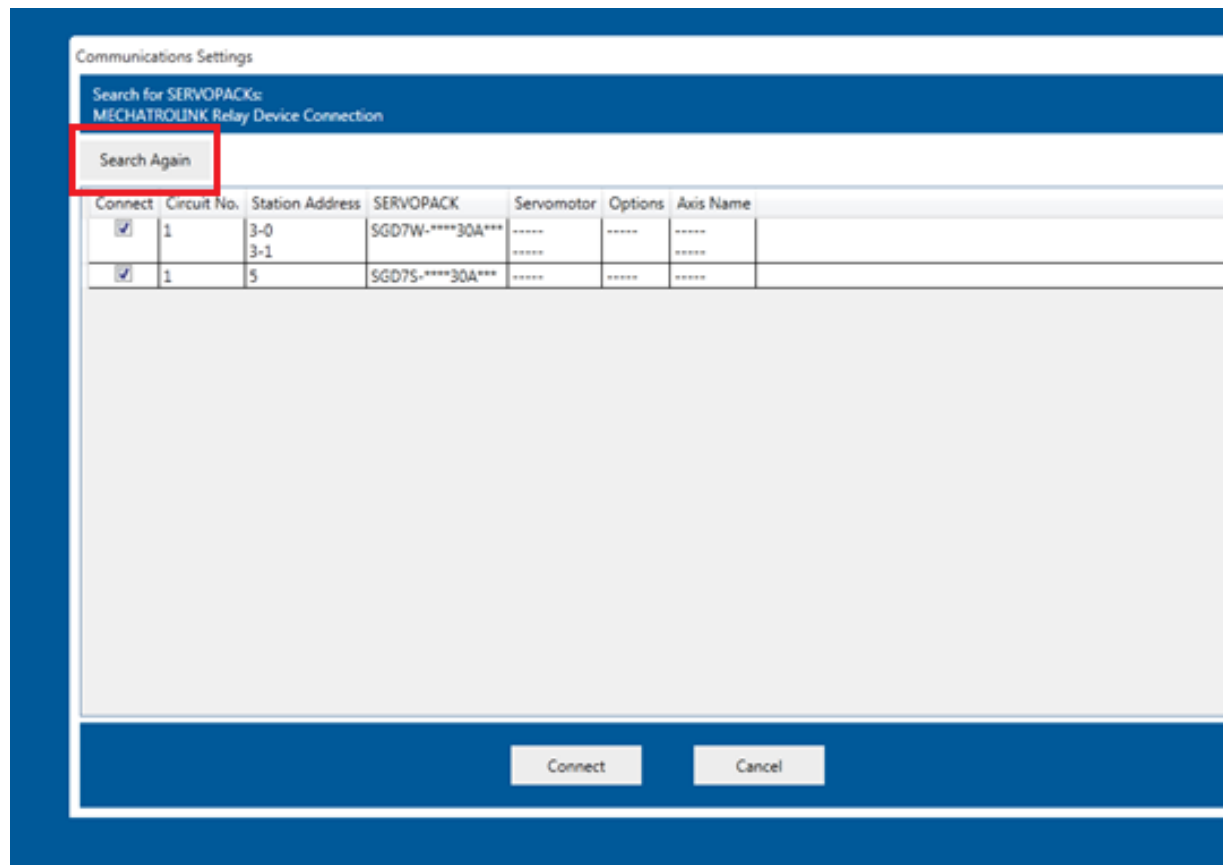
**Product(s):** MP3000iec Series Controllers, SigmaWin+ Ver. 7

**Doc. No.** AN.MPIEC.20

3. Open SigmaWin+ Version 7
4. Click the Home Button > Start > Connect the SERVOPACK



- a.
5. If the Communications Settings window does not show 'Select the connection method.', click on the 'Search Again' at the top left hand corner to search for SERVOPACKS



