

QUICK START

DevCom uses Device Descriptions (DDs) to access data stored in the memory of the smart field device. These DDs are developed by the manufacturer for their products and, in turn, distributed by the FieldComm Group (FCG) worldwide. The latest DDs are included as part of the DevCom installation. Visit the FCG website (www.fieldcommgroup.org) or the ProComSol website (www.procomsol.com) for update information.

The following steps will allow you to install and quickly begin using DevCom:

Step 1: Install the DevCom App

- 1. Go to the Apple App store on your iOS device.
- 2. Purchase and install the DevCom App. A 10 day trial is free.

Step 2: Activate DevCom

Launch DevCom by selecting the DevCom icon.

You will be shown the number of days you can run before activation is required. You can use it for up to 10 days before you need to activate it. Activation only needs to occur once. See Section 4.3 for details.

Step 3: Install the DD Library

After DevCom is licensed or Demo mode is entered, you will be prompted to download the DD Library. The Install could take up to 15 minutes based on your internet speed. See Section 4.2.2 for details.

Step 4: Connect the communication interface

Connecting to a HART device requires special interface hardware. These interfaces ("HART Modems") are available from ProComSol, Ltd. The interface should be connected and configured. The required interface is a Bluetooth Low Energy HART Modem - ProComSol, Ltd model HM-BLE. See Section 4.2.3 for details.

On initial start the App will prompt you for a HART modem to use. Make sure your modem is turned on and press the "Scan for Bluetooth Devices" button in DevCom. Select your HART Modem after the scan is complete.

Step 5: Connect to the field device

Find a connection point for the device's 2-wire 4-20mA loop you wish to communicate with. For communications you must have a suitable load resistance or a 250Ω resistor must be placed in series with the device. Using the clips from the HART modem, connect to the HART device. While the HART Communication signal is available anywhere along the 4-20mA wiring, it is often easiest to connect across the field device's terminals (caution should be observed when working in a hazardous area, many iOS devices are not rated for intrinsic safety and should only be connected in a safe area).

Step 6: Browse the Device

On initial start, DevCom sends a command to the field device, establishes a connection, and learns its identity. Once DevCom knows the device identity, it locates the device's DD in the library and loads it. From this point forward operation of DevCom is determined by the DD provided by the device manufacturer. If a DD for the device is not present, a generic DD will be used.



Menus and data are presented using a tree scheme. The organization of the data in the display window is dictated by the device DD. The display shows menus and data. To navigate to a different menu simply select it. To return to the previous menu, press the "Back" icon on the device.

Step 7: Modify the Device's Configuration

The Menu tree allows access to all of the data exactly as described by the device manufacturer's DD. When you find elements of the field device's configuration you want to change, simply click and edit the data. Once you have changed the configuration to suit your needs, press the "Commit" button to send the new data to the HART field device.

Step 8: Performing Maintenance and Testing the Field Device

Many devices perform Methods or Standard Operating Procedures (SOPs) that may need to be performed to ensure the device is in peak condition. These Methods may include calibrating the loop current, trimming the transducer values or performing some diagnostic test on the field device. Methods appear on the screen just like menus, but have a blue background. Click on the Method and it will start running in a new window. The Method will guide you through the process ensuring the procedure is completely and consistently performed. When the Method is complete the window will disappear.

Step 9: Exit

When you are through working on the field device simply exit DevCom. Once the App exits, you can then disconnect the HART interface hardware.



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1 INTRODUCTION

The Smart Device Communicator (DevCom) allows access to and management of a HART compatible field device's configuration and calibration. This manual provides the information about the Hardware setup, Communication with Smart devices, and functions of DevCom.

DevCom is unique in that it uses the DD of the connected device to determine what information to display, what variables are available for edit, and what procedures to follow for calibration, setup, and maintenance.

1.1 Acronyms and Definitions

Acronym	Definition
DD	Device Description File. This contains the device information.
DDL	Device Description Language
FCG	FieldComm Group, formerly the HART Communication Foundation (HCF)
DevCom	Smart Device Communicator
III	Window select button (aka Hamburger Button)

1.2 Conventions Used in This Manual

Following formatting conventions are used in this guide:

Convention	Description
Words in bold type	Field names including buttons in the display, or important phrases.
\rightarrow Arrow	Window select button followed by the selection to make are separated by \rightarrow .
	For example, select $\implies \rightarrow$ New Device to connect to a new device.
UPPERCASE	Acronyms
UPPERCASE within angle brackets	Command keys For example, press <back>.</back>
"Parenthesis"	Names of window elements, like "OK".





1.3 Document Organization

DevCom user manual is organized into the following sections:

Section 1	Describes the scope and objective of DevCom user manual along with the organization of the remaining part of the manual.
Section 2	Provides an overview of the DevCom application and its architecture.
Section 3	Provides the information pertaining to hardware and software requirements for the DevCom application.
Section 4	Provides the steps to install, activate, and uninstall the DevCom application.
Section 5	Provides the steps to start the DevCom application and connecting to field devices.
Section 6	This section explains different aspects of the DevCom application and its functionalities.

1.4 Getting Help

If you need help or encounter problems when using DevCom or this guide, please contact ProComSol, Ltd. See Appendix C for contact information. Please provide the following information.

Create a text description of the problem. If possible, provide the text in event sequence, which will enable the duplication of the problem. Provide information about the system. This information must include:

- DevCom version
- Mobile device information: make, model, and iOS version
- HART Device information: make, model, and device revision
- Point of contact: name, telephone number, and e-mail address,



2 OVERVIEW OF DEVCOM

Field devices such as flow, pressure, level, temperature transmitters, and valve positioners provide the physical connection to the process. These devices allow the control system to monitor and manipulate process conditions. HART devices maintain a real-time database of process, configuration, identification, and diagnostic information. This information can be accessed using the HART Field Communications Protocol.

HART devices are capable of providing functions and features far beyond the basic task of providing a process input or accepting a control output to manipulate process conditions. Many HART compatible device manufactures create a DD (Device Description) describing all of these functions and features specific to that device. The DD also provides information essential to the successful configuration and calibration of the device.

DevCom uses these DD's to access the data stored in a device, providing full configuration and setup support for all registered HART DD's.

DevCom accesses and presents field device data based solely on its DD. No other files, information or custom drivers are required. DevCom is intended to monitor and configure a single device at a time, it is directly connected to the current loop (or HART-IP) of the particular device and:

- Provides user interface to configure the HART field device,
- Provides a means to configure and view all the parameters related to HART field device, and
- Provides an option to view the detailed status and diagnostic capability of the device.

DevCom allows viewing and modifying of field device parameters based on the DD. Using the device's DD, DevCom performs various tests to verify the proper operation of the HART device. DevCom runs as a standalone software application and must have a HART compatible modem attached to the system to interrogate the HART device.





3 SYSTEM REQUIREMENTS

The following minimum system requirements are recommended for operation of DevCom.

