Introduction

Optional Communication Cards

These instructions explain how to update firmware via the internet for the following GS4 optional communication cards:

- GS4-CM-ENETIP – EtherNet/IP™ communication card
- GS4-CM-MODTCP – Modbus TCP communication card

Only one comm card can be installed in a drive at a time.

Optional Communication Card Location

<table>
<thead>
<tr>
<th>GS4 Optional Communication Cards *</th>
<th>Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>Description</td>
</tr>
<tr>
<td>GS4-CM-MODTCP *</td>
<td>DURApulse communication card, Modbus TCP, 10/100 Mbps auto-detect, Ethernet (RJ45) port. For use with GS4 series AC drives.</td>
</tr>
<tr>
<td>GS4-CM-ENETIP *</td>
<td>DURApulse communication card, EtherNet/IP 10/100 Mbps auto-detect, Ethernet (RJ45) port. For use with GS4 series AC drives.</td>
</tr>
</tbody>
</table>

* Communication cards can be installed only in Slot #1 of the GS4 drive, and only one comm card at a time can be installed.

WARNING: AC INput poWeR must be dIsCoNNeCted befoRe peRfoRmING ANy mAINteNANCe. Do Not CoNNeCt oR dIsCoNNeCt WIres oR CoNNeCtoRs WhIle poWeR Is ApplIed to the CIRCuIt. mAINteNANCe must be peRfoRmed oNly by A quAlIfIed teChNICIAN.

WARNING: A ChARGe mAy stILL remAin IN the dC-lINk CApACItoR WIth hAzARdous voltAGes, eveN If the poWeR hAs beeN tuRNed off. To AvoId peRsoNAl INjuRy, do Not Remove the CoveR of the AC dRIve uNtIl All “dIspLAY led” lIGhts oN the dIGItal keypAd ARe off. pLeAse NoTE thAt there ARe lIve CompoNeNts exposed WIthIN the AC dRIve. do Not touCh these lIve pARts.

NOTE: (table)
Removing the Card Slot Cover

Drive Frames A, B, and C
Remove the cover screw and press the tabs on both sides to remove the cover. Cover screw torque is 6.9–8.7 in·lb [0.78–0.98 N·m].

Drive Frame D
Loosen the captive screws and press the tabs on both sides to remove the cover. Cover screw torque is 6.9–8.7 in·lb [0.78–0.98 N·m].

Drive Frames E, F, and G
Loosen the captive screws, lift the cover slightly and pull it outward to remove (Frame E shown). Cover screw torque is 10.4–13.0 in·lb [1.18–1.47 N·m].
**CONNECTING COMM CARD TO PC**

**GS4-CM-xxxxxx RJ45 PIN DESCRIPTION**

<table>
<thead>
<tr>
<th>PIN</th>
<th>Signal</th>
<th>Description</th>
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<th>Signal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TX+</td>
<td>Transmit Data +</td>
<td>5</td>
<td>–</td>
<td>N/C</td>
</tr>
<tr>
<td>2</td>
<td>TX–</td>
<td>Transmit Data –</td>
<td>6</td>
<td>RX–</td>
<td>Receive Data –</td>
</tr>
<tr>
<td>3</td>
<td>RX+</td>
<td>Receive Data +</td>
<td>7</td>
<td>–</td>
<td>N/C</td>
</tr>
<tr>
<td>4</td>
<td>–</td>
<td>N/C</td>
<td>8</td>
<td>–</td>
<td>N/C</td>
</tr>
</tbody>
</table>

**GS4-CM-xxxxxx OPTIONAL CABLE**

Cat5E patch (straight-through) shielded-twisted-pair cable with RJ45 male connectors:
- Part # C5E-STPxx-Snn, where:
  - xx = color; BK-black, BL-blue, GN-green, GY-gray, OR-orange, PL-purple, RD-red, YL-yellow
  - yy = length; 3, 7, 10, 14, 25, or 50 feet

**FIRMWARE UPDATE INSTRUCTIONS**

The comm card firmware can be updated via GSOF2 configuration software for GS4 AC drives, or via an internet browser. The browsers we support are Internet Explorer, Microsoft Edge, Chrome, Firefox and Safari.

1) Short the JP2 jumper of the card, and then power on to enter the BOOT mode.

2) Set the PC IP address to **192.168.1.50** and connect the PC and the GS4 comm card with the ethernet cable (as shown in step #1).
3) a) If using the upgrade icon in GSOFT2 configuration software, the browser when launched will path to IP address **192.168.1.3**.

![GSOFT2 Configuration Software](image1)

b) If using an internet browser, enter the IP address **192.168.1.3** in the browser's address bar to connect to the web page.

![Internet Browser](image2)

4) Click the button to select the firmware file.

![Firmware Update Screen](image3)
5) Select the firmware file you want to update.

6) Click the button for firmware update.

7) After the firmware update is completed, the Update Status is displayed as “Firmware update success.”

8) Turn off the power and remove the short from JP2.