



Connected Industrial

IN COMPLEX GAS OPERATIONS, THERE'S NO "ON THE JOB" TRAINING

Rely on Honeywell's Expertise for Technology Instruction



Today's demanding natural gas industry has a growing need for skilled and knowledgeable personnel. That's why facilities worldwide rely on Honeywell's expert, hands-on training in the use of Mercury Instruments electronic products and software.



Meet the Expert! Classes will be led by Honeywell TAC instructors namely Rich Pinkerton & Luke Altic who bring over 20 years of experience in Honeywell Mercury Instruments products. As a part of our technical support group, Rich & Luke help our customers overcome their field issues.

1. Learn the Basics of Gas Measurement

Honeywell can help you understand the basics of electronic gas volume corrector measurement. Attend our training class and gain hands-on experience with the Mini-Max and EC 350 volume correctors and MasterLink software. The course also reviews basic gas laws and pulse output operation.

Agenda: Day 1

- 9:00am-12:00pm: Introduction to Windows OS, Basic Gas laws and calculations, Mercury Manuals
- 1:00-3:00pm: Introduction to Mini-Max Volume corrector & usage of MasterLink software
- 3:15-5:15pm: Understanding the operation of Mini-Max (Configuration, Calibration, Creating item file, Reports & Graphs).

Agenda: Day 2

- 9:00am-12:00pm: Pulse output configuration and testing (Using Mini-Max, LED display board & Pulse counter), Firmware upgrade for Mini-Max
- 1:00-3:00pm: Introduction to EC 350 & MasterLink R500 software
- 3:15-5:15pm: Understanding the configuration & setup of EC 350 using MasterLink R500 (Configuration, Calibration, Creating item file, Reports & Graphs, Pulse outputs), Hands-on session: Firmware upgrade of EC 350.

Agenda: Day 3

- 9:00am-12:00pm: Understanding User management & Security aspects of EC 350. Demo: Configuring different users using MasterLink R500
- 1:00-3:00pm: Session on EC 350 operation and overview of manuals
- 3:15-5:15pm: Overview of TCI & Mini-AT & Concluding remarks.

Objectives:

- Provide students with a fundamental understanding of the volume correction
- Provide specific operational details about Mini-Max & EC 350
- Explain the basic operation of MasterLink software
- Provide basic understanding of gas laws.

2. Become Familiar with Wireless Telemetry

It's more important than ever to become familiar with wireless remote monitoring and data acquisition technology. With Honeywell's instruction, you'll learn how to implement and operate a wireless telemetry system in your facility.

Agenda: Day 1

- 9:00am-12:00pm: Introduction to Wireless Telemetry Technologies, Software Overview & Installation, Hands-on session: Data & Protocol
- 1:00-3:00pm: Hands-on session: Data & Protocol (cont.), Introduction to MI Wireless assembly, Introduction to MI Wireless Power Supply systems
- 3:15-5:15pm: Hands-on session: Configuring and troubleshooting Mercury modem power control hardware.

Agenda: Day 2

- 9:00am-12:00pm: Review of Day 1, Introduction to Wireless carriers and data account types, Hands-on session: CNI2-2E EVDO part 1, Hands-on session: Cloud Link 4G modem, configuration, set up
- 1:00-3:00pm: Introduction to Sierra Wireless products EVDO & GPRS
- 1:15-5:15pm: Introduction to MI Wireless telemetry solutions (radio networks, radio backhaul & satellite systems).

Agenda: Day 3

- 9:00am-12:00pm: Review of Day 2, Lab: Setting up instrument for alarm and scheduled call in, Demo: CNI2-2E/Cloud Link 4G modem Serial configured for TDS
- 1:00-3:00pm: Introduction to Antennas, Overview of system level troubleshooting
- 3:15-5:15pm: Concluding remarks on Cloud Link, MI Wireless.

Objectives:

- Explain the usage of Cloud Link modem, MI Wireless and some Sierra products
- Illustration of using MasterLink software to configure a Cloud Link modem
- Brief discussions on older technologies like CNI2, landline modems, IMU and SIPs.

3. Master the Use of Advanced Instrumentation

Honeywell training can also make you fully proficient in instrumentation communication. Use the Mini-AT, EC 350 volume corrector to hone your skills in pulse input, direct serial communications, modem communications, 4-20 mA analog output and PT board (Modbus) communications.

Agenda: Day 1

- 9:00am-12:00pm: Introduction to Windows operating system, Mercury Instrument Manuals, MasterLink SQL Software & R500
- 1:00-3:00pm: Introduction to Mini-AT Configuration/Calibration/Creating Item file/Reports & Graphs
- 3:15-5:15pm: Pulse output configuration & testing using Mini-AT, LED display board.

Agenda: Day 2

- 9:00am-12:00pm: Serial communication concepts and protocol, Landline modem communication
- 1:00-3:00pm: Protocol translator board & Modbus, 4-20 mA communication
- 3:15-5:15pm: Introduction to the EC 350—Overview/HMI/Configuration/Audit Trail configuration/Calibration/Creating Item file/Reports & Graphs/Pulse Output/Modbus, Firmware upgrade for EC 350.

Agenda: Day 3

- 9:00am-12:00pm: Introduction to EC 350 (configuring Cloud Link & Landline modem)
- 1:00-3:00pm: Overview of ERX, Wireless ERX & Misc. topics
- 3:15-5:15pm: Closing comments on EC 350, ERX.

Objectives:

- Understanding the Mercury protocol & RS-232 serial communication
- Configuration and working of 4-20 mA output
- Usage of Modbus protocol through both the native EC 350 and the protocol translator board in the Mini-AT
- Discussion on pulse outputs.

4. Trainings

Onsite Training

Onsite customer trainings can be provided on request and will be tailored to the needs of the requestor. It may be a subset of topics offered in any of the above classes plus additional topics as needed by the customer.

Cost:

\$2800.00 USD will be the cost for providing onsite training which includes travel, meal and hotel expenses of the trainer. A specific quote will be provided to the requestor depending on the exact content and duration of the training.

Expected Benefits:

- **Improved Skills:** Honeywell's training courses provide the instruction needed for technicians and field operators to employ the latest electronic gas instrumentation.
- **Increased Knowledge:** By attending formal training, personnel expand their knowledge of critical gas industry operations and learn how to put Mercury Instruments solutions to work in their facilities.
- **Greater Confidence:** Nothing is more important than a well-trained staff to optimize performance and profitability. With Honeywell training assistance, facilities can significantly improve the ROI on advanced technology and gain a competitive edge.

All courses include a Certificate of Achievement awarded to each student upon completion.

Classroom Training

Location:

In Cincinnati, training courses are offered at the Honeywell facility on Kemper Meadow Drive on Tuesdays and Wednesdays (8:30am-5:00pm EST) and conclude on Thursday (8:30am-3:00pm EST).

Hotel Information:

Please contact our preferred Hotel for your stay and receive our room block rate at \$99 per night which includes breakfast.

Spring Hill Suites by Marriott Cincinnati
12001 Chase Plaza Drive
Cincinnati, Ohio 45240
513-825-9035

Cost:

Tuition is \$900.00 per student (covers course materials, resource CD, handouts, morning refreshments and noon meals). Each student is responsible for transportation and hotel charges, all remaining meals, and any personal expenses.

Other Requirements:

Laptop with Windows XP (or greater), RS-232 serial connectivity, internal modem and administrative rights to allow software installation and file copying.



For more information

To learn more about Honeywell's training courses go to

Honeywell Process Solutions

1280 Kemper Meadow Drive
Cincinnati, OH 45240
Phone: +1 (855) 251-7065