1. From the Main Menu go to Settings->Fieldbus.

	Home		Т	123456789
	Job		26	1 (0)
	Pset	$\mathbf{v}$	30	()
<b>W</b>	Wireless Tools		ang	le :angle
	Accessories		T	None
0	Result			
<b>A</b>	Settings	Date & Time		
U	Tool General Setting	System Initialization		ssigned
	Logs	Ethernet Settings		
	Diagnostics	EOR Data Out		
2	System Maintenance	BCODE / VIN		
	User Management	PF-OP		
	About	FRD-OP		
		PFCS		
		VW-XML		
		AC-ToolsNet		
		ТҮТ-РҮ		
		Digital IO		
		Fieldbus		

- 2. Fieldbus Type Select Profinet.
- 3. Profile Type Select None if using Custom Bit Mapping.
  - a. If only using one tool and you require the IC-PCM mapping, select IC-PCM Profile.
- 4. Remote Tool Enable Mode Select how the remote enable is configured.
  - a. None No input is being used to enable/disable the tool.
  - b. 1-Line Tool is enabled when input is high. Tool is disabled when input is low.

- c. 2-Line Pulse the enable input to enable the tool. Pulse the disable input to disable the tool.
- 5. Bus Control System Enable if using inputs to control system behavior.
- 6. Enable Logs Enable to capture logs for all fieldbus events. This is helpful during initial communication setup.
- 7. The total number of Input and Output bytes allowed is 256.
- 8. All paired tools are listed on the screen.

Fieldbus		
Fieldbus Type	Profinet	2
Profile Type	None	
Remote Tool Enable Mode	1 Line ·	7
Bus Controls System		
Enable Logs		
Byte (s) Input:2/256 Output:22/256		
123456789 Input: 0 - 0 Output: 0 - 8	• •	Ø
XXXXX00000           Input: 1 - 1         Output: 9 - 21	ⓐ ⊚ (	Ø

9. Select the desired tool and assign inputs and outputs.

Edit I	Fieldbus - 123456789				
Input/Ou	tput		Input/Out	put	▼
Byte (s)					
	Input Assignment	$\oplus$		Output Assignment	$\oplus$
<u>0</u>	Bit 0 Bit 2 Bit 4 Bit 6 Bit 7		<u>0</u>	$ \begin{array}{c}       Bit \\       0 \\       1 \end{array} $ $ \begin{array}{c}       Bit \\       2 \end{array} $ $ \begin{array}{c}       Bit \\       3 \end{array} $ $ \begin{array}{c}       Bit \\       4 \end{array} $ $ \begin{array}{c}       Bit \\       5 \end{array} $ $ \begin{array}{c}       Bit \\       6 \end{array} $ $ \begin{array}{c}       Bit \\       7 \end{array} $	
			<u>1-4</u>	Peak torque	
			<u>5 - 8</u>	Final Angle	

🕞 Edit Fieldbus - XXXXX00000						
Input/Output		Input/Ou	tput	▼		
Byte (s)						
Input Assignment	$\oplus$		Output Assignment	$\oplus$		
$1 \qquad \begin{array}{c} \text{Bit} \\ 0 \\ 1 \\ \end{array} \begin{array}{c} \text{Bit} \\ 1 \\ \end{array} \begin{array}{c} \text{Bit} \\ 2 \\ \end{array} \begin{array}{c} \text{Bit} \\ 3 \\ \end{array} \begin{array}{c} \text{Bit} \\ 4 \\ \end{array} \begin{array}{c} \text{Bit} \\ 5 \\ 6 \\ \end{array} \begin{array}{c} \text{Bit} \\ 1 \\ \end{array} $	Bit 7	9	$\begin{array}{c} \text{Bit} \\ \textbf{0} \\ \textbf{1} \\ \textbf{2} \\ \textbf{3} \\ \textbf{4} \\ \textbf{5} \\ \textbf{6} \\ \textbf{6} \\ \textbf{7} \end{array}$	)		
		<u>10 - 17</u>	Controller cycle count			
		<u>18 - 21</u>	Peak torque			

10. When complete select the Save icon.

Fieldbus		(8)		
Fieldbus Type	Profinet	<b>•</b>		
Profile Type	None			
Remote Tool Enable Mode	1 Line			
Bus Controls System				
Enable Logs	Enable Logs			
Byte (s) Input:2/256 Output:22/256				
123456789 Input: 0 - 0 Output: 0 - 8		۷ ۲ ا		
2 XXXXX00000 Input: 1 - 1 Output: 9 - 21				

11. Use the Copy function to copy settings from one tool to another.

Fieldbus				
Fieldbus Type	Profinet			
Profile Type	None	2		
Remote Tool Enable Mode	1 Line	2		
Bus Controls System	Bus Controls System			
Enable Logs				
Byte (s) Input:1/256 Output:9/256				
123456789 Input: 0 - 0 Output: 0 - 8	() () () -	Ø		
( <u>2</u> ) XXXXX00000	(D) @ @	Ð		

Fieldbus	Copy settings from			•
Fieldbus Type	• 123456789	inet		
Profile Type		е		
Remote Tool Enable		10		
Bus Controls Syste				
Enable Logs				
Byte (s) Input:1/256 Output:9/	256			
123456789 Input: 0 - 0 0			۲	$\oslash$
2 XXXXX0000	0		© (2)	$\oslash$

**12.** Follow the Profinet Siemens Setup Procedure for assigning the appropriate network settings for Port 2 on the controller. **The PLC assigns the IP Address to the controller.** 

Note: Port 1 is used for accessing the controller web browser and should be on a different subnet than Port 2.

13. The onboard Help Menu has a complete list of definitions for all Ethernet and Fieldbus settings.



14. You can use the Diagnostic Mode to confirm Fieldbus functionality.

Fieldbus	•	
Fieldbus Type	Profinet -	
Profile Type	None 🗸	
Remote Tool Enable Mode	1 Line 🗸 🗸	
Bus Controls System		
Enable Logs		
Byte (s) Input:2/256 Output:18/256		
123456789 Input: 0 - 0 Output: 0 - 8	© (© Ø	
2 XXXXX00000 Input: 1 - 1 Output: 9 - 17		

← Fieldbus Diagnostics - 123456789						
		Fieldbus Master	Disconn	ected		
Input/Out	tput		Input/Out	put	•	
Force Out	tput				•	
Byte (s)						
	Input Assignment	$\oplus$		Output Assignment	$\oplus$	
<u>0</u>	$ \begin{array}{c c} \textbf{Bit} \\ \textbf{0} \\ \textbf{1} \\ \textbf{2} \\ \textbf{2} \\ \textbf{3} \\ \textbf{4} \\ \textbf{5} \\ \textbf{6} \\ \textbf{6} \\ \textbf{7} \\ \textbf{7}$			$ \begin{array}{c}       Bit \\       0 \\       1 \end{array} $ $ \begin{array}{c}       Bit \\       2 \end{array} $ $ \begin{array}{c}       Bit \\       3 \end{array} $ $ \begin{array}{c}       Bit \\       4 \end{array} $ $ \begin{array}{c}       Bit \\       5 \end{array} $ $ \begin{array}{c}       Bit \\       6 \end{array} $ $ \begin{array}{c}       Bit \\       7 \end{array} $		
				Peak torque 🗸 🗸		
				Final Angle 🔷 🗸		

Note: The PLC and controller must be on similar timing. The INSIGHT controller expects data no faster than every 50 ms. The customer PLC should have cycle rates no faster than 100 ms or communications issues could arise.