



HART® Communications and the YPC 4010

Yokogawa Corporation of America

YPC 4010 Calibrator with HART®

A Yokogawa Commitment to Industry
vigilance™



FEATURE

- HART® Foundation communication capability

BENEFIT

- Poll, configure & maintain supported HART® field devices using...
 - Universal Commands
 - Common Practice and
 - **Device Specific** Commands

What are Universal, Common Practice and Device Specific Commands?

Universal Commands

- Poll HART® devices for unique identifiers
- Poll for measured Process Variable and units
- Poll for AO value and percent of range
- Poll for transmitter range, units, damping
- Poll for s/n and limits
- Read or write tag numbers and messages
- Read or write polling address (0 – 15)
- Read or write final assembly number

Common Practice Commands

- Read up to four dynamic variables
- Write damp value, transmitter range and units
- Calibrate URL and LRL (set zero and span)
- Trim PV zero and D/AC zero and gain
- Set fixed analog output current
- Perform self test
- Write transfer function
- Write sensor s/n
- Read or write dynamic variable assignments

Device Specific Commands

- Sensor trim / calibration
- Read or write functions unique to a particular device
 - Set low flow cut-off value
 - Start, stop or clear totalizer
 - Read or write density calibration factor
- Choose primary variable
- Read or write materials of construction
- Decode diagnostics

FEATURE

- Generic HART®
Device Object File

BENEFIT

- Communicate with any HART®
field device using Universal and
Common Practice Commands
 - Poll for information
 - Trim analog output
 - Write tags and messages
 - Set URL & LRL
 - Set fixed analog output
 - Trim PV zero
 - Trim D/AC zero & span

FEATURE

- Device Specific Commands for 265 of the most popular HART® field devices available
(<http://dpcupdates.1911mptdofs.com/customers/past.asp>)
- HART® device support added continually

BENEFIT

- Use the YPC 4010 like a HART Communicator! Calibrator and HART Communicator in one handheld tool!
- 3 – 5 new HART® field devices / month continuously expands HART® capability

FEATURE

- YOKOGAWA Download Site for Firmware & Device Object Files (DOFs)
- Convenient field upgrade of HART® capability and YPC firmware via Internet

BENEFIT

- New DOFs or YPC 4010 firmware versions are easily accessible via Internet
- DPC Manager Utility handles user downloads to minimize down time, maximize convenience

What sets the Yokogawa YPC 4010 apart from the other multifunction competitors?

- YPC 4010 is the only calibrator / HART® communicator to offer complete execution of all HART® commands – Get the NIST traceable standards you need with all the convenience of a HART® communicator in ONE TOOL
- YPC 4010 is the only calibrator supported by an Internet Download site for both device communication interfaces and firmware updates

What sets the Yokogawa YPC 4010 apart from the others multifunction competitors?

- YPC 4010's Quick Cal feature allows users to compare HART® PV and AO to actual measurements made by the YPC's NIST traceable standards for quick evaluation and trim of HART® transmitters. Trim commands instantly available – no menus to navigate!
- YPC is the only calibrator / HART® communicator to offer complete execution of all HART® commands for devices other than Pressure or Temperature! YPC features Device Specific communication functions for Coriolis, Mag, and Vortex flowmeters in addition to a variety of Pressure and Temperature devices

What sets the Yokogawa YPC 4010 apart from the other multifunction competitors?

- YPC 4010 is the only calibrator / HART® communicator to be completely compatible with Yokogawa DMS Device Management Software. Calibration procedures can be downloaded to YPC memory, enabling technicians to execute calibration procedures and save results in the field for subsequent upload to DMS. HART configurations can also be downloaded, changed, sent to the HART device and saved from the HART device for subsequent uploading to DMS.