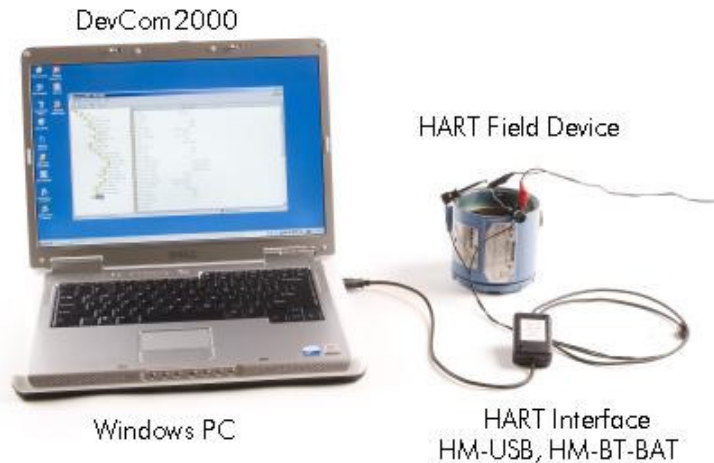## Advanced, Cost-effective, and Reliable HART Communication Products

ProComSol, Ltd (Process Communications Solutions) was founded in 2005 dedicated to providing products for users of HART technology. We established our reputation with reliable USB HART modems certified by the HART Communication Foundation. The HM-USB HART Modem is the most cost-effective certified USB HART Modem available.

As for technical innovations, our Bluetooth HART modems first appeared on the market in 2005. This makes us the first to offer wireless capabilities for HART users.

Our DevCom2000 HART Communicator software products have established themselves as the only real alternative to expensive communicators. DevCom2000 was originally released in 2006 as the first product to use the HART Communication Foundation's SDC-625 technology. Constant and steady improvements over the years have made DevCom2000 reliable, convenient, and feature rich.

ProComSol has always been a member of the HART Communication Foundation. We are committed to improving the HART protocol and offering high quality, reliable, and innovative products using this amazing technology. If you do not see products or features that you need, please contact us. We promise to work hard to meet your needs.

Thank you for your interest in our products,
*ProComSol, Ltd*

Table of Contents

DevCom2000
Smart Device Communicator

Benefits:

- Perform complete HART device configurations using your PC or Laptop
- Uses the registered DD files from the HART Communication Foundation
- Complete access to all features of the device DD including Methods
- Monitor PV, Multi-variables, and Device Status
- View and edit device Variables
- The most cost-effective DD based HART communication solution available

Features:

- Windows Explorer menu layout
- Device menu structure easy to navigate
- Get to the information you want quickly
- Communication and Event Logs
- Save configurations as text file or PDF file for documenting the device
- Write saved configurations to devices
- Complies with new Enhanced DDL standard (IEC 61804-3)
- Comes with all the latest registered DD's from the HART Foundation
- 1 Year warranty
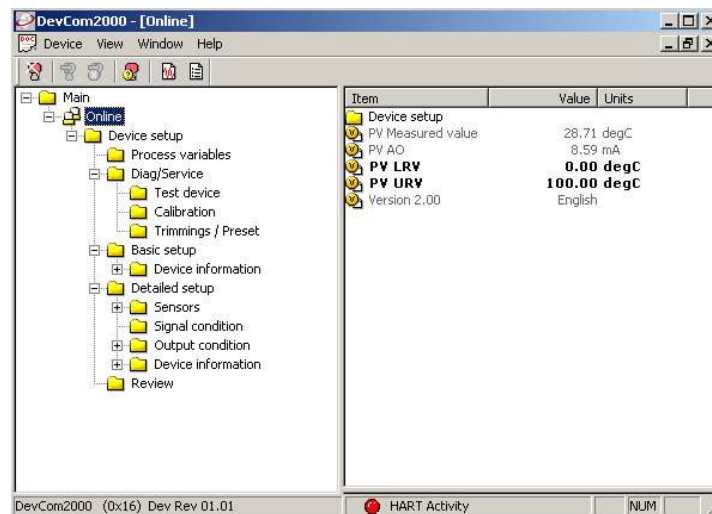
Sample Screen Shot

DevCom2000
Smart Device Communicator

Specifications:

System Requirements (minimums)

