

ControlLogix HART Analog I/O Modules

Catalog Numbers 1756-IF8H, 1756-OF8H

Topic	Page
Before You Begin	2
Enhancements	4
Corrected Anomalies	4
Known Anomalies	6
Additional Resources	7

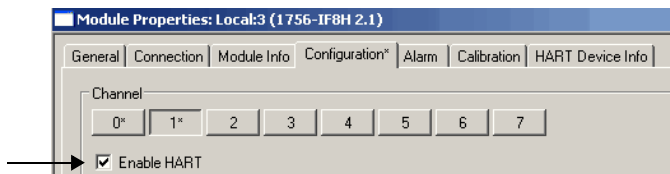
About This Publication

These release notes correspond to major revision 2, minor revision 1 of module firmware. Use this firmware with RSLogix 5000 software, version 15.00 or later.

Before You Begin

Before using your module, you must review these tasks:

- Configure the module in RSLogix 5000 software with the following:
 - Version 15 or later, install the module add-on profile by going to <http://www.rockwellautomation.com/support/downloads.html> and choosing RSLogix 5000 I/O Modules Add-On-Profiles from the list.
- Enable HART data in the module Input Data tag by doing the following:
 - From the Configuration tab on the Module Properties dialog box, check Enable HART for each channel that you want to use HART features.

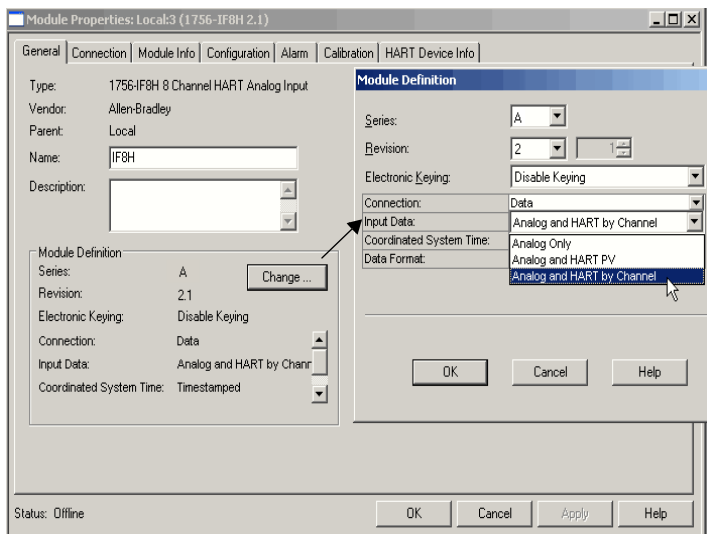


You must enable HART to see HART data in the Input Tag or to use asset management software.

IMPORTANT The 1756-IF8H and 1756-OF8H module firmware includes electronic data sheet (EDS) files. This allows RSLinx software to upload and register the EDS files directly from the modules.

- Populate HART data in your Input Data tag by doing the following:
 - On the General tab, click Change in the Module Definition box.
 - From the Input Data pull-down menu, choose Analog with HART PV or Analog and HART by Channel.

For a description of these two Input Data types, see Chapter 4 in the ControlLogix HART Analog I/O Modules User Manual, publication [1756-UM533](#).



To use asset management software, such as FactoryTalk AssetCentre or Endress+Hauser FieldCare, refer to the ControlLogix HART Analog I/O Modules User Manual, publication [1756-UM533](#).

Enhancements

See the table for a list of enhancements provided with revision 2.1

Table 1 - Enhancements with Revision 2.1

Cat. No.	Enhancement
1756-IF8H 1756-OF8H	A new Input Data tag format, Analog and HART by Channel, groups analog information per channel. This makes it easier to view all the data related to one field device.
	The Input Data tag for Analog and HART PV includes additional information for ExtDeviceStatus, UpdatedStatusReady, FieldDeviceStatus, and HART 7 manufacturer identification codes. These tags also are included in the Analog and HART by Channel Input Data tag.
	Additional device diagnostics are available on the HART Device Info tab.
	A Unicast connection can be enabled for HART analog modules by using RSLogix 5000 software, version 18 or later, in a remote EtherNet/IP chassis.
	When changes are made to the Add-On Profile tabs, the channel button settings are preserved.

Corrected Anomalies

See the table that lists the firmware revision anomalies that have been corrected with revision 2.1.