Mobile Device	Processor: ARM64 Memory RAM: 1 GB Memory ROM: 2 GB
HART Modem	ProComSol HM-BLE
Communication Port	Bluetooth 4.0
Operating System	iOS 10



4 DEVCOM INSTALLATION

4.1 Prerequisites

You need to be familiar with the basic functions of the following when installing DevCom:

- iOS operating system
- HART communication interface
- HART field device

4.2 Installing the DevCom Application

4.2.1 DevCom Application

To install the DevCom application, perform the following steps:

Step	Action
1	Purchase DevCom from the Apple App Store
2	Install following the screen prompts

Activating DevCom

DevCom must be activated for use within 10 days. The following procedure will activate the App (this only needs to occur one time):

Action
Launch the DevCom App. The following Licensing Window is displayed after accepting the License Agreement:
••••• 🗢 🗢 10:09 AM 🛞 🛑 f
\equiv Licensing
Status: Demo expires in 10 days
Purchase ID: Restore Purchase
Purchase License Evaluation



Step	Action
2	Tap "Purchase License".
3	Enter your App Store login credentials if prompted.
4	Tap "Buy" to purchase the App
5	To proceed in Evaluation mode, press "Evaluation". You can use the App for 10 days before activation is required.

4.2.2 Installing the DD Library

The DD Library is required for App function. Perform the following to download the latest DD Library to your device:

Step	Action				
1	The following Window is shown after the Licensing Window:				
	•••••• 🗢 10:11 AM 🛞 📖 /				
	= DD Library				
	DD Library Version: Missing				
	DD Library /ProComSol/Library				
	DD Library Update Available				
	2017-02 Install				
	Library Contents Add New DD File				
2	Select "Install"				
3	The following screen will appear. Note that the full DD Library download takes about 15 minutes. Do not close this screen!				



Step Action			
	•••• ?	10:11 AM	* 💼 +
	\equiv DD Lib	rary	
	DD Lib	orary Version: Mis	ssing
	DD Library	/ProComSol/	Library
		Installing	
	Library Co		ew DD File

4 The following screen will appear when the DD Library install is successfully completed:

•••	00 穼	11:57 AM	* 📑 +
≡.	Bluetooth	Devices	
	Devices		
	DD Libr	ary Install Complete	
		Ok	
_			
_			
	Scan	Disconr	nect



4.2.3 Selecting a HART Modem

A HART Modem is required for communication to your HART device. The following procedure is used to select the modem (this only needs to occur one time):

Step	Action						
1	The following Window is shown after the DD Library Download Window:						
		•••• ?	11:58 AM	* 🛑 +			
		\equiv Bluetooth	Devices				
		Devices					
		Scan	Discon	inect			
2	Turn on your HAI	RT modem	and press "	Scan".			
•		1 11		.	-		

3 The Window will show all available Bluetooth Low Energy devices.



••••• ?	2:35 PM	* 🛑 +
≡ Bluetoo	oth Devices	
Devices		
HART M	10dem 5-4948-9006-25462EB9B891	
Scan	Disco	onnect

4.3 Connecting to the HART Network

The DevCom application communicates with the HART Field Devices through a HART compatible communication interface (e.g., a "HART Modem"). Using this communication interface you will transmit real-time HART data between DevCom and the connected HART compatible field device.

The DevCom App for iOS currently only works with the HM-BLE, HART Modem Bluetooth Low Energy, manufactured by ProComSol.

Turn the HM-BLE on. Using the clips on the wires from the HART modem, connect to the device across the 4-20ma signal. If a suitable load resistance is not available, a 250Ω resistor must be placed in series with the device power supply.





Figure 1 Typical DevCom Hardware Setup

4.4 Uninstalling the DevCom Application

To uninstall the DevCom application, perform the following steps on the iOS Device:

Step	Action
1	Press and hold the DevCom icon on the screen
2	The icons will start shaking and have a small "x" in the corner
3	Tap the "x" on the DevCom icon.



5 USING DEVCOM

5.1 Starting DevCom

Establish the physical connection between the field device and the HART Modem. With the physical connection established, launch DevCom by pressing the DevCom icon on your device screen.

Step	Action			
1	Start the DevCom displayed:	App. The fo	llowing applicat	tion window is
		•••○ 🗢 11	:58 AM 🛛 🔻 🔜 +	
		Device Explo	orer	
		Device Model: DD:	Tag: * Connecting *	
		Looking		
		Cancel	Commit	
	DevCom will then	automaticall	v identify the fi	ald device and

DevCom will then automatically identify the field device and begin communicating with the field device.

2 When the field device is successfully connected to DevCom, the Device Explorer window appears with the root menu of the device DD shown.



	•••• 🗢 9	:14 AM	•••
	\equiv Device Explo	orer	
	Device Model: PR 5 DD: /00006d/00ef/	335 Tag: T 0101.fm8 Conne	-101 .) ected
	o	Inline	
	De	vice setup	
	PV	77.86 de	egF
	Electr	77.85 de	egF
	PV AO	4.00 m.	A
	PV % rnge	25.02 %	
	Cancel	Commi	t
The DevCom	windows shown i	in this docu	ment are only an
davias What	lat you may see v		the DD and the

device. The menus, data, status and configurations displayed are specified by the device's manufacturer in the DD itself.

3 Select the required menu to configure or review the field device's data.

5.2 Getting Familiarized with DevCom

5.2.1 The Device Explorer Window Fields

The DevCom Device Explorer window is designed to provide the operator with valuable information in order to make work quick and easy. Below is a typical Device Explorer window with each field described:







- 1 Window Navigation icon, aka "Hamburger" icon
- 2 Window name
- 3 Device Status Icon
- 4 Device model of connected HART device
- 5 Tag name of connected HART device
- 6 DD loaded for connected HART device
- 7 Modem status
- 8 Communication indication
- 9 Back softkey for menu navigation
- 10 Menu title for current menu
- 11 Sub menu
- 12 Label
- 13 Data
- 14 Units
- 15 Cancel, return edit changes to original value
- 16 Commit, save edit changes to connected HART device

5.2.2 Navigating the Window Menus using the \equiv icon (aka "Hamburger")

DevCom has several windows with specialized information. Press the Hamburger icon and the following Window appears, details in Section 6.5: Note that the red icon indicates the active Window when the Hamburger icon was pressed. This helps the user return to the previous window.

Menu	Explanation
DevCom	DevCom – App name
	New Device - Connect to a new device or reconnect to the same device.
New Device	Device Explorer – Main device window
Device Explorer	Settings – Launches Settings Window
🔅 Settings	Bluetooth Devices – Launches Bluetooth
Bluetooth Devices	Selection Window
Document Device	Document Device – Launches the Document Device Window
🛃 🛛 Download Config	Download Config – Launches the Saved
늘 DD Library	Configurations Window
🗐 Licensing	DD Library – Launches the DD Library Window.
i About	Licensing – Launches the License Window.
😧 Exit	About – Shows copyright information, support information, and revision levels.
	Exit - Exit DevCom.