Operating System	Windows NT, 2000, XP, Vista, 7
Processor Speed	Pentium, 600 Mhz
Memory	256 MB
Hard Disk Space	500 MB
Monitor	256-color VGA
Communication Port	USB, RS232, or Bluetooth
HART Modem	ProComSol HM-USB, HM-BT-BAT-ER, or equivalents

Device Descriptions (DD's)

DD Library	Included
Generic DD	Included
Current Library	HCF Release 2009 No. 3 (call for latest data)
Number of devices	987 (call for latest data)
DD Updates	Quarterly updates for 1 year free
	Download updates with subscription service

Functions

Monitor PV
Monitor Multi-variables
Monitor Device Status
View and Edit Variables
Save complete device configuration to text file and PDF file
Write saved configurations to devices
Sample Execute Methods:
      Trims
      Calibrations
      Loop Tests
      Zero and Span

DevCom2000 PDA
Smart Device
Communicator

Benefits:
- Perform complete HART device configurations using your PDA
- Uses the registered DD files from the HART Communication Foundation
- Complete access to all features of the device DD including Methods
- Monitor PV, Multi-variables, and Device Status
- View and edit device Variables
- The most cost-effective DD based handheld HART communication solution available

Features:
- Windows Explorer menu layout
- Device menu structure easy to navigate
- Get to the information you want quickly
- Save configurations for documenting the device
- Comes with all the latest registered DD's from the HART Foundation
- 1 Year warranty
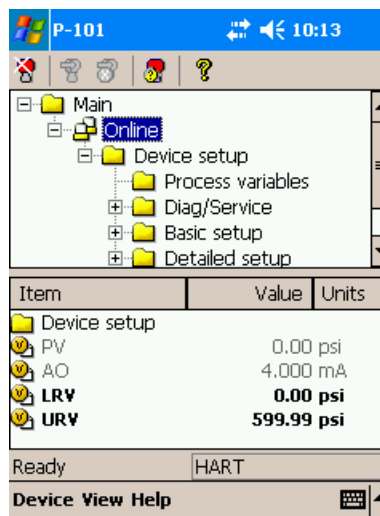
Sample Screen Shot

DevCom2000 PDA
Smart Device
Communicator

Specifications:

System Requirements (minimums)

Operating System	Pocket PC 2003, Windows Mobile 5.0
Memory slot	SD Card
Memory	64 MB
Hard Disk Space	128 MB
Screen	256-color VGA
Communication Port	Bluetooth
HART Modem	ProComSol HM-BT-BAT-ER, or equivalent

Device Descriptions (DD's)

DD Library	Included
Generic DD	Included
Current Library	HCF Release 2009 No. 3 (call for latest data)
Number of devices	987 (call for latest data)
DD Updates	Quarterly updates for 1 year free
	Download updates with subscription service

Functions
Monitor PV
Monitor Multi-variables
Monitor Device Status
View and Edit Variables
Save complete device configuration to text file
Sample Execute Methods:
      Trims
      Calibrations
      Loop Tests
      Zero and Span
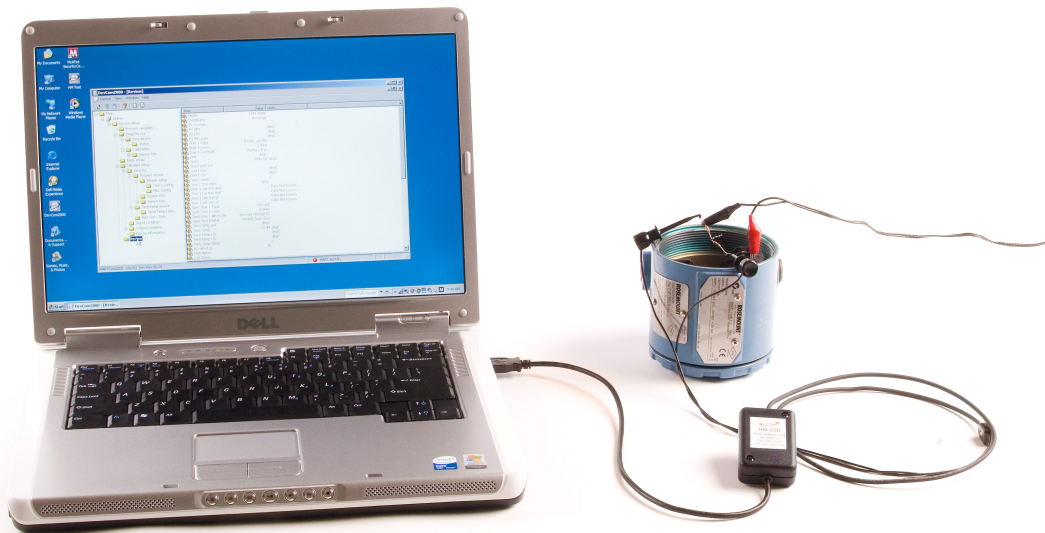
COM-PC
Smart Communicator PC

