

HART Configuration Software HPC301 Datasheet

HART®
Fieldbus
Profibus
Intrinsic Safety
Configuration Tools
Semiconductors
Training
Custom Design



Turn your Palm hand held into a full powered HART configurator

The HPC301 is both powerful and user-friendly . It provides easy configuration and monitoring of field instruments plus the mobility of operating on a Palm Organizer.



The HPC301 turns just about any Palm into a full featured configurator for your HART network and instruments. Now you can configure HART devices from multiple manufacturers; test and adjust network settings, or modify instrument operations while in the field. The HPC series give you the freedom of complete portable HART network control. Full synchronization with configuration data files on your PC add the security you need to manage your network effectively.

The HPC series includes industry-leading software tools and rugged field designed and tested interfaces . . . all built with and backed by the quality you've grown to expect from SmarResearch:

The HPC301:

- Turns your Palm Compatible organizer into a fast configuration platform for HART products from most vendors.
- Has been tested to be both faster and easier to use than other hand held alternatives.
- Provides full support for HART instruments from various manufacturers without the need for device-specific datapacks or memory modules.
- Support Multidrop operation for all 15 nodes allowed by the HART protocol.
- Incorporates a one step installation process plus an extensive help system to reduce training and eliminate the need for extensive manuals.
- Seamlessly integrates with Smar's CONF401 PC configuration software.
- Includes the ability to set up configurations off-line and store them for later use.
- Comes with free upgrades as additional instrument support is added.

Included HPC301 interfaces:

- Support most Palm OS based handhelds.
- Are compatible with HART products from multiple manufacturers.
- Are self powered: no external power supply is required.
- Incorporate a flexible plastic coiled cable wrap for easy connection and use.
- Have been designed to meet very low leakage (Max 10 μ A @ 35V dc) current to the process network standards.
- Are packaged in a Palm-standard case.

The HPC301 brings the power of modern desk top software to your field staff.

The HPC301 Pocket Configurator uses the latest Palm OS platform available. It incorporates a user interface designed for easy use and fast learning. The HPC series uses the same command and operating interfaces that have become standard for pc and palm top software:

- The HPC301 can be easily modified for local languages and operating needs.
- All devices are integrated into a single program. Users do not have to learn instrument-specific interface protocols.
- All instrument functions, features, and parameters are included.
- PALM and instrument password protection and user configuration tools give you the ability to control individual access. The HPC series can easily be configured for operators, maintenance staff, supervisors, and engineers. You'll have one tool everyone who works with your HART network can use.

Handle All HART Devices Easily.

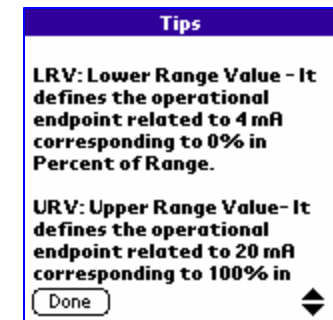
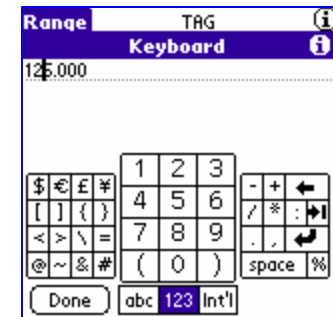
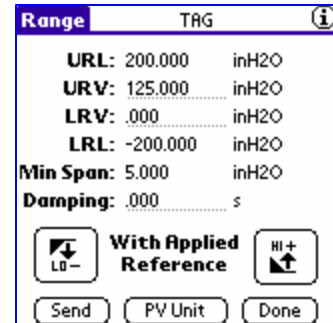
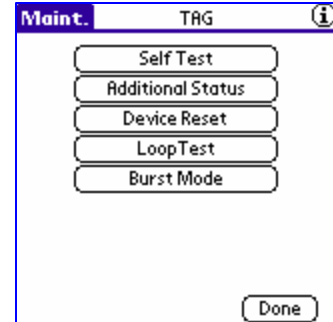
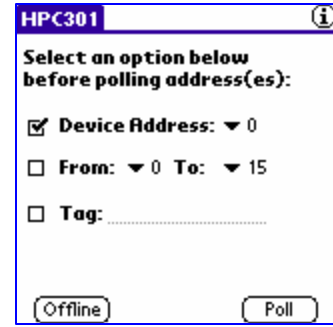
Configuring devices from different vendors or with different functions is easy with the HPC. Each device control set is complete for that device. Because the user controls are the same throughout the HPC program device specific training is no longer an issue. Every function for every instrument is incorporated in an easy to learn and use way.

Easy Data Entry

Entering data is easy with the HPC. Numbers can be entered by either tapping appropriate buttons on the Palm screen, or through the Palm Grafitti pen method. Because each screen is designed for the specific device, data entry is held to a minimum for easier field use.

Online Help That Works

Online interactive help is always a single tap away with HPC. Users will find the instructions and guidance they need to get the job done fast and accurately.



