#### Data Sheet DS/DHH800\_2 3KXD311800R1001\_B

## Fieldbus Tools Hand-Held Configuration Devices Mobility DHH800-MFC Configuration Device with HART<sup>®</sup> Communications

- Hand-Held Terminal for HART<sup>®</sup> device configuration, commissioning, and maintenance operations
- Supported Devices ABB instruments with an option for third party suppliers
- Supported HART Commands Universal, Common Practice, and Device Specific
- On-Site Updates update new device profiles and firmware via Internet connection
- Extensive Memory dedicated memory for 600 HART device profiles
- Extensive Storage document and store more than 200 device configurations.
- Time Saving Engineering clone/upload/ download configurations
- Remote Configuration off-line mode for developing/reviewing configuration.
- Record Keeping as found/as left history using DHH820-DMS software
- User Interface 13-line, 128 x 128 pixel graphic, backlit display
- User Convenience edit directly from Review/Edit mode



### DHH800-MFC





# Mobility DHH800-MFC with HART<sup>®</sup> Communications

As part of ABB's Mobility line of device hand-helds, the DHH800-MFC is a hand-held terminal for device configuration of HART<sup>®</sup> instruments. It interfaces to a wide range of devices supporting ABB instruments with an option to support those from third party suppliers. All supported HART field devices can be configured, polled, and trimmed using the Mobility DHH800-MFC. As a full function HART communicator, the Mobility MFC supports Universal, Common Practice, and Device Specific commands for commissioning, configuration, and maintenance operations. The Mobility DHH800-MFC provides a full view of information in a 13-line 16k pixel based display. It's easy to navigate parameter scrolling capability eliminates the need to memorize menus for online or offline device configuration.

The Mobility DHH800-MFC is designed for optimum convenience and usability. It's sleek, easy to grasp contour with thumb key access makes the Mobility DHH800-MFC especially suitable for single-handed operation.

### **Design Features**

- Update new device profiles and firmware via Internet connection
- Dedicated memory for 600 HART device profiles
- Document and store more than 200 device configurations
- Clone / Upload / Download configurations
- Off-line mode for developing / reviewing configurations
- As found / as left history using DHH820-DMS software available with ABB 800xA System or as a separate application ordered via DHH810-MFT price list
- 13-line, 128x128 pixel graphic, backlit display
- Full alpha-numeric keypad
- Edit directly from Review/Edit mode
- Quick Menu access key
- HART menu Home key
- Dedicated text edit keys
- Programmable lock-out settings
- Contrast key for direct adjustment from any mode
- Elastic hand strap and adjustable, detachable hanging strap
- Thumb keys (left hand) for menu Up, Down, and Select
- Custom "use-in-place" soft case with lead kit compartment

The Mobility DHH800-MFC supports all HART devices at the Universal and Common Practice command levels plus a large and growing list of ABB and non-ABB devices at the Device Specific command level (greater than 130 as of 1 April 2005). The up-to-date device list can be found at www.abb.com/instrumentation in the Fieldbus & Tools product area of Instrumentation & Analytical products. Every Mobility DHH800-MFC comes with a 3 year download subscription allowing users to keep up-to-date with the latest device revisions/ definitions for an extended time. Updates under this subscription are readily downloaded from the Internet. The Mobility DHH800-MFC supports many transmitter types including Analytical, Flow, Level, Pressure, and Temperature.

### **Specifications**

- Base Unit Data: Length = 10" (25.4cm)
   Width = 4-1/8" (10.47cm) to 2-1/2" (6.35cm)
   Depth = 1-1/4" (3.18cm) to 1-5/8"(4.13cm)
   Housing = ABS plastic case
   Weight = 19 oz (539 g) (with batteries)
- Keypad: single sheet elastomer keys;
   4 soft, 8 single function,
   30 dual function, 3 thumb keys
- Display: 13 line, 128 x 128 pixel graphic display, 2.6" (6.6cm) x 2.6" (6.6 cm) viewable area, backlight
- Power: two 9V alkaline, lithium, or NiMH batteries (external charge); optional 100 – 240 Vac power adapter
- Temperature:Storage: -40° F to 140° F (-40° C to 60° C)
- Operating: 14° F to 140° F
  - (-10° C to 60° C)
- Connections:Standard HART banana jacks (¾" (1.9 cm) center-to-center) for HART ac adapter jack DB-9 for data transfer
  - Intrinsically Safe Option: Certification to Class 1, Division 1, Groups A, B, C & D Certification to ATEX pending
- Electrical Compliance: All units CE marked

### Use Cases

The Mobility DHH800-MFC supports a wide range of functions that can help to reduce costs by saving time in start-up, day-to-day operations, and maintenance activities. It powers up quickly, typically in less than 2 seconds, and it easily connects with device terminals and/or wiring, making it readily available to begin configuration and/or troubleshooting. On power-up, the Mobility DHH800-MFC searches for a connected device, and upon finding it, the DHH800-MFC display identifies the device and reveals a wealth of information about the device in its large 13 line display area including the device's key variables and status. The large 200-device memory capacity allows the Mobility DHH800-MFC to be used in the field for long periods of time without having a return back to upload it's saved data. The Mobility DHH800-MFC includes a Review/Edit function that allows a user to scroll online or offline through every HART accessible parameter without having to memorize varying menu structures from different instrument suppliers. This time saving feature along with thumb key access and the Mobility DHH-800-MFC's ergonomic design that allows it to comfortably fit in your hand, makes single-handed operation in any location, including hard-to-access places, the often preferred method of use. Below are some of the typical ways that the Mobility DHH800-MFC can be used.