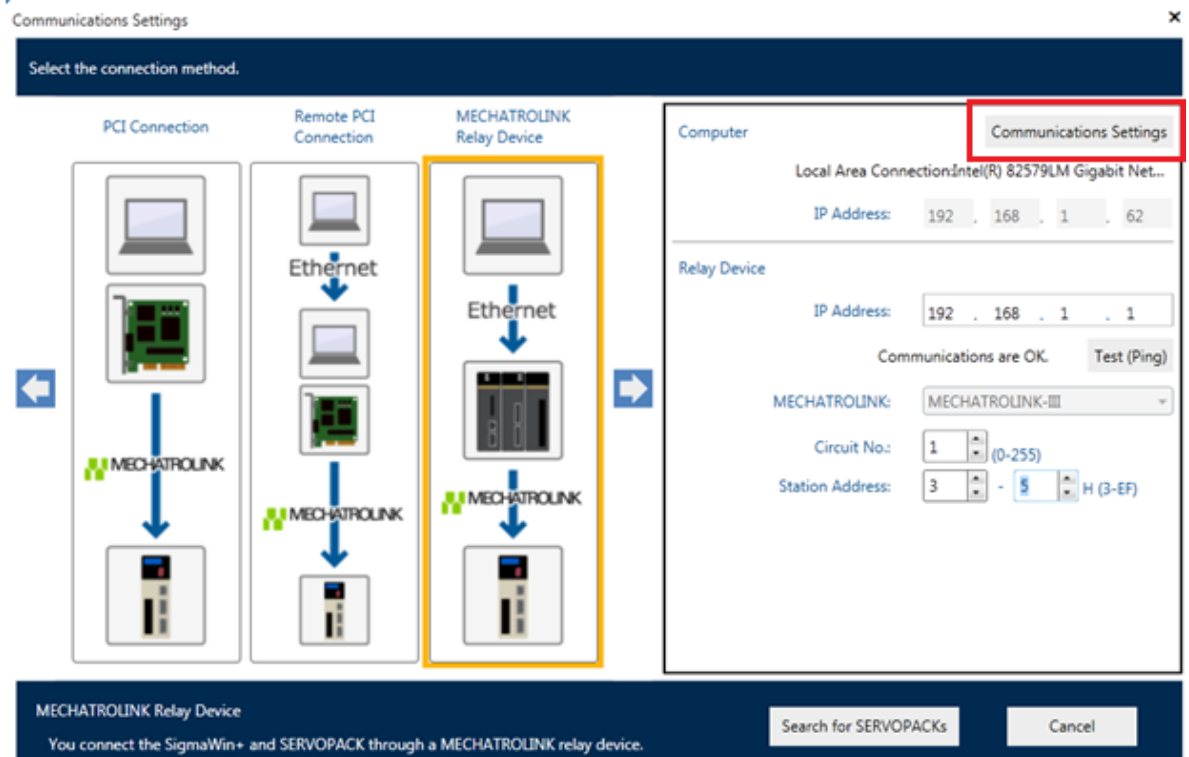
a.

## Title: Connecting SigmaWin+ Ver.7 to SERVOPACKS through an MPiec Controller

Product(s): MP3000iec Series Controllers, SigmaWin+ Ver. 7

Doc. No. AN.MPIEC.20

6. In the 'Select the connection method.' screen, click the 'Communications Settings' button at the top right hand corner