Specifications

Software

- PALM OS

PALM Models Supported

- V series
- III series
- VII series
- m125/130
- M500/505/515
- I705 (USA model only)
- Tungsten W
- Zire 71

Each HPC301 includes a cradle designed for the specific Palm designated, an interface cable, plus software. You can use your current Palm top, order one from your favorite vendor, or order one directly from SmarResearch.

HART Instruments Supported

- All HART instruments that use the Universal and Common Practice command sets
- All Smar instruments with full command sets
- Selected instruments from other major manufacturers

Instrument support is constantly being added. Check the SmarResearch web site (www.smarresearch.com) for the most up-to-date list.

Languages available

- English
- German
- Portuguese

Communications

- The Palm serial port connects directly to the HPC301 interface.

Electrical

All versions are self powered, and include rechargeable long-life batteries plus an ac adaptor/charger(120/240VAC input; 6V/1.0 amp output). The adaptor/charger also recharges the PALM if it is mounted in the adaptor.

HART Network Connection

Spring loaded insulated clip-connectors.

| Information | TAG | (i) |
|--|----------------|-----|
| Tag: | TAG | |
| Descriptor: | 16 CHARACTERS | |
| Message: | 32 CHARACTERS | |
| Date: | Feb 26, 2002 | |
| Unique ID: | 3E 01 00 00 00 | |
| <input type="button" value="Send"/> <input type="button" value="Dev. Info"/> <input type="button" value="Done"/> | | |

| Information | TAG | (i) |
|---|----------------|-----|
| Messstelle: | TAG | |
| Beschreib.: | 16 CHARACTERS | |
| Nachricht: | 32 CHARACTERS | |
| Datum: | Feb 26, 2002 | |
| Geräte-ID: | 3E 01 00 00 00 | |
| <input type="button" value="Senden"/> <input type="button" value="MU. Info"/> <input type="button" value="Fertig"/> | | |

| Informação | TAG | (i) |
|--|----------------|-----|
| Tag: | TAG | |
| Descrição: | 16 CHARACTERS | |
| Mensagem: | 32 CHARACTERS | |
| Data: | Feb 28, 2002 | |
| Único ID: | 3F 00 00 00 00 | |
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Commands Supported

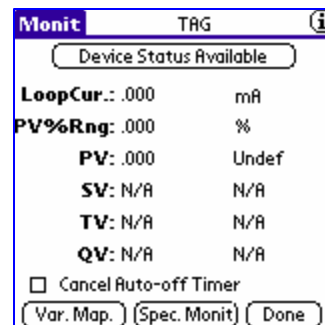
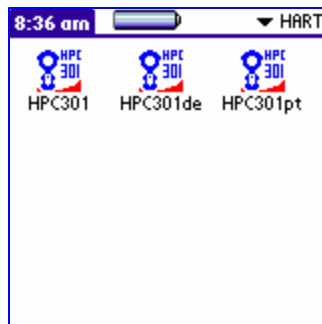
Universal Commands

- #0 - Read Unique Identifier
- #1 - Read Primary Variable
- #2 - Read Loop Current and Percent of Range
- #3 - Read Dynamic Variables and Loop Current
- #6 - Write Polling Address
- #11 - Read Unique Identifier Associated with Tag
- #12 - Read Message
- #13 - Read Tag, Descriptor, Date
- #14 - Read Primary Variable Transducer Information
- #15 - Read Device Information
- #16 - Read Final Assembly Number
- #17 - Write Message
- #18 - Write Tag, Descriptor, Date
- //#19 - Write Final Assembly Number

Practice Commands

- #33 - Read Device Variables
- #34 - Write Primary Variable Damping Value
- #35 - Write Primary Variable Range Values
- #36 - Set Primary Variable Upper Range Value
- #37 - Set Primary Variable Lower Range Value
- #40 - Enter/Exit Fixed Current Mode
- #41 - Perform Self Test
- #42 - Perform Device Reset
- #43 - Set Primary Variable Zero
- #44 - Write Primary Variable Units
- #45 - Trim Loop Current Zero
- #46 - Trim Loop Current Gain
- #47 - Write Primary Variable Transfer Function
- #48 - Read Additional Device Status
- //#49 - Write Primary Variable Transducer Serial Number
- #50 - Read Dynamic Variable Assignments
- #51 - Write Dynamic Variable Assignments

Common



Versions for all popular PALM models

| Order Number | PALM Models | Description |
|--------------|--|---|
| HPI311-III | PALM III and PALM VII Series | Interface cradle, cables, a/c adaptor and charger |
| HPI311-V | PALM V series | Interface cradle, cables, a/c adaptor and charger |
| HPI311-M5 | PALM m125/130/500/505/515 i705, Tungsten W, Zire 71 | Interface cradle, cables, a/c adaptor and charger |



PALM III & VII Series



PALM V Series



*PALM M Series, Tungsten W
and Zire71*

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HPC301DS - 0903