- Commission devices
  - Step-by-step configuration
  - Document as-left configuration
  - Electronic Birth Certificate
- Operations
  - Reconfiguration for process changes
  - Reconfiguration for batch runs
  - Document as-found and as-left configurations
  - Populate DHH820-DMS database software
- Device Maintenance
  - Troubleshoot devices with HART
  - View device error messages
  - Clone devices to commission replacements
  - Preventive review of device status

The Mobility DHH800-MFC provides HART users with a more useful, reliable, and comprehensive communication tool. Combine it with our Mobility DHH810-MFT Modular Calibrator with HART Communications and Mobility Device Management System (DHH820-DMS) documenting software to provide the only single-source device management solution capable of meeting continually changing documentation requirements.

Ordering information													
Mobility DHH-MFC with HART <sup>®</sup> Communications Variant digit No. 1 - 7	8 - 1	10	11	12	13	14	15	16	17	18	19	20	21
DHH800-MFC Catalog No. DHH800	-												
Configurator with HART® Communications	MF	С											
<ul> <li>Includes CE Mark, HART leads Kit, RS-232 Serial Cable,</li> </ul>													
Paper User's Manual and 3-year download subscription													
Model Type													
<ul> <li>Includes Batteries, Universal Power Adapter</li> </ul>													
All Supported HART devices (ABB and non-ABB)			1	2									
Only Supported ABB HART Devices			2	2									
Documenting Options													
Standard					1								
- As-found & as-left function requires													
DHH820-DMS database software sold separately													
Support for 21 CFR Part 11					2								l
<ul> <li>documenting for FDA electronic signature compliance</li> </ul>													l.
requires DHH820-DMS database software sold separately													
Certification													
CE Mark (Standard on all units)						0	0						
CE Mark, Intrinsic Safety certification by MET Laboratories per CSA						0	1						l.
C22.2 No. 1010.1-92, C22.2 No. 157, and UL913, Fifth Edition Rev	. 2/2	1/9	7										ĺ.
for Class I, Div I, Groups A, B, C and D.													
Carrying Case and Strap Options													
Rear Hand Strap with protective boot (Standard on all units)   0									i.				
Rear Hand Strap with protective boot and Adjustable Hanging Strap    1										i.			
Rear Hand Strap with protective boot and Soft Carrying Case								2					i.
Rear Hand Strap with protective boot, Soft Carrying Case and adjust	able I	har	ngiı	ng :	stra	р		3					
User's Manual Language Options													
English									0	1			
Reserved													
Always one											1		
Firmware Language													
English												0	1

Selection of the DHH800-MFC12 model is required for support of ABB and third party devices while selection of the DHH800-MFC22 model provides support for ABB devices only. The upgrade from DHH800-MFC22 to DHH800-MFC12 does not require the return of the handheld and can be done over the Internet after purchase of the upgrade with part number 3KXD311800L0042.

CF = Consult Factory for availability and price

Standard Products =

Additional ordering information			
Mobility DHH800-MFC with HART <sup>®</sup> Communications - Accessories		Note	Catalog No.
Carrying Accessories			
Gray protective boot provides degree of protection against drop related damage; slip on	(A37136)	1)	3KXD311800L0001
MFC carrying case - custom soft case with adjustable shoulder strap and HART lead compartm	(A36875) nent		3KXD311800L0002
Adjustable, detachable hanging strap - clips directly to MFC attach points	(A36937)		3KXD311800L0003
Communication Accessories			
HART Test Lead Kit - standard banana plugs, mini-grabbers, 250 ohm re	(A900529-00014) esistor	1)	3KXD311800L0011
Standard size 250 $\Omega$ shunt resistor - required for HART low resistance loops	(A36821)		3KXD311800L0012
DB-9 cable, Male x Female, 6 ft (1.83 meter) length	(A900447-00052)	1)	3KXD311800L0013
Power Accessories			
9 Volt Alkaline Battery (2 required)	(A900614-00006)	1)	3KXD311800L0021
9 Volt Lithium Battery (2 required)	(A900614-00009)		3KXD311800L0022
9 Volt NiMH Batteries (2 required) rechargeable	(A900614-00015)		3KXD311800L0023
NiMH battery charger (9 Volt)	(A37134)		3KXD311800L0031
Power adapter, 100 Vac to 240 Vac, 50-60 Hz	(A37160)	1)	3KXD311800L0034
Universal plug adapter kit for 3KXD311800L0034 power adapter	(A37159)	1)	3KXD311800L0035
Media Accessories			
Mobility Interface Software CD set, Version 2.1	(698B277U01)	1)	3KXD311800L0041
Upgrade from "ABB Only" to "ABB + non-ABB" Mobility MFC	(DPCLICUPG-22)	,	3KXD311800L0042
Mobility MFC Operations Manual, printed hard copy - one copy supplied with order at no charge and pdf instructions included on CD	(694A198U01)	1)	3KXD311800R4301

Note: 1) Included with base order DHH800-MFC

Standard products =

Notes

ABB has Sales & Customer Support expertise in over 100 countries worldwide

www.abb.com/Instrumentation

The Company's policy is one of continuous product improvement and the right is reserved to modify the information contained herein without notice.

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ABB Inc. 125 East County Line Road Warminster, PA 18974 USA Tel: +1 215 674 6000 Fax: +1 215 674 7183

ABB Limited Howard Road, St. Neots Cambridgeshire, PE19 8EU UK

Tel: +44 (0) 1480 475321 Fax: +44 (0) 1480 217948