

Process for Including Support for your Field Device in the 375 / 475 Field Communicator

Emerson's Goal

Emerson's goal for the 375 and 475 Field Communicators is to be truly universal. Our goal is to support all known HART® and FOUNDATION™ fieldbus devices. While registration with the HART Foundation and the Fieldbus Foundation are a pre-requisite for including that device in the 375 / 475, there are some additional steps that Emerson requires to assure our customer will have trouble free operation with any device supported by the 375 / 475.

HART Device Integration

The following steps should be taken to incorporate a HART Device Description into the 375 or 475 Field Communicator:

- 1) Using the Field Communicator Easy Upgrade Utility, upgrade your 475 or 375 Field Communicator to the latest software revision. If you do not currently have the latest Easy Upgrade Utility, it can be downloaded for no charge from [here](#).
- 2) Download the [Field Communicator Device Developer's Toolkit for HART devices](#).
- 3) Develop the Device Description (i.e. DD) for your device.
- 4) Using the 475 Device Developer's Toolkit, generate the 475 Device Description Package (DDP) for the device. Each device DDP includes an .HHD and an HDD file that are generated by the toolkit.
- 5) Load the DDP (i.e. the .HHD and .HDD) file into the 375 or 475 using the *Easy Upgrade* Utility.
- 6) Once the DD is loaded into the device developer's 375 / 475, enable the Event Capture Function capability on the unit. The procedure for doing this is explained in Section 2 of the User's Manual for the toolkit.
- 7) Run a complete test of all functions performed by the DD with the 375 / 475 connected to the actual field device.
- 8) Transfer the Event Capture File (or Files) to a PC. See Section 2 of the "HART Toolkit for Device Developers User Manual" for additional information.
- 9) Register your DD with the HART Communication Foundation.



- 10) Send your DD, along with the Event Capture Files, to the [HART Communication Foundation](#). Do not send the DD and Event Capture files directly to Emerson.
- 11) Emerson will receive your DD (in tokenized binary form) directly from the HART Communication Foundation.
- 12) You will be contacted by Emerson after successful verification of your DD or if any problems are encountered with it.

FOUNDATION Fieldbus Device Integration

The following steps should be taken to incorporate a FOUNDATION Fieldbus Device Description into the 375 or 475 Field Communicator:

- 1) Using the Field Communicator Easy Upgrade Utility, upgrade your 475 or 375 Field Communicator to the latest software revision. If you do not currently have the latest Easy Upgrade Utility, it can be downloaded for no charge from [here](#).
- 2) Download the Field Communicator Device Developer's Toolkit for FOUNDATION fieldbus devices.
- 3) Develop the Device Description (DD) for you device.
- 4) Using the 475 FOUNDATION fieldbus Device Developer's Toolkit, generate the 475 Device Description (DDP) for the device. Each device DDP includes an .FHD, and FDD file which are generated by the toolkit.
- 5) Load the .FHD or .FDD file into the 375 or 475 using the Easy Upgrade Utility.
- 6) Run a complete test of all functions performed by the DD with the 375 / 475 connected to the actual field device.
- 7) It is strongly recommended that the field device, and its DD, be registered with the Fieldbus Foundation.
- 8) Sign a copy of the [Manufacturer Approval Form](#) indicating that this DD has been tested with the 375 / 475 and its operation is correct.
- 9) Send an E-Mail to [Emerson](#) with the following information:
 - a) Name of the FOUNDATION fieldbus Device (Include Manufacture ID, Device ID, Device Rev, and DD Rev)
 - b) Your contact information (Name, Company, Phone, and e-mail)
 - c) A .pdf of the signed **Manufacturer Approval form**.



- d) The Device Description Package (DDP) for your device. (Note – Emerson does not get these DDs from the Fieldbus Foundation. You must send the DDP directly to Emerson.

10) You will be contacted if there are any questions or issues with your DD.

Timing for DD Updates to the 375 / 475 Field Communicator

Regular updates to the DD set posted on the 375 / 475 Easy Upgrade site, as well as the DD set that ships with new 475 Field Communicators, are made at least 4 times per year. This roughly corresponds to the release of the Quarterly DD Updates from the HART Communication Foundation and follows this release as soon as possible.

The [DD list](#) currently supported in the 375 / 475 is always available on the [Field Communicator Web Site](#). (Select the HART or FOUNDATION fieldbus DD List in the right hand column.)

If Emerson receives a DD in between this quarterly update schedule, and all the criteria above are met, it will be posted upon request on a special [Interim Site](#).

Customers can then download the newly released DD and load it into their 375 / 475 using the procedure described.

