



Cole-Parmer Training Video Set

pH Measurement, Temperature Measurement, Conductivity, Relative Humidity, Pumps, and pH Control

new

EX-16711-00 Training Video Set, six videos described in detail below\$000.00

pH Measurement

Learn about general purpose pH electrodes: how they are made, the theory of how they work, which one is best suited for a specific application, and how to condition and maintain them. Discover how temperature affects measurements of pH and ways to compensate for these effects, how to calibrate your pH meter to your electrode with standard buffer solutions, how to check accuracy based on true output measured in millivolts, the types of pH meter/electrode combinations available, and unit features such as memory and interface options.



EX-16711-01 pH Measurement Video\$000.00
Running time: Approximately 50 minutes. Shpg wt 1 lb (0.5 kg)

Temperature Measurement

Which temperature sensor is best for materials used in your application and will it accurately measure a full range of values? This video helps you answer these questions by describing the temperature measurement options available complete with their advantages and shortcomings. The devices described include indicating labels and paints, bimetal sensors, and a full range of thermometer models (glass, infrared, platinum RTD, thermistor, and thermocouple). Learn about contact and noncontact measurements; local and remote device options; and measurement range, accuracy, and response time.



EX-16711-02 Temperature Measurement Video\$000.00
Running time: Approximately 50 minutes. Shpg wt 1 lb (0.5 kg)

Conductivity

Conductivity is an especially important factor in applications involving acid, salt, and alkali concentrations; chemical streams; cooling towers; boilers; and others. Beginning with a definition of conductivity, this video shows the different types of conductivity sensors available and the considerations involved in making conductivity measurements. The user learns to define the area and range of measurement, understand the units of measurement, compensate for temperature effects, calibrate the equipment, and make accurate and repeatable measurements.



EX-16711-03 Conductivity Video\$000.00
Running time: Approximately 50 minutes. Shpg wt 1 lb (0.5 kg)

Relative Humidity

What's the difference between absolute humidity and relative humidity, and what is a dew point? This video defines these measurements and reviews the different types of relative humidity sensors available. The human hair bundle responds to relative humidity by frizzing or drooping and can be used as a sensor. More technical devices available for the measurement of relative humidity include the thin film capacitance sensor, the psychrometer relative humidity sensor, and synthetic fibbons. This video shows how these sensors work, their accuracy levels, and their calibration requirements.



EX-16711-04 Relative Humidity Video\$000.00
Running time: Approximately 50 minutes. Shpg wt 1 lb (0.5 kg)

Why should I buy a Cole-Parmer training video?

Cole-Parmer now offers onsite training for your associates and laboratory personnel in a convenient, cost-effective video format. A seminar is an effective training medium, but it can be offered only when a speaker is available and when the demand is high enough to warrant the cost. Each video presents a seminar at your fingertips anytime you need one, and repeat performances are as simple as pressing the rewind button!

Each video features Jim Maxwell, Cole-Parmer's technical training manager. Jim's training workshops have been well attended by many of our customers, internal associates, and worldwide distributors. Jim has been a part of our family since 1977, and has been involved in technical training since 1985. He not only knows the products that Cole-Parmer sells, but also how the products work and which applications they best suit. Jim is able to convey this information to students of all levels.

The training provided in this video format covers the topics of conductivity, pH control, pH measurement, temperature measurement, relative humidity, and pumps. Each tape described on this page is available individually or as part of a six-tape set (16711-00).

Pumps

This video describes what a pump is and how it moves fluid. Different pump types are suitable for various applications. Review information about centrifugal pumps, metering pumps (piston, bellows, and double diaphragm models), and positive displacement pumps (gear, bellows, diaphragm, flexible impeller, progressive cavity, rotary vane, and peristaltic models). Learn more about flow rate, pressure, frequency, stroke length, bypass regulation, and chemical resistance features.



EX-16711-05 Pumps Video\$000.00
Running time: Approximately 50 minutes. Shpg wt 1 lb (0.5 kg)

pH Control

Controlling pH in an industrial environment certainly isn't easy, but this video provides the information you need to help you manage it. It addresses the choices that must be made for electrodes, their housing, pH controllers, and both local and remote transmitters. This video covers general purpose through high accuracy, ORP, and antimony electrodes; threaded, twistlock, and submersible housings; benchtop, panel- and wall-mount units; fixed, variable, and multiple inputs/outputs; analog and digital displays; plus ATC, computer interface, recorder output options, and more.



EX-16711-06 pH Control Video\$000.00
Running time: Approximately 50 minutes. Shpg wt 1 lb (0.5 kg)

INTERNATIONAL VIDEO ORDERS

For orders outside the USA, standard format for all video is NTSC. Special formats such as PAL, SECAM, and MESECAM are available. Specify catalog number and special format when requesting a quote or placing an order.