

# DriveLogix5730 Controller with Embedded EtherNet/IP Option Card, Firmware Version 3.1.4

This publication describes enhancements and anomalies for the DriveLogix5730 controller with Embedded EtherNet/IP™ option card for the firmware version 3.1.4.

Topic	Page
Enhancements	Below
Corrected Anomalies	Below
Restrictions	<a href="#">2</a>
Rockwell Automation Support	<a href="#">4</a>

## Enhancements

This enhancement has been provided with this firmware version.

### Quality of Service (QoS) Feature Now Supported

This version of firmware provides the Quality of Service (QoS) feature, which allows the DriveLogix5730 controller with the embedded EtherNet/IP option card installed in a PowerFlex® 700S AC drive to communicate with the embedded EtherNet/IP port on a PowerFlex 755 AC drive.

## Corrected Anomalies

There are no corrected anomalies in this firmware version.

## Restrictions

The following restrictions apply to this firmware version.

### Ethernet Switch Port Configuration

The option card supports only the following EtherNet/IP settings.

- 10 Mbps half duplex
- 10 Mbps full duplex
- 100 Mbps half duplex
- 100 Mbps full duplex

Depending on the option card and firmware revision, different port configuration is required.

- **Option Cards with Firmware Version 1.28 or Earlier**  
Based on the IEEE 802.3u autonegotiation protocol, it selects the mode automatically. If you connect a option card to a port on a 10/100 Mbps switch, you must set this port to **autonegotiate**.

If you set this port manually to one of the modes listed above, a mismatch between option card and switch modes of operation may occur. This will result in significant reduction of system performance.

- **Option Cards with Firmware Version 1.33 or Later**  
Starting with version 12.0 of RSLogix™ 5000, you can manually configure the communication rate and duplex of the option card. Additionally, you can manually configure the communication rate and duplex on both the option card and the switch port that is connected to the option card. However, the configurations must match on both devices.

### Changing Ports on an Ethernet Switch - Autonegotiation Setting Only

If you disconnect the option card from one port and connect to a different port, regardless of whether the new port is on the same or a different switch (or a hub), follow these steps:

1. Disconnect the cable from the port to which the option card is currently connected.
2. Wait until the option card Link Status (LNK) LED is off.
3. Connect the cable to the new port.

This procedure will restart the autonegotiation process at the option card side. You can also restart the option card itself.

---

## DNS Addressing with NetLinx Embedded EtherNet/IP Option Cards

Depending on module configuration, DNS addressing of remote NetLinx embedded EtherNet/IP option cards may not function properly with RSLinx (version 2.41) and RSLogix 5000 (version 12 and earlier). If you experience this problem, refer to the Technical Support document A56128176, “How to Make DNS Addressing work with NetLinx products.” Download the document at <http://www.rockwellautomation.com/support/> or contact Technical Support at 262.512.8176.

## Connection Limitations

The DriveLogix5730 controller with embedded EtherNet/IP option card can support up to 32 I/O connections. However, if all connections are at a maximum packet size of 126 DINTS, the option card can only support up to 21 connections.

Connections are a measure of the number of devices with which a controller or communication card communicates. Some examples of devices that consume a connection include:

- a chassis of discrete I/O (rack-optimized)
- an analog module
- a produce/consume tag

For more information on how the DriveLogix5730 controller with embedded EtherNet/IP option card uses connections, refer to the DriveLogix5730 Controller for PowerFlex 700S Drives with Phase II Control User Manual, publication [20D-UM003](#).

## Changing the Subnet Mask

After setting or changing the Subnet Mask on a configured DriveLogix5730 controller with embedded EtherNet/IP option card, you must cycle power on it for the Subnet Mask to take effect.

## Diagnostic Counters

RSLogix™ 5000 software and RSLinx™ software display many diagnostic counters for the DriveLogix5730 controller with embedded EtherNet/IP option card. However, some of these fields are not supported by the embedded EtherNet/IP option card. The fields that are not supported are permanently displayed as 0.

# Spare Allen-Bradley Parts

## IGMP Support

The option card supports the following versions of IGMP (Internet Group Management Protocol):

- Version 1.0 (firmware version 1.33 and earlier)
- Version 2.0 (firmware version 2.1 and later)

## Rockwell Automation Support

Rockwell Automation provides technical information on the Web to assist you in using its products. At <http://www.rockwellautomation.com/support/>, you can find technical manuals, a knowledge base of FAQs, technical and application notes, sample code and links to software service packs, and a MySupport feature that you can customize to make the best use of these tools.

Rockwell Automation also provides complimentary phone support for drives, option cards, and peripherals. For further help, contact a Customer Support representative in one of the following ways:

United States or Canada	1.262.512.8176
Outside United States or Canada	Use the <a href="#">Worldwide Locator</a> at <a href="http://www.rockwellautomation.com/support/americas/phone_en.html">http://www.rockwellautomation.com/support/americas/phone_en.html</a> , or contact your local Rockwell Automation representative.

For an additional level of technical phone support for installation, configuration, and troubleshooting, we offer TechConnect support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://www.rockwellautomation.com/support/>.

Allen-Bradley, PowerFlex, RSLogix 5000, RSLinx, Rockwell Software, Rockwell Automation, and TechConnect are trademarks of Rockwell Automation, Inc.

Trademarks not belonging to Rockwell Automation are property of their respective companies.

Rockwell Otomasyon Ticaret A.Ş., Kar Plaza İş Merkezi E Blok Kat:6 34752 İçerenköy, İstanbul, Tel: +90 (216) 5698400

**[www.rockwellautomation.com](http://www.rockwellautomation.com)**

### Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication 20D-RN042A-EN-P - April 2012

Copyright © 2012 Rockwell Automation, Inc. All rights reserved. Printed in the U.S.A.