5.2.3 Using the Help Menus

When you select a parameter label, a window will appear with information about the parameter. Below is an example:



5.2.4 Menu Color Scheme

DevCom application uses different colors to represent different elements of the application. The following table lists the colors and their meanings:

Color Examp	le	Meaning
	<menu name=""></menu>	Indicates a menu in the navigation tree
<label></label>	<data> 💌</data>	Indicates an "Enumerated Variable" item (Note the triangle)
<label></label>	<data></data>	Indicates a Read Only "Variable" item (Note the data background is gray)
<label></label>	<data></data>	Indicates an Editable "Variable" item (Note the data background is white)
	<method name=""></method>	Indicates a "Method" (Standard Operating Procedure) item
	<edit display="" name=""></edit>	Indicates an "Edit Display" item



6 FUNCTIONS AND BASIC OPERATIONS

6.1 Overview

DevCom allows the user to monitor and configure a single device at a time in the field. Each device had a DD that determines what device information is present. A DD may contain any of the following parameters/elements:

<u>Variable</u>

A variable is defined as the data contained in the device (e.g. Device Firmware Version). There are three types of variables:

<u>Numeric</u> – Variable data consists of numbers <u>Text</u> – Variable data consists of text and/or numbers <u>Enumerated</u> – Variable data is from a list of valid data points.

The above variables are further definable as follows:

<u>Editable Variable</u> – It allows the operator to modify the value and download it to the device. <u>Non-Editable Variable</u> – It is a read-only data from the device.

Edit Display

This option is used to view a group of parameters. You can also modify a single parameter from this group, based on which other parameters of the device get altered.

For example, if the Engineering Unit of the device is modified, the corresponding Low Limits and High Limits change as per the Engineering Unit set.

Method / Standard Operating Procedure (SOP)

This option helps to perform various tests on the device for instance, Self Test and Loop Test. A Method or SOP is a series of steps that are executed in a sequence results in the completion of some device related tasks. When a method gets invoked, it gives various warning messages and options to the user, by which the user can thoroughly test the device. If a test is aborted by operator command at any stage of the sequence, the method invokes additional steps to bring the device back to its original state before the test.

6.2 Configuring Device Information

6.2.1 Overview

DevCom allows you to view and configure the field device parameters based on the device description (DD). The related variables are grouped under various menus of different levels as defined in the DD file. The following table describes the details about the device configuration:

Step	Action
1	Ensure that the application is running and communications have been established:



•••• 🗢	9:14 AM	• +
\equiv Device	Explorer	œ
Device Mode DD: /00006	el: PR 5335 Tag: d/00ef/0101.fm8 Conn	T-101 , nected
	Online	
	Device setup	
PV	77.86	legF
Electr	77.85	legF
PV AO	4.00 n	nA
PV % rnge	25.02 %	6
Cance	el Comm	hit

There are three types of variables: Numeric, Text, and Enumerated. In turn these variables can be read/write and read only. Dynamic variables are also read only.
Following points describe how the device parameters represents their status when connected to DevCom: White Data Background: Modifiable Values
Gray Data Background: Read only Values
Data field with gray triangle: Enumerated data



•••• 🗢 🗢 2:28 P	M 🔲 🗲
\equiv Device Explorer	
Device Model: PR 5335 DD: /00006d/00ef/0101.1	Tag: AB ≱, m8 Connected
← Signal cor	dition
PV URV	1820.0 degC
PV unit	degC -
PV % rnge	-17.60 %
PV Damp	3.00 s
Cancel	Commit

- 4 The subsequent topics explain how to configure device
 - parameters.

6.2.2 Variable Edit

To edit a parameter of the connected device, perform the following steps:

Step	Action
1	Ensure that the application is running and communications have been established:



•••	• 9:14 AM	••• +
≡	Device Explorer	
D	evice Model: PR 5335 D: /00006d/00ef/0101.fm	Tag: T-101 , 8 Connected
	Online	
	Device se	etup
P	V	77.86 degF
E	lectr	77.85 degF
P	V AO	4.00 mA
P	V % rnge	25.02 %
	Cancel	Commit

2 Select the menu where the editable parameter is present as shown below. For this example we are editing PV Damp:

•••• ?	2:29 PM	* 📟
≡ Device	e Explorer	e
Device Mod DD: /00006	el: PR 5335 d/00ef/0101.fm8	Tag: T-1102 X Connected
\leftarrow	Basic setup	
Тад	T-1	1102
	Range valu	es
	Sensor con	fig
PV Damp	:	3.00 s
Snsr s/n		0
Cano	el	Commit

3 Select the variable data to edit it. The existing data will be highlighted and an appropriate soft keyboard will appear:



Step Action

••••• ?	2:29 PM	* 🗔 +			
\equiv Device	Explorer				
Device Model: PR 5335 DD: /00006d/00ef/0101.fm8 Tag: T-1102 Connected					
←	Basic setup				
Tag	T-1	102			
	Range value	es			
Sensor config					
PV Damp		s.00 s			
1	2 ABC	3 Def			
4 _{GHI}	5 JKL	6 ^{MNO}			
7 PQRS	8 TUV	9 wxyz			
	0	$\langle \times \rangle$			

4 Make the changes to the parameter value, as required.



5 Tap anywhere on the screen other than the keyboard to remove the keyboard. Note that the changed variable data background is now Yellow and the "Commit" and "Cancel" button text are also Yellow:



Step Action	
	•••• ? 2:30 PM 🗏 🔜 f
	\equiv Device Explorer \bigcirc
	Device Model: PR 5335 Tag: T-1102 DD: /00006d/00ef/0101.fm8 Connected
	← Basic setup
	Tag T-1102
	Range values
	Sensor config
	PV Damp 1.00 s
	Snsr s/n 0
	Capacit
	Cancel Commit

6 Click on the "Commit" button to send the new value to the device. The buttons and data background return to white when complete:

•••• 🗢	2:31 PM	* 💴 +
\equiv Device	Explorer	
Device Mode DD: /000060	el: PR 5335 d/00ef/0101.fm8	Tag: T-1102 * Connected
\leftarrow	Basic setup	
Тад	T-1	102
	Range value	es
	Sensor conf	ig
PV Damp	1	.00 s
Snsr s/n		0
Canc	el (Commit

7 For Enumerated variables, the process is very similar. Start by selecting the menu where the desired parameter is located:



••••	2:30 PM	* 📖 +
\equiv Device	Explorer	
Device Mode DD: /00006d	l: PR 5335 //00ef/0101.fm8	Tag: T-1102 Connected 🛠
← :	Signal conditio	n
PV LRV	40	0.0 degC
PV URV	182	0.0 degC
PV unit	deg	gC -
PV % rnge	-17	7.59 %
PV Damp	1	.00 s
Cance	el C	Commit

8 Select the variable data to edit it. In this case "PV unit". A list will appear with the valid values available:

•••• 🗢	2:3	I PM	* 📑 +
\equiv Dev	ice Explor	er	
Device N DD: /000	/lodel: PR 533 006d/00ef/010	15)1.fm8	Tag: T-1102 * Connected
÷	Sianal c PV	onditio unit	on
PV LR\	Impgal/I	ן א	degC
PV UR	degC degF	L	degC
PV uni	degR Kelvin mV		
PV % r	ohm Hz		%
PV Dar	Car	ncel	
Ca	ancel		Commit

