

HART, SIMATIC PDM, PACTware Maintenance course

Learn the skills to quickly find, analyze, and solve HART network problems. This course will provide you with the knowledge and skills you need for cabling, shielding, and grounding the cables in HART, Wireless HART and HART-IP installations. You will also be able to effectively use both SIMATIC PDM and PACTware to connect to all of your HART instruments.

Upon completion of this course, the student shall be able to:

- Add HART devices to an existing network
- Understand how the network functions
- Install and setup HART, Wireless HART, and HART-IP networks
- Use SIMATIC PDM and PACTware effectively
- Troubleshoot common and uncommon problems

Course outline

- HART physical layers
- HART commands
- EDD/DD and DTMs
- PACTware and SIMATIC PDM
- Asset management
- Serial HART
- HART-IP
- Wireless HART
- Statuses
- Network design and setup
- Wiring
- Troubleshooting

Hands-on Exercises:

- PACTware and HART modem
- Decoding HART commands
- SIMATIC PDM and HART modem
- Generic DTM, EDD, and HCF library
- HART-IP to HART gateway
- HART server with SIMATIC PDM

Training Equipment:

- HART modem (Thorsis Technologies)
- HART gateway (Thorsis Technologies)
- Mdbus
- HART protocol analyzer
- PACTware
- SIMATIC PDM
- Siemens and Vega instruments

Class Day Information

- Attendees must bring a laptop or tablet which can read a USB drive.
- Attendees will receive a support USB drive with an electronic version of the materials plus key PI documents.
- Students will receive a certificate of attendance and 7.5 verifiable professional development hours
- Students will receive a copy of *'HART Communication Protocol – A practical guide'* written by James Powell
- Class size is limited to a maximum of 8 students (2 students per training rack).



Course duration

This course requires 7.5 hours of instruction which includes two 15 minute breaks and one 30 minute lunch break.

Scheduled Classes

- Please check our website for scheduled classes or contact us to arrange a training date
- On-site or On-demand classes are available upon request
- Please contact us to arrange a training date

Course code and Prerequisites

- Course code: T-HART-02
- There are no prerequisites for this course.

Instructor

James Powell, P.Eng., is the principal engineer and owner of JCOM Automation Inc. He has written many articles and two books: *HART Communication Protocol – a practical guide*, and *Catching the process fieldbus – An introduction to PROFIBUS and PROFINET*. James is a certified PROFIBUS DP, PA, and PROFINET network engineer, PROFIBUS System Design Engineer and has over 20 years of experience with PROFIBUS, PROFINET, EtherNet/IP, Modbus, and HART installations.

JCOM Automation is a member of PROFIBUS PROFINET North America and is a certified PROFIBUS and PROFINET training center and Competence Center.

To book this course for yourself or your team, please contact JCOM Automation at admin@jcomautomation.ca or +1-705-868-8745.