Description:

Combines all components needed for a cost-effective PC based HART Communicator

Includes:

- DevCom2000 Smart Device Communicator Software
- HM-USB, HART Modem USB
- 1 Year warranty

Note: Computer not included.

COM-PC
Smart Communicator
PC

Specifications:

DevCom2000 Smart Device Communicator Software

DD Library	Included
Generic DD	Included
Current Library	HCF Release 2009 No. 3 (call for latest data)
DD Updates	Quarterly updates for 1 year, free
DD Specification	Enhanced DDL standard (IEC 61804-3)

HM-USB HART Modem USB

Dimensions	2.5" x 1.5" x 0.75" (64mm x 38mm x 19mm)
Total Unit Weight	3 oz (85 g)
HART Cable Length	4' (1.2 m)
HART Cable Connectors	Mini-Grabber
USB Cable Length	18" (0.5 m)
USB Cable Connector	USB Type A
HART Specifications	HART 4, HART 5, HART 6, HART 7, HART Physical Layer Spec HCF_SPEC-54
HART Foundation	Registration Number L2-06-1000-012
USB Specifications	USB 1.1, USB 2.0
Power	USB port provides power to unit
Current Draw	20mA

Note: For full specifications see individual data sheets.

COM-PDA
Smart Communicator PDA

Description:
Combines all components needed for a cost-effective HART Hand-Held Communicator

Includes:
- Socket SoMo 650-E PDA with Bluetooth 2.0, 802.11b
- DevCom2000 PDA Smart Device Communicator Software
- SD Card containing the complete HART DD Library
- HM-BT-BAT-ER Bluetooth HART Modem
- Loop Resistor, 250 Ohm
- Rugged hard plastic case with carrying handle
- 1 Year warranty

All components installed, setup, and ready to go!

COM-PDA
Smart Communicator
PDA

Specifications:

Socket SoMo 650-E PDA

Operating System	Windows Mobile 5.0
Memory slot	SD Card
Memory RAM	128 MB
Memory ROM	256 MB
Screen	256-color VGA (240 x 320 pixels)
Communications	Bluetooth 2.0, 802.11b, IrDA

DevCom2000 PDA Smart Device Communicator Software

DD Library	Included
Generic DD	Included
Current Library	HCF Release 2009 No. 3 (call for latest data)
DD Updates	Quarterly updates for 1 year free

SD Card

Memory Size	2 GB

HM-BT-BAT-ER Bluetooth HART Modem Extended Range

Dimensions	2.00" x 2.75" x 0.80" (50mm x 70mm x 20mm)
Total Unit Weight	6 oz (170 g)
HART Specifications	HART 4, HART 5, HART 6, HART 7, HART Physical Layer Spec HCF_SPEC-54

Loop Resistor, 250 Ohm

Power Rating	1 Watt

Carrying Case

|	
Size	13-1/2" L x 10" W x 3-3/4" H

Note: For full specifications see individual data sheets.

DD-LIB-1YR
DD Library Subscription

Features:

- Keep your DD Library current with new Device Descriptions (DDs)
- Keeps your DD Library current with updated/revised DDs
- Access to DevCom2000 upgrades as well
- Easy to use web based updates
- 1 Year worth of updates (4 updates)