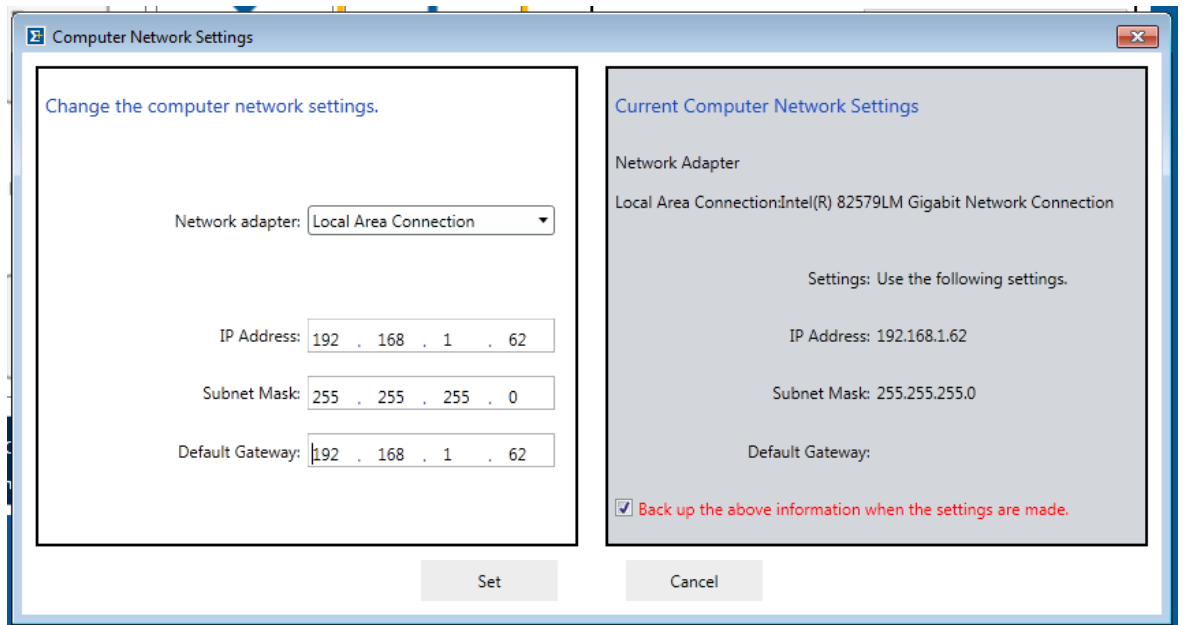
- a.
  7. Click the drop down arrow and select 'Local Area Connection'
  8. Type in the IP address from step 2 within 'IP Address' and 'Default Gateway'
  9. Check the box 'Backup the above information when the settings are made'

## Title: Connecting SigmaWin+ Ver.7 to SERVOPACKS through an MPiec Controller

Product(s): MP3000iec Series Controllers, SigmaWin+ Ver. 7

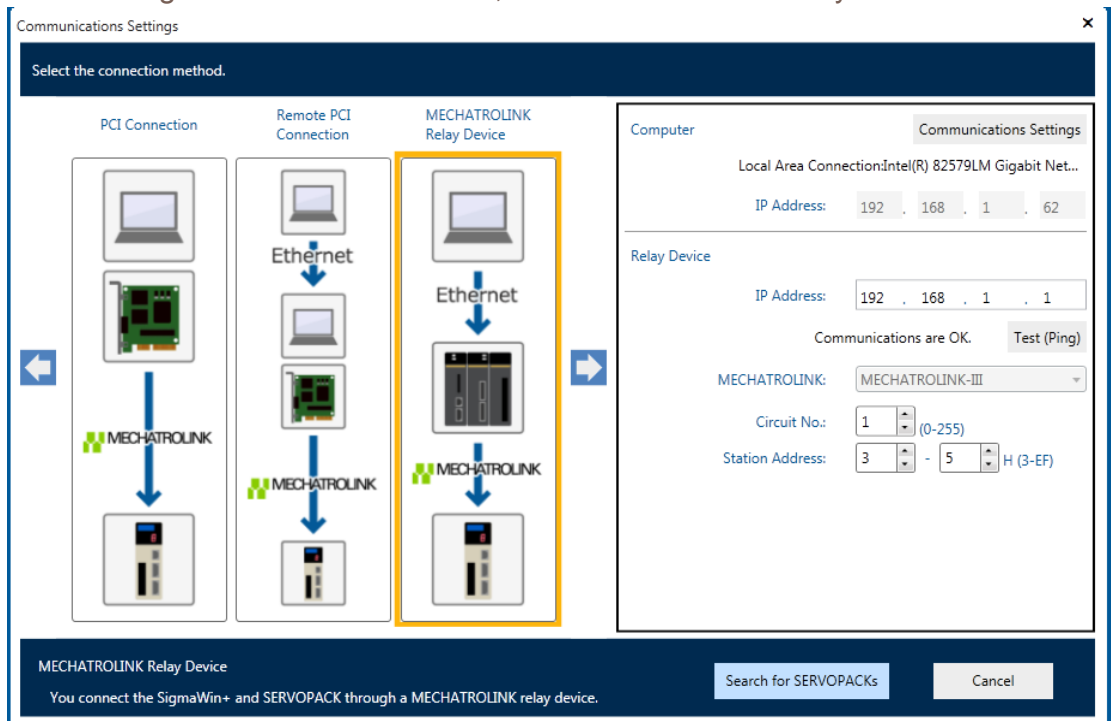
Doc. No. AN.MPIEC.20

10. Click 'Set'



a.