- 9 Select the value you wish to use.
- 10 Once selected, the list will disappear and the new value will be inserted into the data field. Note that the changed variable background is now Yellow and the "Commit" and "Cancel"



Step	Action			
	buttons are also	Yellow:		
		•••• 🗢	2:31 PM	* 💼 +
		\equiv Device E	Explorer	
		Device Model: DD: /00006d/0	PR 5335 00ef/0101.fm8	Tag: T-1102 粥 Connected
		← Si	gnal condition	1
		PV LRV	400	0.0 degC
		PV URV	1820	0.0 degC
		PV unit	deg	IF -
		PV % rnge	-17.	58 %
		PV Damp	1.	00 s
		Cancel	C	ommit

11 Click on the "Commit" button to send the new value to the device:

•••• ?	2:31 PM	* 💼 +
\equiv Devic	e Explorer	
Device Moo DD: /00006	lel: PR 5335 6d/00ef/0101.fm8	Tag: T-1102 Connected
\leftarrow	Signal condition	on
PV LRV	7	52.0 degF
PV URV	33	08.0 degF
D\/.upit		
PV unit		
PV % rnge	-1	7.59 %
PV Damp		1.00 s
Con		Commit
Cano	cei	Commit



6.2.3 Edit Display

The Edit Display is a variation on the Variable edit. An additional window helps the user view a group of parameters based on the DD. You can also modify a single parameter from this group. Parameters linked to the edited field will be updated automatically

To view and configure these variables, perform the following steps:

Step	Action				
1	Ensure that the ap been established:	plication	is running an	d comr	nunications have
		••••• ?	9:14 AM	• +	
		\equiv Device I	Explorer		
		Device Model: DD: /00006d,	: PR 5335 Tai /00ef/0101.fm8 Co	g: T-101 , innected	
			Online		
			Device setup		
		PV	77.86	degF	
		Electr	77.85	degF	
		PV AO	4.00	mA	
		PV % rnge	25.02	%	
		Cancel	l Com	nmit	

2 Select the menu where the editable parameter is present as shown below. For this example we want to edit URV from the Range Values Edit Display:



•••• ?	2:31 PM	* 📖 +
\equiv Device	Explorer	
Device Mode DD: /00006d	l: PR 5335 Ta /00ef/0101.fm8	ag: T-1102 * Connected
<i>←</i>	Basic setup	
Tag	T-110	2
	Range values	
	Sensor config	
PV Damp	1.0	0 s
Snsr s/n		0
	C	
Cance	el Co	mmit

3 Once selected, the Edit Display looks like a regular menu as seen here:

←	Range values	
LSL	752.0	degF
USL	3308.0	degF
PV LRV	752.0	degF
PV URV	3308.0	degF
PV unit	degF	-

4 Select the parameter you wish to edit from within the Edit Display box. The following dialog box appears on the screen:



Step	Action					
		•••• ?	2:32 PM	* 💼 +		
		\equiv Device	Explorer			
		Device Model DD: /00006d,	: PR 5335 1 00ef/0101.fm8	ag: T-1102 * Connected		
		←	Edit Together			
			750			
			/52			
		PV URV	3308	degF		
		Cance		ommit		
5	Make the chang	e to the value	ue, as requi	red.		
6	Click on the "C device.	ommit" but	ton to send	the new v	alue to the	

6.2.4 Executing Methods or Standard Operating Procedures

Methods are defined in the DD file for the device that DevCom is connected to. You can select the Method and execute it for calibrating the device, trouble shooting, etc. Method execution leads you through a number of steps, like in a wizard.

A Few examples of methods include,

Set high and low range calibration points Calibrate the device Run the advanced diagnostic test procedure Execute tests to gather information on device operation.

To execute a Method, perform the following steps:

Step	Action
1	Ensure that the application is running and communications have been established:



••••• ?	9:14 AM	•
\equiv Device	Explorer	Ð
Device Mode DD: /00006	el: PR 5335 d/00ef/0101.fm8	Tag: T-101 J Connected
	Online	
	Device setu	ıp
PV	77	7.86 degF
Electr	77	7.85 degF
PV AO		I.00 mA
PV % rnge	25	5.02 %
Cance		Commit

2 Select the menu where the method is present and select the desired Method:



3 Below is an example of a Method window:





4 Click "OK" to move to the next dialog in the Method sequence. Some methods require more user input such as selecting an enumerated value as below:

••••• ?	2:33 PM	* 🔤 +
	Method	
	Loop test	
	4mA 20mA Other End	
F	Cancel button to abort m execution.	ethod
Help	Abort	Ok

- 5 Click "Abort" to cancel the Method execution.
- 6 Click "Help" to get specific help for that step of the Method. This Help information is provided by the device DD.



6.3 Calibrating HART Field Devices

Calibration of field devices and loop test are achieved by executing the Methods or Standard Operating Procedures that are specific to device. Methods are defined based on the test parameters specific to the device, providing information for the calibration of that device.

See the previous section for Method execution.

6.4 Viewing the Device Status

DevCom provides the user with the ability to monitor the device specific status of the device.

To view the device and status, perform the following steps:

Step	Action					
1	Ensure that the ap been established:	oplication	is running a	ind com	nunications h	ave
		••••• ?	9:14 AM	• +		
		\equiv Device	Explorer			
		Device Model DD: /00006d	: PR 5335 /00ef/0101.fm8	Tag: T-101 , Connected		
			Online			
			Device setup			
		PV	77.8	degF		
		Electr	77.8	35 degF		
		PV AO	4.0	M mA		
		PV % rnge	25.0	92 %		
		Cance	l Co	ommit		

2 Select the Device Status icon at the upper right of the screen. The following window is displayed (Note that this information is DD dependent and will be different for your device):



Step Action	•••• ?	2:33 PM	* 💼 +
	≡ Device	e Explorer	
	Device Mod DD: /00006	lel: PR 5335 id/00ef/0101.fm8	Tag: T-1102 ≱ Connected ≯
	←	Device Status	i
	Device Status	0x0004	
	Sensor errors	0x0000	
	ADC errors	s 0x0000	
	Misc. error	rs 0x0000	
	Cano	cel C	Commit

The status byte is shown for each status point.

3 To see more details on which status point is active, select the status data. Here is a sample:

		oonnee
,	Sensor errors	
—	sensor1	
Sensor	sensor2	
ADC er	CJC/electr	
Misc. e		
	Ok	

⁴ Press the Back soft key (← soft key) to close the Device Status window.



6.5 Window Detailed Description

6.5.1 Settings

There are several Settings that may need to be changed by the user to perform a desired activity. Below is a description of what Settings are available:

Step	Action						
1	Ensure that the appli NOT need to have b	ication is r been establi	unning. Co ished.	ommur	nications do)	
2	Select $\blacksquare \rightarrow$ Setting window is displayed	gs from the l:	e main wind	low. 7	The Setting	8	
	•••	••• ?	2:34 PM	* 💼 +			
	=	Settings					
	C	Default Modem:	HART Modem				
	-		Reset				
	-	ART Master:	Secondary Nas	Master			
	Ρ	olling Address:	Polling Addres	ss 0 🔻			
	C	DD Language:	System Langu	Ja ▼			
	Ν	lodem Type	Bluetooth	n LE 🔻			
		Save	e Settings				
	Each Setting is expl	ained belov	w.				

