- Clear the cycle log on the controller prior to enabling ToolsNet.
 From the Main Menu go to Settings->AC Toolsnet.

| | Home | | | T | 12345678 |
|-------------|----------------------|-----------|-----------------------|-----|-----------|
| | Job | | | 26 | 1/0) |
| | Pset | | \mathbf{v} | 30 | () |
| U | Wireless Tools | | | ang | le :angle |
| | Accessories | | | T | None |
| 0 | Result | • | | | |
| (1) | Settings | | Date & Time | | |
| U | Tool General Setting | | System Initialization | | ssigned |
| | Logs | ► | Ethernet Settings | | |
| | Diagnostics | ► | EOR Data Out | | |
| ? | System Maintenance | ► | BCODE / VIN | | |
| | User Management | | PF-OP | | |
| | About | | FRD-OP | | |
| | | | PFCS | | |
| | | | VW-XML | | |
| | | \langle | AC-ToolsNet | | |
| | | | ТҮТ-РҮ | | |
| | | | Digital IO | | |
| | | | Fieldbus | | |
| | | | | | |

3. Select which tool you want to edit the Toolsnet Settings.

| AC-ToolsNet | None | 6 | 8 |
|-----------------|-------------------------|---|---|
| Enable Protocol | None | | |
| (| XXXXX00000 123456789 | | |

4. Enable Toolsnet and Enable Logs.

| AC-ToolsNet | 123456789 | 6 |
|-----------------|----------------|---|
| Enable Protocol | | |
| Enable Logs | | |
| System Type | Ingersoll Rand | |

- 5. The following Toolsnet parameters are defined by the user.
 - a. **System Type:** This should be Ingersoll Rand.
 - b. **PIM IP Address:** This is the address of the PIM server in ToolsNet 3.2. It should be set to the IP address of the ToolsNet client in ToolsNet 8.
 - c. **PIM Port Address:** The TCP port address for PIM communications (Default is 6575).
 - d. **Retry Interval (sec):** The amount of time to wait for message acknowledgement before sending the message again (Default 5).
 - e. **Keep Alive Timer (sec):** Repetition rate for keep alive messages (Default 30 seconds).
 - f. **Connection Retry Timer (sec):** After the number of message retries are exhausted, the connection is closed and reopened after the connection retry interval (Default 60 seconds).
 - g. System Number: Four digit System number identifier.
 - h. Station Number: Four digit Station number identifier.
 - i. **System Name:** Alphanumeric text identifier for the controller system name.
 - j. **Station Name:** Alphanumeric text identifier for the station.
 - k. Spindle Name: Alphanumeric text identifier for the tool.

| AC-ToolsNet | 123456789 | 6 |
|------------------------------|----------------|---|
| Enable Protocol | | |
| Enable Logs | | |
| System Type | Ingersoll Rand | |
| PIM IP Address | 192.168.5.33 | |
| PIM Port Address | 6575 | |
| Retry Interval (sec) | 5 | |
| Keep Alive Timer (sec) | 30 | |
| Connection Retry Timer (sec) | 60 | |
| System Number | 1 | |
| Station Number | 1 | |
| System Name | INSIGHTqcx | |
| Station Name | Station 1 | |
| Spindle Name | Spindle 1 | / |

6. Click on the Save Icon in the header to save the Toolsnet settings.

| AC-ToolsNet | 123456789 | 60 |
|-----------------|-----------|----|
| Enable Protocol | | |
| Enable Logs | | |

7. Click on the Copy Icon in the header to copy Toolsnet settings from one tool to another.

| AC-ToolsNet | 123456789 | (()() |
|-----------------|-----------|--------------|
| Enable Protocol | | |
| Enable Logs | | |

- 8. Assign a unique IP Address for each tool. Ensure that the IP Addresses have the same subnet as the first Ethernet port (0).
 - a. From the Main Menu, go to Wireless Tools.



b. Select a tool and go to Tool Settings.

| Wireless Tools | | | |
|---------------------|----------|--------------|-------|
| Radio Settings | | | \ni |
| 1. XXXXX00000 | (| \mathbf{O} | ٢ |
| 2. 123456789 | (| \mathbf{O} | ۲ |
| Available Tools (2) | | Pair | Þ |

c. Assign the appropriate IP Address and Save.

| | <u> </u> |
|--------------------------------|----------------------|
| ← Tool Settings | (8) |
| 123456789 | \bigotimes |
| MAC Address | 16:6B:20:31:02:00:00 |
| IP Address | 192.168.5.100 |
| Job Selection | Internal-Display |
| Boot Job | • |
| Persist IO State on Disconnect | • |
| Model Number | QXX2AT18PS6 |
| Serial Number | 123456789 |

9. When connected to the Toolsnet server, the AC Toolsnet status button on the Home screen will turn Green.

| 123456789 | - | • angle | | • | |)C | (| 👌 😉 🛇 🔕 |
|----------------|----------|----------|------------------------|-------|-----------------------|------------|----|------------|
| Next: angle | | | | | | | | |
| angle | | | | | | | | |
| , | Step#1 | | エ Angle(°) | | 〒 396 | ≁ Torque(N | m) | 〒 1.00 |
| \checkmark | | | 361 | | © 360 <u>↓</u> 324 | 0.09 | | <u>↓</u> 0 |
| Torque vs Time | | | | | | | | 6 |
| | | | | | | | | |
| 1 | | | | | | | | |
| 0.8 | | | | | | | | |
| 0.6 | | | | | | | | |
| 0.4 | | | | | | | | |
| 0.2 | | | | | | | | |
| o | | | | | \frown | | | |
| 192.168.5.5 | ② 176.10 | 58.5.6 (| 3 192.168.5.100 | PF-OP | AC-ToolsNet | | | |

10. Below are sample results using a Toolsnet simulator.

| the second second second | | | | | | | | | | | | |
|--|--|---------------------|--|---|-------------------------------------|--------------------------------------|-------------|--|--------------------------------------|--------|------|---|
| ToolsNet Simulator 0.0.2 | | | | | | | | | | - | | × |
| Server ilP 192.168.5.33 | V PIM port 6575 | | Cycle result | ts | ⊖ Graph | 15 | | | | | | |
| Tool Tool IP 192.168.5.100 System type 0019 Station number 0001 | V Tools connected System number Connection | 1 0001 Online | Tool IP 192.168.5.100 192.168.5.100 192.168.5.100 | System Type 0 0019 0 0019 0 0019 0 0019 | System Numb 0001 0001 0001 | er Station M 0001 0001 0001 | Number | Timestamp 2021-07-08 10:51:02 2021-07-08 10:51:06 2021-07-08 10:51:07 | Rundown S 01145 01146 01147 | Geq VI | N | |
| System name INSIGHTq Station name Station 1 Spindle name Spindle 1 Cycle count 1147 | ∝ ✓ Monitor comms | Delete | | | | | | | | | | |
| Programs | | | | | | | | | | | | |
| 0003 job2-/ | 4-100-200 | | | | | | | | | | | |
| | | | < | | | | | | | | | > |
| Comms monitor | | | Additional VIN I | nfo | Parameter Info | | | | | | | |
| 19 | 2.168.5.102 192.168 | 8.5.103 | VIN Identi 0001 0002 | VIN No | Spindle No 0000 | Program 0003 | ID 00001 | Name V Angle | alue Type | Unit | Step | |
| ٢ | Г | > | 0003 | | | | | | | | | |
| | | Stop | Online cycle res | ults 1 to 3 of 3 | • | | | | | | | |