11. Click on the blue right arrow to find the icon, 'MECHATROLINK Relay Device'



a.

## Title: Connecting SigmaWin+ Ver.7 to SERVOPACKS through an MPiec Controller

**Product(s):** MP3000iec Series Controllers, SigmaWin+ Ver. 7

**Doc. No.** AN.MPIEC.20

12. In Relay Device Section at the right, type in the IP Address of the MPiec Controller
13. Click on 'Test(Ping)' to check the connection
  - a. 'Communications are OK.' should appear
14. Select the range of SERVOPACKS to find in Hex by starting at Station Address 3 to the maximum number of nodes on the system

Circuit No.:  (0-255)

Station Address:  -  H (3-EF)

- a.
15. Click on 'Search for SERVOPACKS'
16. The SERVOPACKS on the network should have been found and shown as below

Communications Settings

Search for SERVOPACKS:  
MECHATROLINK Relay Device Connection

Search Again

| Connect                             | Circuit No. | Station Address | SERVOPACK        | Servomotor | Options | Axis Name |
|-------------------------------------|-------------|-----------------|------------------|------------|---------|-----------|
| <input checked="" type="checkbox"/> | 1           | 3-0<br>3-1      | SGD7W-****30A*** | -----      | -----   | -----     |
| <input checked="" type="checkbox"/> | 1           | 5               | SGD7S-****30A*** | -----      | -----   | -----     |

Connect Cancel

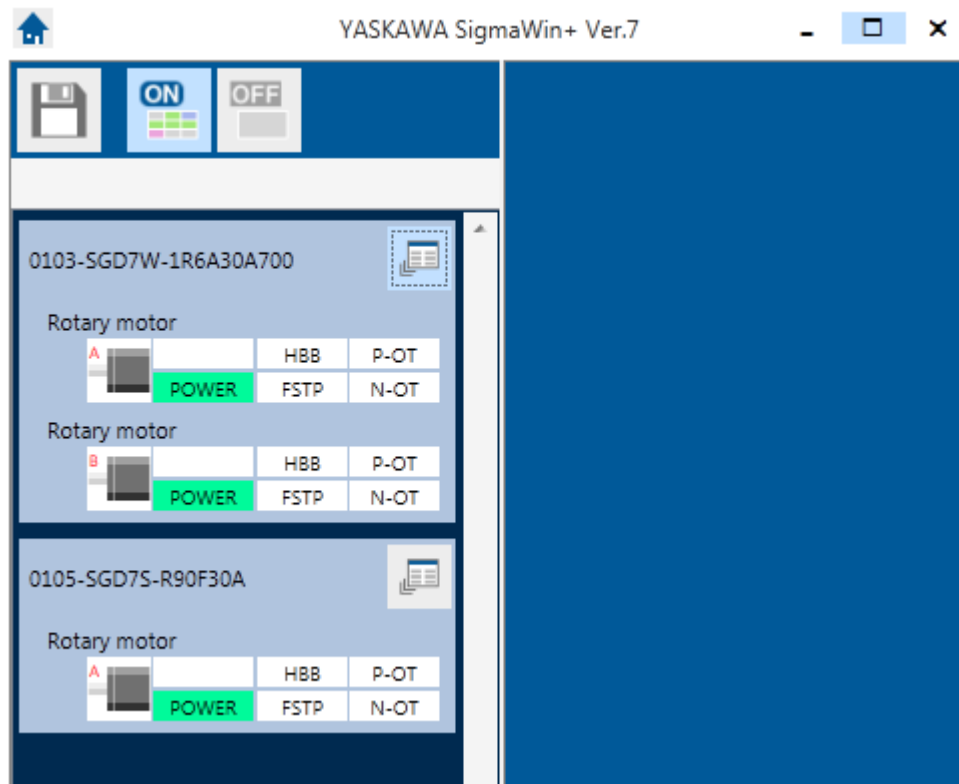
a.