6.5.1.1 Default Modem

This option allows the user to disconnect the modem. Press "Reset" to clear the modem from App memory.

6.5.1.2 HART Master

This option allows the user to select Primary Master or Secondary Master for Multi-master systems.

Step	Action
1	Select desired HART Master.
2	Press "Save Settings" If a new HART Master was selected the following message will be shown:



••••	2:34 PM	* 🔜 +
\equiv Setting	s	
Default Mo	dem: HART Mod	em
	Reset	Master
P Settings C Modem Typ	Settings Saved, will now recom device	r nect to
	Source Settings	

6.5.1.3 Polling Address

This option allows the user to set the address to look for devices on Multi-drop networks. The default is address 0.

Step	Action
1	Press the triangle next to the current Polling Address selection. A drop down list will appear with all the valid Polling Addresses. You may need to scroll to view the address you want.



Step Action		
	●●●●●●● 3:36 PM ▲ ● ● ● ■ Settings Default Modem: HART Modem DISEDESE- ●●●●●● Polling HART Polling Address 0 Polling Address ster Master Polling Address s 0 ♥ DD Lat Polling Address Polling Address 1 LE ♥ Moder Cancel	
	Save Settings	

- 2 Press the desired Polling Address.
- 3 Press "Save Settings". If a new Polling Address was selected the following message will be shown:



4 Press "OK" to return to the Device Explorer window.



6.5.1.4 DD Language

This option allows the user to select which language the DD data will be presented. Note that all DD's do not have each of these languages. In this case, English will be used. Also note that only the DD data is affected. DevCom specific items have been translated into various languages. The language used is set by the language of the iOS device. For example, if the iOS device is set for Spanish, the DevCom text will be in Spanish.

Step	Action
1	Press the triangle next to the current DD Language. A drop down list will appear with all the valid DD Languages. You may need to scroll to view the language you want.

E Settings Default Modem: HART Modem DUSADD33- DD Language HART Polling Polling DD Lar Japanese Spanish Portuguese Duscion Cancel	\$+
Default Modem: HART Modem Discoss- DD Language HART System Language English German French Italian DD Lar Japanese Spanish Moder Portuguese Discion Cancel	
HART System sta Language English German ss French Italian Japanese Spanish Moder Portuguese 11 Cancel	
Polling German French Italian DD Lar Japanese Spanish Moder Portuguese Lussion Cancel	er aster
DD Lar Japanese Ja Spanish Dortuguese Di L Bussian Cancel	0 -
Moder Portuguese 1 L Bussian Cancel	· •
Cancel	.E 🔻
Save Settings	

- 2 Press the desired DD Language.
- 3 Press "Save Settings". If a new DD Language was selected the following message will be shown:



•••• 🗢	2:34 PM	* 💼 +
\equiv Settings		
Default Mode	em: HART Moder	n
	Reset	
HART Master Settings Sa D Modem Type	r: Primary M Settings aved, will now reconne device Ok Bluetoo	th LE V
S	Save Settings	

6.5.1.5 Modem Type

This option allows the user to select which modem to use to connect to the HART Network. See Section 6.8 for HART-IP and the TCP/IP modem type.

Step	Action
1	Press the triangle next to the current Modem. A drop down list will appear with all the valid Modem types.



•••• ?	3:36 PM	* 📑 +
≡ Setting	6	
Default Moc	lem: HART Moc	lem
HART Polling DD Lar Moder	Bluetooth LE TCP/IP	ster Master ss 0 v
	Save Settings	

- 2 Press the desired Modem Type.
- 3 Press "Save Settings". If a new Modem Type was selected the following message will be shown:



4 Press "OK" to return to the Device Explorer window.



6.5.2 Bluetooth Devices

This window allows the user to view the current modem or to change what modem to use for communications.

Step	Action
Step 1	Action The Window will show all available Bluetooth devices with the current selected modem highlighted and/or marked with the Bluetooth icon.
23	Scan Disconnect Tapping the current HART Modem will restart the connection. Tapping "Scan" will look for nearby Bluetooth devices.
4	Tapping "Disconnect" will remove the connection to the current
	HART Modem.

6.5.3 Document Device

HART Device configurations can be saved to memory as a comma delimited text file and formatted PDF file to document the device.

To save device configurations to disk, perform the following steps:

Step	Action
1	Ensure that the application is running and communications have been established:



•••• ?	9:14 AM	
\equiv Device	Explorer	÷
Device Mod DD: /00006	el: PR 5335 d/00ef/0101.fm8	Tag: T-101 , Connected
	Online	
	Device setu	q
PV	77	7.86 degF
Electr	77	2.85 degF
PV AO	4	.00 mA
PV % rnge	25	5.02 %
Canc	el (Commit

² Select \implies **Document Device** from the main window. The Document Device window is displayed:

•••• 🗢	2:36 PM 🛛 🖇 📖
≡ Docum	ent Device
File	(/T-1102_20170926_1435)
Technician	tester
Notes:	Test 2
Header:	xyz corp
Footer:	Heat
Sa	ave Configuration

- 3 The default file name is Tag_Date_Time. The filename can be changed by the user. Edit the filename as needed.
- 4 Enter Notes in the Notes field if desired. Enter Technician name in the Technician field if desired.



Step	Action
5	Enter Header and Footer information for the PDF file if desired.
6	Press the "Save Configuration" button to save device configuration to text file and pdf file.



7 When complete, the Configuration Save Complete message will be displayed. Use the Download Config function to display the saved .pdf file.





6.5.4 Download Config

The saved HART Device configurations can be viewed and even downloaded to other devices.

To view saved device configurations, perform the following steps:

Step	Action
1	Select \implies Download Config from the main window. The Saved Configurations window is displayed:
	•••••
	\equiv Saved Configurations
	N Tag Model Date 0 PT-102 3095MV 2017-09-01 1 PT-102 3095MV 2017-09-06 2 PT-102 3095MV 2017-09-19 3 T-1102 PR 5335 2017-09-26
	Browse
2	The saved configurations are shown in the order they were created. You can scroll up and down the list if necessary.
2	$\mathbf{T}_{\mathbf{r}} = \mathbf{r}_{\mathbf{r}} \mathbf{f}_{\mathbf{r}} $

3 Tap a configuration to view details of the configuration. When tapped, the Configuration Detail window is displayed:



-		2-29 DM	¥ 🔜 4
	≡ Config	uration Detail	↑ , ,
	← …gurati	on 3: T-1102 (20	017-09-26)
	Tag:	T-1102	
	Long Tag:	AOG 2015	
	Device:	PR 5335	
	File Name:	(/T-1102_2017092	26_1435
	Date:	2017-09-26	
	Notes:	Test 2	
	View		wnload