HM-USB
HART Modem - USB

HART REGISTERED
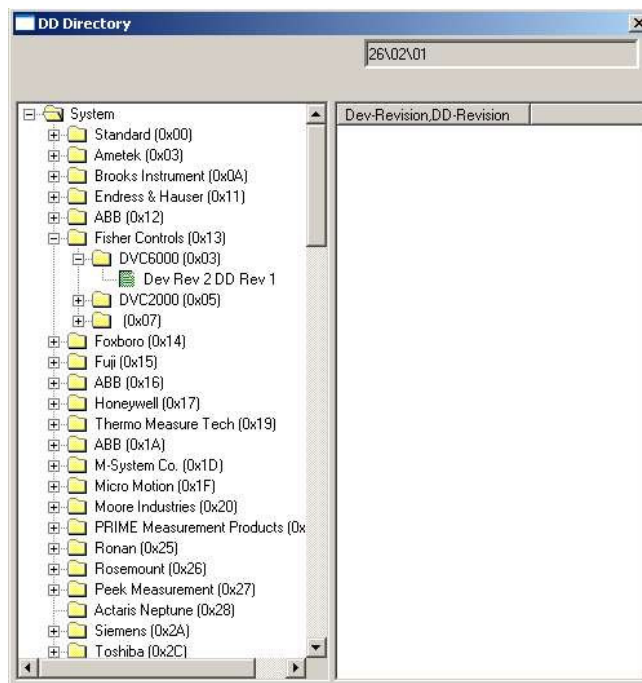
Features:

- USB 1.1 and 2.0 compatible
- Integral standard USB type A connector
- Integral heavy duty HART Minigrabber connectors
- Certified to meet HART Physical Layer Spec HCF_SPEC-54
- Self powered, no external power supply or batteries needed
- 48" (1.2m) cable length
- Easy to install Virtual Serial Port for any Windows application
- Compact size 2.5" x 1.5" x 0.75" (64mm x 38mm x 19mm)
- Rugged ABS plastic enclosure
- Custom cable lengths available
- Banana plug option available (HM-USB-BP)
- HART Modem Test Program included
- HART Foundation Registered, Registration Number L2-06-1000-012
- Cost effective
- Each unit 100% tested
- 1 Year warranty

HM-USB
HART Modem - USB

Specifications:

Enclosure

Material   High strength ABS Plastic
Dimensions   2.5" x 1.5" x 0.75" (64mm x 38mm x 19mm)
Total Unit Weight   3 oz (85 g)

Cables

HART Cable Length   4' (1.2 m)
HART Cable Connectors   Mini-Grabber
USB Cable Length   18" (0.5 m)
USB Cable Connector   USB Type A

HART

Interface   Capacitive coupling
Output   600 mVpp
Leakage   < 10 uA
Connections   Across loop resistor or HART field device
Specifications   HART 4, HART 5, HART 6, HART 7,
                           HART Physical Layer Spec HCF_SPEC-54
HART Foundation   Registration Number L2-06-1000-012

USB

Specifications   USB 1.1, USB 2.0
Power   USB port provides power to unit
Current Draw   20mA

Environmental

Operating Temperature   0 degC to 50 degC (32 degF to 122 degF)
Storage Temperature   -40 degC to 85 degC (-40 degF to 185 degF)
Humidity   0% to 99% (non-condensing)

HM-USB-ISO
HART Modem - USB
Electrically Isolated

Features:

- 1500 Vdc Opto Isolation between HART and USB circuits
- USB 1.1 and 2.0 compatible
- Integral standard USB type A connector
- Integral heavy duty HART Minigrabber connectors
- Certified to meet HART Physical Layer Spec HCF_SPEC-54
- Self powered, no external power supply or batteries needed
- 48" (1.2m) cable length
- Easy to install Virtual Serial Port for any Windows application
- Compact size 2.75" x 2.0" x 0.8" (70mm x 51mm x 20mm)
- Rugged ABS plastic enclosure
- Custom cable lengths available
- Banana plug option available (HM-USB-ISO-BP)
- HART Modem Test Program included
- Cost effective
- Each unit 100% tested
- 1 Year warranty

HM-USB-ISO
HART Modem - USB
Electrically Isolated

Specifications:

Isolation
Isolation Voltage   1500 Vdc

Enclosure
Material	High strength ABS Plastic
Dimensions	2.75" x 2.0" x 0.8" (70mm x 51mm x 20mm)
Total Unit Weight	3 oz (85 g)

Cables
HART Cable Length	4' (1.2 m)
HART Cable Connectors	Mini-Grabber
USB Cable Length	18" (0.5 m)
USB Cable Connector	USB Type A