Table 2 - Corrected Anomalies with Revision 2.1

Cat. No.	Description
1756-IF8H 1756-OF8H	<p>CORRECTED: Remote over ControlNet network creates error if you add a module.</p> <p>If you clear the Use Scheduled Connection Over ControlNet checkbox on a HART module in a chassis connected to the Logix controller via the ControlNet network, then if you subsequently add another module in the local rack, you get this error message: 'Failed to create new module. ControlNetScheduled invalid property'.</p>

Table 2 - Corrected Anomalies with Revision 2.1

Cat. No.	Description
1756-IF8H 1756-OF8H	CORRECTED: If you use drag-and-drop or copy-and-paste with the module, you get an error message.
	CORRECTED: A fatal error occurs for RSLogix 5000 software if more than one user accesses the same controller and deletes a 1756 HART module from the I/O configuration tree.
	CORRECTED: For HART field devices with HART 6 or later that support Device Variables but not Command 50, which reports how Dynamic Variables (PV, SV, TV, FV) are mapped to Device Variables, the 1756 HART module would use Device Variable codes in Command 9 that did not match the assigned PV, SV, TV, FV. Starting with firmware revision 2.1, Command 3 or Command 9 is used as described in Table 3 below.

Table 3 - Dynamic Variable Assignment

HART Version	HART Device Reports PV, SV, TV, FV Assignments in Command 50	HART Command Used by 1756 Module to Collect PV, SV, TV, FV	Device Variable Codes Used in Command 9 for PV, SV, TV, FV
5	N/A	3	N/A
6	No	3	N/A
	Yes	9	As Reported in Command 50
7 or later	No	9	246, 247, 248, 249
	Yes		As Reported in Command 50

Known Anomalies

See the table that lists the known anomalies that carried over from firmware revision 1.2

Table 4 - Known Anomalies with Revision 2.1


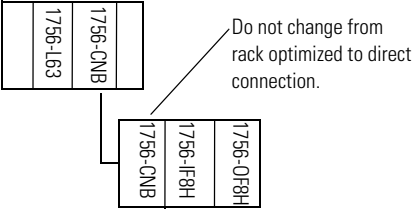
Cat. No.	Description
1756-IF8H 1756-OF8H	<p>Cannot change Input Data tag once module is created. In RSLogix 5000 software, version 15, you get an error if you change the Input Data tag and download the project. You must delete the HART module and recreate it with the different Input Data tag.</p>
	<p>Rack optimized cannot be changed to direct connection. If you configured the 1756-CNB module for rack optimized, you cannot change it later, or you receive this error message.</p>   <p>Do not change from rack optimized to direct connection.</p> <p>To change the 1756-CNB rack-optimized selection, delete it and create it again. To avoid losing the configuration of the modules in the remote rack, use this procedure.</p> <ol style="list-style-type: none"> 1. Copy the 1756-CNB module to a new ControlNet node address. 2. Copy the modules in the remote rack to the new 1756-CNB module. 3. Delete the old 1756-CNB module and change the new 1756-CNB node address to the correct ControlNet node address.

Table 4 - Known Anomalies with Revision 2.1

Cat. No.	Description
1756-IF8H 1756-OF8H	Channel select button does not persist across dialog boxes. The selection for the Channel Selection button does not carry over from dialog box to dialog box, as you click tabs at the top of the dialog boxes.

Additional Resources

These documents contain additional information concerning related Rockwell Automation products.

Resource	Description
1756-IF8H ControlLogix Analog Input Module with HART Protocol Installation Instructions, publication 1756-IN608	Publication describes how to install a 1756-IF8H analog input module.
1756-OF8H ControlLogix Analog Output Module with HART Protocol Installation Instructions, publication 1756-IN609	Publication describes how to install a 1756-OF8H analog output module.
ControlLogix HART Analog I/O Modules User Manual, publication 1756-UM533	Publication describes how to configure and troubleshoot 1756-IF8H and 1756-OF8H analog I/O modules.
1756 ControlLogix I/O Modules Specifications Technical Data, publication 1756-TD002	Publication provides specifications for the 1756-IF8H and 1756-OF8H analog I/O modules.

You can view or download publications at <http://www.rockwellautomation.com/literature>. To order paper copies of technical documentation, contact your local Rockwell Automation distributor or sales representative.

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.

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/>.

Installation Assistance

If you experience a problem within the first 24 hours of installation, please review the information that's contained in this manual. You can also contact a special Customer Support number for initial help in getting your product up and running.

United States or Canada	1.440.646.3434
Outside United States or Canada	Use the Worldwide Locator at http://www.rockwellautomation.com/support/americas/phone_en.html , or contact your local Rockwell Automation representative.

New Product Satisfaction Return

Rockwell Automation tests all of its products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning and needs to be returned, follow these procedures.

United States	Contact your distributor. You must provide a Customer Support case number (call the phone number above to obtain one) to your distributor to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for the return procedure.

Documentation Feedback

Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete this form, publication [RA-DU002](#), available at <http://www.rockwellautomation.com/literature/>.

Allen-Bradley, Rockwell Software, Rockwell Automation, RSLogix 5000, ControlLogix, FactoryTalk AssetCentre, 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

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 1756-RN636B-EN-P - February 2011

PN-93205

Supersedes Publication 1756-RN636A-EN-P - January 2007

Copyright © 2011 Rockwell Automation, Inc. All rights reserved. Printed in the U.S.A.