6.5.4.1 View Saved Configuration

Step	Action
1	From the Configuration Detail window, press View.
2	The PDF file for the saved configuration is shown using the iOS device PDF viewer:



✓ DevCom ●●●	०० 중 2:38 P	М	* 💼 +	+	
C <	T-110252	26.pdf	Undo		
	xyz corp Device Configuration F	ile, Rev 2.0			
File: (T-1102_20170926_143) Tag: T-1102 LongTagMsg. AOG 2015 Model: PK 5335 Device ID: 1105744 DD: 000064006/t0101.1mB Date (yyy-mm-dd): 2017-09 Time (Itrams-c): 02:38-27 PM Tech: tester Notes: Test 2	26 (
Variable PV unit Xfer finctin PV PV AO PV Krogo AO Aim typ PV URV PV URV PV Damp USL USL LSL LSL Min span	Value degF Linear 302.39 3.79 -17.59 0xFA Undefined 3308.0 752.0 1.00 3308.0 752.0 180.0		Units mA % degF degF degF degF degF degF		
Sensor Limits Units CJC/electronics temp units Electr Sensor typ Meas typ Meter typ system configuration AO 100% AO 0% AO 0% AO up im AO to im	degF degF 74.77 T/C Type B IEC T/C/V sgl int CJ/ 0x0C Undefiner Not used 20.00 4.00 20.50 20.50	854	degF mA mA mA		
Distributor name OEM data 0 OEM data 1 OEM data 2 Error detection Sh sens Br sens Manufacturer Model Num req preams Universal rev Fid dow rev	0.10 0.00 0.00 0.00 No test perform 3.50 23.00 PR electronics / PR 5335 4 5 1_	aaaaaaaaa d 'S	କଡକଟିକିଡକେଡକଡକଡକଡ MA MA	90 Q	
Hardware rev Physici signi code Dev flags	27 12 Bell 202 current 0x00		Page 1		
	xyz corp Device Configuration F	lie. Rev 2.0		-	
۶Ľ	Ð	ρ	Û		

6.5.4.2 Configuration Write

Step	Action
1	Ensure that the application is running and communications have been established.
2	From the Configuration Detail window, press Download. The following Prompt is displayed:



-r				
	•••• 🗢	2:38 PM	* 🛄 +	
	≡ Configu	iration Detail		
	←guratio	on 3: T-1102 (2	2017-09-26)	
	Tag: (T-1102		
	Long Tag: (AOG 2015		
	D D F	ownload Conf Download Config?	ig	
	D No		Yes	
	Notes:	Test 2		
	View	D	ownload	

- 3 Press Yes to continue or No to go back to the Configuration Detail window.
- 4 If Yes, pressed, the following prompt appears:



This alerts the user that a configuration change can upset the process and the device should not be connected to the process.

5 Press OK when device is not connected to the process.



Step	Action			
6	When the configuration write is complete, the following prompt will be displayed:			
		•••• ?	2:39 PM	* 📑 +
		\equiv Device E	xplorer	
		Device Model: DD: /00006d/0	PR 5335 00ef/0101.fm8	Tag: T-1102 * Connected
			Online	
			Device set	up
		P Do	wnload Con	fig

PV AU

PV % rnge

Also note that the connection to the device has been reinitialized in order to refresh the data in the App memory.

Ok

3.79

-17.60

6.5.4.3 Configuration Browse

This function allows the user to bring configurations saved from another source into their device. The other source can be other DevComDroid users or even DevCom2000 users.

Step	Action
1	Copy the zzz.pdf, zzz.dc, and zzz.txt (where zzz is the configuration root file name) files to the iOS device. The recommended directory is the /Download directory
2	Select \implies Download Config from the main window. The Saved Configurations window is displayed:



Step	Action			
		•••• ?	2:37 PM	* 💼 +
		≡ Save	ed Configurati	ons
		N Tag	Model	Date
		0 PT-102	2 3095MV	2017-09-01
		1 PT-102 2 PT-102	2 3095MV 2 3095MV	2017-09-06
		3 T-1102	PR 5335	2017-09-26
			Browse	
	Press Browse	. The Brow	vse window	is displaye
		•••• 🗢	2:40 PM	* 💼 +
		≡ Brov	wse	
		← Pat	th: Documents	
		-	.config	
		_	ProComSol	
			PT-102 20170	901 132009
			DT_102_20170	006 102009.
			PT-102_20170	900_102808.
			PT-102_20170	919_151502.p
		=	1-1102_201709	926_143526.
		_		
		_		
		_		
		_		
		Ca	incel Acle	d Selected File

This window will just show the .pdf files. You can navigate to other directories using the Back key.

4 Select the desired configuration to add to the device. Once selected the Add Selected button becomes active:



••••·· 🗢 2:40 PM 🖇 💼 4
≡ Browse
← Path: Documents
config
ProComSol
PT-102_20170901_132009.
PT-102_20170906_102808.
PT-102_20170919_151502.p
T-1102_20170926_143526.

5 Press Add Selected, and the following prompt appears when the Configuration Add is complete:

••••	2:40 PM	* 📑 +
\equiv Savec	l Configuratio	ons
N Tag 0 PT-102 1 PT-102 2 PT-102 3 T-1102 4 T-1102	Model 3095MV 3095MV 3095MV PR 5335 PR 5335	Date 2017-09-01 2017-09-06 2017-09-19 2017-09-26 2017-09-26
Co	Configuration Add Sud nfiguration Add Sud Ok	Add
	Browse	

6.5.5 DD Library

This window allows the user to view the DD Library location, view the library contents, and even add new DD files to the library.



6.5.5.1 View DD Library

Step	Action
1	Ensure that the application is running. Communications do NOT need to have been established.
2	Select $\implies \rightarrow$ DD Library. The DD Library Window is displayed:
	••••• 🗢 😒 2:41 PM 🗱 🖬 t
	\equiv DD Library
	DD Library Version: 2017-02 DD Library /ProComSol/Library
	DD Library Up to Date
	Library Contents Add New DD File
3	Tap "Library Contents" The following Window is displayed:





4 Select a manufacture and the list of devices for that manufacturer are displayed:



6.5.5.3 Add File to DD Library



Step	Action	
1	Ensure that the ap NOT need to hav	oplication is running. Communications do e been established.
2	Select $\blacksquare \rightarrow DD$ displayed:	Library. The DD Library Window is
		•••••• 🗢 2:41 PM 🖇 🔜 /
		\equiv DD Library
		DD Library Version: 2017-02
		DD Library /ProComSol/Library
		DD Library Up to Date
		Library Contents Add New DD File
		Library Contents Add New DD File

3 Tap "Add New DD File" The following file selection Window is displayed:

•••• ?	2:	44 PM	* 💼 +
	-ile Selec	ct	
← Pat	h: Docum .config ProComs	ients Sol	
	0201.fm8	3	
-			
Ca	ncel	Add S	elected File



Step	Action
	Use the <- key to navigate the device file structure until you find the file you would like to add.
4	Once the desired file is found, select it to activate the "Add Selected" Button.
	•••• হ 2:44 PM 🖇 📥 f
	\equiv DD File Select
	← Path: Documents
	config
	ProComSol
	📄 0201.fm8
	Cancel Add Selected File
	Tap "Add Selected File" to add the file to the DD Library.