HART
Interface	Capacitive and transformer coupling
Output	600 mVpp
Leakage	< 10 uA
Connections	Across loop resistor or HART field device
Specifications	HART 4, HART 5, HART 6

USB
Specifications	USB 1.1, USB 2.0
Power	USB port provides power to unit
Current Draw	20mA

Environmental
Operating Temperature	0 degC to 50 degC (32 degF to 122 degF)
Storage Temperature	-40 degC to 85 degC (-40 degF to 185 degF)
Humidity	0% to 99% (non-condensing)

HM-BT-BAT-ER
HART Modem - Bluetooth Extended Range

Benefits:
- Access hard to reach instrumentation from the ground or your truck
- Improve plant personnel safety
- Easy instrument configuration using PDA's or PC's without bulky modules or wires
- Less clutter on desk or workbench

Features:
- Bluetooth v2.0
- Reliable wireless communication up to 275 ft (83.8m)
- Internal antenna
- Rechargeable Li-Ion battery via mini-USB connector
- Integral heavy duty HART Minigrabber connectors
- Meets HART Physical Layer Spec HCF_SPEC-54
- High security 128 bit encryption
- Compact size 2.00" x 2.75" x 0.80" (50mm x 70mm x 20mm)
- Rugged ABS plastic enclosure
- HART Modem Test Program included for PC and Pocket PC
- Integrated loop for hanging strap attachment
- Each unit 100% tested
- 1 Year warranty

HM-BT-BAT-ER
HART Modem - Bluetooth
Extended Range

Specifications:

Enclosure

Material	High strength ABS Plastic
Dimensions	2.00" x 2.75" x 0.80" (50mm x 70mm x 20mm)
Total Unit Weight	6 oz (170 g)

Cables

HART Cable Length	4' (1.2 m)
HART Cable Connectors	Mini-Grabber

HART

Interface	Capacitive coupling
Output	600 mVpp
Leakage	< 10 uA
Connections	Across loop resistor or HART field device
Specifications	HART 4, HART 5, HART 6, HART 7, HART Physical Layer Spec HCF_SPEC-54

Bluetooth

Specifications	Bluetooth v2.0
Frequency	2.4 GHz
Class 1 Master Distance	275' (83.8m)
Class 2 Master Distance	25' (7.6m)

Battery

Type	Rechargeable Li-Ion
Life	19 hours continuous use

Environmental

Operating Temperature	0 degC to 50 degC (32 degF to 122 degF)
Storage Temperature	-40 degC to 85 degC (-40 degF to 185 degF)
Humidity	0% to 99% (non-condensing)

HM-BT-VIN
HART Modem - Bluetooth
Explosion Proof

Benefits:
- Access hard to reach instrumentation from the ground
- Easy instrument configuration using PDA's or PC's without bulky modules or wires
- Permanent in-field installation preserves explosion proof environment
- Explosion proof certification from CSA

Features:
- Bluetooth v1.2
- Reliable wireless communication up to 100 ft (30m)
- Internal antenna
- Powered via 12Vdc to 36Vdc
- Bluetooth Activity and Power LEDs visible through glass cover
- Meets HART Physical Layer Spec HCF_SPEC-54
- High security 128 bit encryption
- Compact size 4.5" x 4.0" x 3.75" (115mm x 100mm x 95mm)
- Type 4X Enclosure.
- Conduit sizes ½ inch NPT (standard) and ¾ inch NPT (optional)
- HART Modem Test Program included for PC and Pocket PC PDA
- Optional Mounting Bracket available (BR2-KIT)
- Each unit 100% tested
- 1 Year warranty

HM-BT-VIN
HART Modem - Bluetooth
Explosion Proof

Specifications:

Enclosure

Material	Blue painted aluminum
Dimensions	4.5" x 4.0" x 3.75" (115mm x 100mm x 95mm)
Weight	1.3 lbs (0.54 kg)
Interface	Conduit sizes ½" NPT or ¾" NPT
Certifications	Explosion proof certification from CSA:
	Class l Div 1 Groups B, C, and D.
	Class ll Div 1 Groups E, F, and G
	Type 4X

HART

Interface	Capacitive coupling
Output	600 mVpp
Leakage	< 10 uA
Connections	Across loop resistor or HART field device
Specifications	HART 4, HART 5, HART 6, HART 7
	HART Physical Layer Spec HCF_SPEC-54