## Title: Connecting SigmaWin+ Ver.7 to SERVOPACKS through an MPiec Controller

**Product(s):** MP3000iec Series Controllers, SigmaWin+ Ver. 7

**Doc. No.** AN.MPIEC.20

17. Use the checkbox at the left of each SERVOPACK to connect
18. Click 'Connect'
19. When connected, the screen will look like below



a.

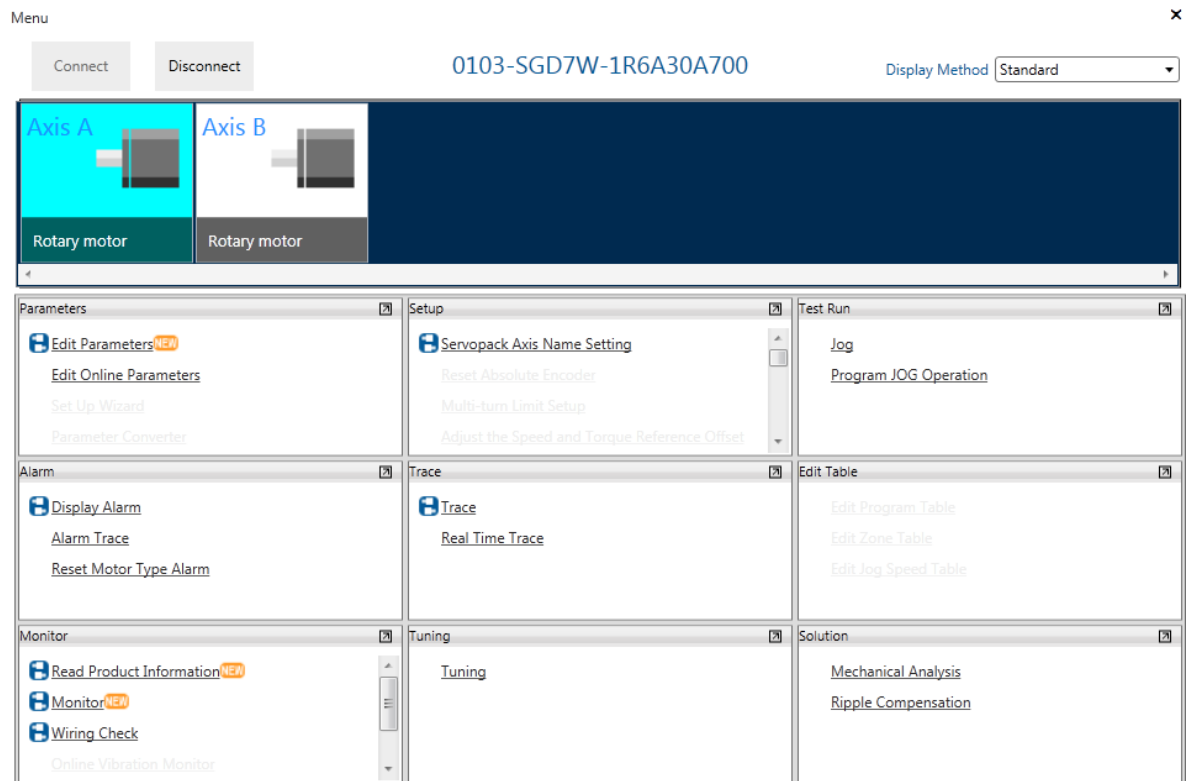


## Title: Connecting SigmaWin+ Ver.7 to SERVOPACKS through an MPiec Controller

Product(s): MP3000iec Series Controllers, SigmaWin+ Ver. 7

Doc. No. AN.MPIEC.20

20. Now it is possible to edit parameters, take traces, etc.



a.

## Title: Connecting SigmaWin+ Ver.7 to SERVOPACKS through an MPiec Controller

Product(s): MP3000iec Series Controllers, SigmaWin+ Ver. 7

Doc. No. AN.MPIEC.20