6.5.6 Licensing

The user may need to review license status to get the number of days left in the evaluation for example. This window shows License details.

Step	Action
1	Ensure that the application is running. Communications do NOT need to have been established.
2	Select $\blacksquare \rightarrow$ Licensing. The Licensing Window is displayed:



Step Action	
	●●●●○ 중 2:44 PM % → ↓
	Status: License Activated
	Purchase ID: 1000000328666312
	License Check-In

This image shows an Activated license.

3 Press the "License Check-In" to send the license back to our server. It can then be used on another iOS device. This makes sharing licenses easy and convenient.

6.5.7 About

This window summarizes revision status and provides support contact information for the DevCom App:

Step	Action
1	Ensure that the application is running. Communications do NOT need to have been established.
2	Select $\blacksquare \rightarrow$ About from the main window. The About window is displayed:





3 Press the "Send email to Tech Support" to bring up your Email App which you can then send to ProComSol to get help for your issue.

6.6 Mac Interface to Mobile Device

Use iTunes on your Mac to manage files generated by the App. Select your device, then Apps to bring up a screen similar the one below:





✓ ✓ Jeffrey's IPhone ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	••• • • • • • • • • • • • • • • • • • •		Ś.		Q Search
Jeffrey's iPhone ▲ Ibode 1005 ● Settings 1005 ● Summary Apps Musice Apps Musice Actionatically install new apps Photos 0 In Movies CySmart Movies 0 CySmart Books 0 CySmart Books 0 CySmart Musice 0 CySmart Im Interpret States 0 Cymmart Im Interpret	<>		Jeffrey's iPhone		
Settings Image: Summary Apps Image: Music Image: TV Shows Image: Photos Image:	Jeffrey's iPhone ▲ 16GB 100% ■ +	Automatically install new apps		Select apps to install on your iPhone o Drag to rearrange apps,	or drag apps to a specific screen. screens, and pages.
 Summary Apps Music TV Shows Photos Info On My Device Music Movies CySmart DevCom Pr-102_20170901_132009.dc 4 KB 9/1/17, 1:20 PM PT-102_20170901_132009.dc 4 KB 9/1/17, 1:20 PM PT-102_20170906_102808.dc 4 KB 9/6/17, 10:29 AM PT-102_20170906_102808.txt 4 KB 9/6/17, 10:29 AM PT-102_20170908_102808.txt 4 KB 9/16/17, 10:29 AM PT-102_20170908_102808.txt 4 KB 9/16/17, 10:29 AM PT-102_20170919_151502.dc 4 KB 9/16/17, 10:29 AM PT-102_20170919_151502.txt 4 KB 9/16/17, 10:29 AM PT-102_20170919_151502.dc 4 KB 9/19/17, 3:16 PM PT-102_20170928_143526.dc 4 KB Today 2:37 PM T-1102_20170928_143526.dc 4 KB Today 2:37 PM T-1102_20170928_143526.txt 4 KB Today 2:37 PM 	Settings	File Sharing			
Apps Apps Music Outype Tovies Tovies Tovies Adobe Acrobat Photos Opps On My Device CySmart Music On My Device Movies Oppoint TV Shows DevCom Movies Oppoint Movies Oppoint Movies DevCom TV Shows DevCom DevCom PT-102_20170901_132009.pdf 8 KB 9/1/17, 1:20 PM PT-102_20170901_01_32009.pdf 8 KB 9/1/17, 1:20 PM PT-102_20170906_102808.dc 4 KB 9/1/17, 1:20 PM PT-102_20170906_102808.dc 4 KB 9/1/17, 1:20 PM PT-102_20170906_102808.dc 4 KB 9/1/17, 1:20 PM PT-102_20170909_10502.0cd 4 KB 9/1/17, 3:16 PM <td< th=""><th>Summary</th><td>The apps listed below can transfer doo</td><td>cuments between your il</td><td>Phone and this computer.</td><td></td></td<>	Summary	The apps listed below can transfer doo	cuments between your il	Phone and this computer.	
Music Music Im for On My Device Music Movies Value Music Movies Printoz Or My Device Movies TV Shows Books Addiobeoks Addiobeoks Tornes	Apps	Apps	Dev	Com Documents	
Motives South RB 2/10/17, 1:20 PM Image: Addog Actional Frocomsol 117 CB 9/1/17, 1:20 PM Image: Photos Image: Photos <th></th> <td></td> <td></td> <td>0201 fm8</td> <td>364 KB 2/10/14 12:00 DM</td>				0201 fm8	364 KB 2/10/14 12:00 DM
IV Shows IIII 60 IIII 60 IIII 60 Info IIII 60 IIII 60 IIII 60 On My Device IIIII 60 IIIII 60 IIIII 60 Music IIIII 60 IIIII 60 IIIII 60 Movies IIIII 60 IIIII 60 IIIII 60 Movies IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	The Shares			ProComSol	1 17 GB 9/1/17 1:20 PM
Photos Cysmart Info Info On My Device Image: Cysmart Music Image: Cysmart Movies Image: Cysmart TV Shows Image: Cysmart Books PT-102_20170906_102808.txt 4 KB 9/6/17, 10:29 AM PT-102_20170919_151502.dc 4 KB 9/19/17, 3:16 PM PT-102_20170926_143526.dc 4 KB 9/19/17, 3:16 PM PT-102_20170926_143526.dc 4 KB 70day 2:37 PM T-1102_20170926_143526.dc 4 KB 70day 2:37 PM T-1102_20170926_143526.txt 4 KB Today 2:37 PM T-1102_20170926_143526.txt 4 KB Today 2:37 PM T-1102_20170926_143526.txt 4 KB Today 2:37 PM T-1102_20170926_143526.txt				PT-102 20170901 132009.dc	4 KB 9/1/17, 1:20 PM
Info On My Device Music Movies TV Shows Books Audiobooks Tones	Photos	CySmart		PT-102_20170901_132009.pdf	8 KB 9/1/17, 1:20 PM
On My Device				PT-102_20170901_132009.txt	4 KB 9/1/17, 1:20 PM
Music Image: Control of the state of	On My Device	DevCom		PT-102_20170906_102808.dc	4 KB 9/6/17, 10:29 AM
 Movies TV Shows Books Audiobooks Tones 	Music	7	1	PT-102_20170906_102808.pdf	8 KB 9/6/17, 10:29 AM
□ TV Shows □ PT-102_20170919_151502.dc 4 KB 9/19/17, 3:16 PM ■ Books □ PT-102_20170919_151502.txt 4 KB 9/19/17, 3:16 PM □ Audiobooks □ PT-102_20170926_143526.dc 4 KB 9/19/17, 3:16 PM □ Tones □ T-1102_20170926_143526.dc 4 KB Today 2:37 PM □ T-1102_20170926_143526.txt 4 KB Today 2:37 PM	Movies			PT-102_20170906_102808.txt	4 KB 9/6/17, 10:29 AM
■ Books ● PT-102_20170919_151502.pdf 8 KB 9/19/17, 3:16 PM ▲ Audiobooks ● PT-102_20170926_143526.dc 4 KB 70day 2:37 PM ● T-1102_20170926_143526.bct 4 KB Today 2:37 PM	TV Shows			PT-102_20170919_151502.dc	4 KB 9/19/17, 3:16 PM
Audiobooks PT-102_20170919_151502.txt 4 KB 9/19/17, 3:16 PM Tones T-1102_20170926_143526.dc 4 KB Today 2:37 PM T-1102_20170926_143526.bxt 4 KB Today 2:37 PM Audiobooks T-1102_20170926_143526.bxt 4 KB Today 2:37 PM Audiobooks Audiobooks T-1102_20170926_143526.bxt 4 KB Today 2:37 PM Audiobooks Audiobooks Audiobooks Audiobooks Audiobooks Audiobooks Audiobooks Audiobooks Audiobooks Audiobooks Audiobooks Tones Audiobooks Audiobooks Audiobooks	Books		1	PT-102_20170919_151502.pdf	8 KB 9/19/17, 3:16 PM
	Audiobooks			PT-102_20170919_151502.txt	4 KB 9/19/17, 3:16 PM
T-1102_20170926_143526.pdf 4 KB Today 2:37 PM T-1102_20170926_143526.txt 4 KB Today 2:37 PM Add Save to	▲ Tones			T-1102_20170926_143526.dc	4 KB Today 2:37 PM
T-1102_20170926_143526.txt 4 KB Today 2:37 PM			1	T-1102_20170926_143526.pdf	4 KB Today 2:37 PM
Add Save to				T-1102_20170926_143526.txt	4 KB Today 2:37 PM
Add Save to					
Add Save to					
					Add Save to
8.82 GB Free Sync Done			8.8	32 GB Free	Sync Done