Bluetooth

Specifications	Bluetooth v1.2
Frequency	2.4 GHz
Class 1 Master Distance	100' (30m)
Class 2 Master Distance	25' (7.6m)

Power Input

Voltage	12Vdc to 36Vdc
Power	600 mW

Environmental

|	
Operating Temperature	-20 degC to 60 degC (-4 degF to 140 degF)
Storage Temperature	-40 degC to 85 degC (-40 degF to 185 degF)
Humidity	0% to 99% (non-condensing)

BR2-KIT
Bracket Kit
2 Inch Pipe

Features:
- Designed for use with the HM-BT-VIN
- Mount the HM-BT-VIN directly to 2" piping
- 0.375" (9.5mm) holes for alternate mounting schemes
- Size 3.6" x 2.0" x 1.35" (91mm x 51mm x 34mm)
- 0.075" (2mm) thick stainless steel
- 1 Year warranty

Kit Contents
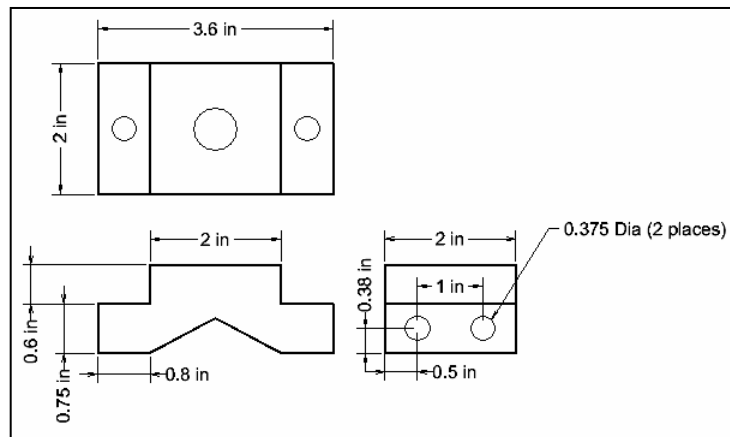
Bracket Dimensions

Cabling Options

We offer several cabling options to meet your application needs:

CN-LENGTH

Custom Cable Length Option

Change the standard 4 ft length to whatever length you need.

Order as:
CN-LENGTH – XX, Where XX is cable length in feet.

- BP

Banana Plug Option

Standard banana plugs allow the user to attach the tests connectors of their choice.

Order as:
HM-USB-BP – For HM-USB Modem
HM-USB-ISO-BP – For HM-USB-ISO Modem
HM-BT-BAT-ER-BP – For HM-BT-BAT-ER Modem

CN-KIT-01

Banana Jack Connector Kit

Kit of four different connector types. Designed for use with the BP option modems.

Order as:
CN-KIT-01

BT-ADAPTER
Bluetooth USB Adapter

Benefits:
- Add Bluetooth to your PC
- Access hard to reach instrumentation from the ground or your truck
- Improve plant personnel safety
- Easy instrument configuration without bulky modules or wires
- Less clutter on desk or workbench

Features:
- Bluetooth Class 1 v2.0
- Compatible with Bluetooth v1.1 and v1.2
- Reliable wireless communication up to 330 ft (100m)
- Internal antenna
- USB connection
- Self powered via USB
- Compact size 2.95" x 2.20" x 0.43" (24mm x 56mm x 11mm)
- Rugged ABS plastic enclosure
- 1 Year warranty

BT-ADAPTER
Bluetooth USB Adapter

Specifications:

Enclosure

Material	High strength ABS Plastic
Dimensions	0.95" x 2.2" x 0.43" (24mm x 56mm x 11mm)
Total Unit Weight	0.3 oz (8.5 g)

Operating Systems

Windows	2000, XP, Vista, Vista 64

Bluetooth

Specifications	Bluetooth v2.0
Frequency	2.4 GHz
Range	330' (100m)

Environmental

Operating Temperature	0 degC to 50 degC (32 degF to 122 degF)
Storage Temperature	-40 degC to 85 degC (-40 degF to 185 degF)
Humidity	0% to 99% (non-condensing)

R-LOOP
250 Ohm Resistor

Description:
250 ohm resistor provides necessary loop resistance for the HART signal.