The default location for the saved configuration files is the directory "\DevCom Documents". Simply highlight the desired files and copy to your Mac. Once on the Mac, they can be viewed or imported into many different software packages.

6.7 DD Library Updates

Users who provide their Email address to ProComSol will be notified when DD Library Updates are available. The Email will provide detailed instructions on how to obtain the update. To update the DD Library, follow Section 4.2.1, Install DD Library.

6.8 HART-IP Interface

6.8.1 Setup

DevCom allows you to connect to your WirelessHART network using HART-IP over an Ethernet connection to the networks WirelessHART Gateway. Once connected to a device, DevCom behaves just like connected via a modem. You can view data, edit parameters, etc. Below is the procedure for setting DevCom to use HART-IP and for connecting to a HART device:

Step	Action
1	Go to the Settings Menu and change the Modem Type to TCP/IP:



Step Action		
••••• ?	4:59 PM	* 💼 +
≡ Settings		
Default Modem:	HART Modem	
HART Master:	Reset Primary Mast Secondary M	er aster
Polling Address:	Polling Address	; 0 -
DD Language:	System Langua	a •
Modem Type		
Sav	re Settings	

- 2 Press "Save Settings" to make the setting change.
- 3 The default network IP address is our demo WirelessHART network. It is used to demonstrate the HART-IP features of the DevCom App. If you would like to connect to your network, go to the Settings Menu again. You will then see this:

••••	5:02 PM 🛛 🖇 🔲 🕯
\equiv Settings	
Default Modem:	HART Modem
	Reset
HART Master:	Primary Master Secondary Master
Polling Address:	Polling Address 0 -
DD Language:	System Langua 🔻
Modem Type	TCP/IP -
HART-IP	Configure
Sav	e Settings



Step	Action
4	Tap "Configure" to bring up the HART-IP Setup Menu:
	•••• 🗢 🗢 5:02 PM 🕴 📥 4
	\equiv HART-IP Setup
	IP Address 174.77.73.234
	Port 5094
	HART 0
	Save Settings
5	Make the necessary edits for your WirelessHART Gateway and

press "Save Settings".

6.8.2 Connecting to a Device

Once the connection to the WirelessHART Gateway is configured, restart DevCom. The App will then connect to the WirelessHART Gateway and retrieve network hierarchy information. This section describes how to then connect to the desired device.

Step	Action
1	Once the network hierarchy information is retrieved, it is displayed in the Gateway Network Menu. Note that the example below if for the ProComSol Demo network and that your network will look different:



Step Action		
	••••• 🗢 5:00 PM 🛞 🗖	• +
	wihartgw	
	BLT-1001: BULLET	
	P T-110: WIRELESS 648x	
	T-301 648 WirelessHART	
	P TH-1020: THUMB	
	🔮 wihartgw	
	Seen Network	
	Scan Network	

Item description:

Wihartgw – is the Tag for the WirelessHART Gateway BLT-1001:BULLET and others are devices on the WirelessHART network that have sub devices.

- 2 Press "Scan Network" if you want to refresh the Gateway Network Menu.
- 3 Tap a device to show the sub-devices connected to it. Note that native WirelessHART devices will have itself as a sub-device. Below is the screen that shows after BLT-1001:BULLET is tapped. Again this is on our Demo network:



		•••• ?	5:00 PM	* 🛑 +
		≡ Gatev	vay Network	
		← BLT-	1001: BULLET	
		e E	BLT-1001: BULLET	
		P F	P-1011: 3095	
		Т 🚽	-101A: PR5335	
		Г 🕘	-104: TMT162	
			Scan Network	
	Item description:			
	BLT-1001:BULL	ET – is t	the root device	e
	P-1001: 3095 and	others a	the sub-dev	vices connected to th
	root device.			
4	Tap any of the sub	o-device	s to connect to	that device. The
	display then looks	just lik	e a modem co	nnected device. The
	only difference is	that the	Bluetooth Ac	tivity icon is now the
	Wireless Activity	icon as	seen here:	



••••• ?	5:02 PM	* 💼 +
≡ Devi	ce Explorer	
Device M DD: /000	odel: 3095MV 026/0016/0203.fm8 Co	Tag: " innected
	Online	
	Device setup	
PV	nan	g/min
PV AO1	4.00	mA
PV LRV	0	g/min
PV URV	4769.5	g/min
Cal	ncel Com	nmit

5 You are now connected to the device and can perform any DevCom function you like as if you were connected locally through a modem.



Appendix A

Troubleshooting Guide

Problem: Will not communicate

Hardware Check:

Verify the following:

- 1. Paired to correct HART Modem
- 2. Loop power supply is on.
- 3. Loop resistance between 250 ohms and 1Kohms.
- 4. Loop current within HART limits.
- 5. If multi drop configuration, all transmitters in loop have unique addresses.
- 6. HART interface hardware connected across loop resistor or across transmitter terminals.



Appendix B

Contact Information

ProComSol, Ltd

Process Communications Solutions 13001 Athens Ave Suite 220 Lakewood, OH 44107 USA

Phone: 216.221.1550 Fax: 216.221.1554 Email: <u>sales@procomsol.com</u> <u>support@procomsol.com</u> Web: <u>www.procomsol.com</u>