MultiLab Ordering Guide

MULTIPARAMETER LABORATORY INSTRUMENTS

ORDERING GUIDE

W142

a **xylem** brand

MultiLab Ordering Guide

Some instrument configurations are offered as kits. Please visit **YSI.com** for a complete list of kit options.

Step 1: Order MultiLab Meter

Each MultiLab meter includes a built-in barometer, universal AC power supply, electrode stand, USB cable, and MultiLab Importer (Excel® add-in). Each instrument is capable of wireless sensor communication when used with wireless sensors and wireless adapters). All sensors and adapters are sold separately. See steps 2 and 3.

☐ **1FD350Y**: MultiLab 4010-1W one channel benchtop instrument

☐ **1FD560Y**: MultiLab 4010-2W two channel benchtop instrument with built-in OUR/SOUR software

☐ **1FD570Y**: MultiLab 4010-3W three channel benchtop instrument with built-in OUR/SOUR software

MultiLab 4010-1W   MultiLab 4010-2W   MultiLab 4010-3W

Step 2: Order Sensors

Smart Wireless Sensors

A wireless adapter kit (WA-Kit) is required for the first sensor-to-instrument connection. For additional wireless sensor connections, only a WA-S is required - see step 3. Each wireless sensor includes a built-in temperature sensor.

☐ **103760Y**: IDS 4110W wireless double junction pH electrode, plastic body, not refillable

☐ **103761Y**: IDS 4120W wireless double junction pH electrode, plastic body, refillable

☐ **103762Y**: IDS 4130W wireless double junction pH electrode, glass body, refillable

☐ **103763Y**: IDS 4210W wireless double junction ORP electrode, glass body, refillable

☐ **301716Y**: IDS 4310W wireless conductivity probe, epoxy body, cell constant K = 0.475, for general lab applications

☐ **301722Y**: IDS 4320W wireless conductivity probe, stainless steel body, cell constant K = 0.1, flow cell included; for ultrapure water applications, cannot be calibrated by the user

☐ **201306Y**: IDS 4410W wireless fluorescent dissolved oxygen (FDO) probe

Smart Sensors with Cable

No additional adapters are needed for digital MultiLab sensors that have a cable, so Step #3 can be skipped unless wireless sensors or BNC electrodes are ordered. Each probe includes a built-in temperature sensor.

☐ **626500**: IDS ProOBOD - Optical DO/BOD probe with stirrer

☐ **300310**: IDS 4100 ProBOD polarographic, membrane-covered DO/BOD probe with stirrer

☐ **103740Y**: IDS 4110 double junction pH electrode, plastic body, not refillable, 1.5 meter cable

☐ **103741Y**: IDS 4110 double junction pH electrode, plastic body, not refillable, 3 meter cable

☐ **103750Y**: IDS 4120 double junction pH electrode, plastic body, refillable, 1.5 meter cable

☐ **103780Y**: IDS 4130 double junction pH electrode, glass body, refillable, 1.5 meter cable

☐ **103791Y**: IDS 4211 double junction ORP electrode, glass body, refillable, 1.5 meter cable

☐ **301710Y**: IDS 4310 conductivity probe, epoxy body, 1.5 meter cable, cell constant K = 0.475, for general lab applications

☐ **301711Y**: IDS 4310 conductivity probe, epoxy body, 3 meter cable, cell constant K = 0.475, for general lab applications

☐ **301720Y**: IDS 4320 conductivity probe, stainless steel body, 1.5 meter cable, cell constant K = 0.1, flow cell included; for ultrapure water applications, cannot be calibrated by the user

☐ **201300Y**: IDS 4410 fluorescent dissolved oxygen (FDO) probe, 1.5 meter cable

☐ **201301Y**: IDS 4410 fluorescent dissolved oxygen (FDO) probe, 3 meter cable

Ion Selective Electrodes (ISEs) with BNC Connection

It is possible to connect analog ISEs to the MultiLab 4010-2W and 4010-3W by installing a BNC adapter in the back of the instrument – see step #3. This adapter prevents one of the digital channels on the instrument from being used and features a banana plug for temperature. Only one BNC adapter can be installed on an instrument. With the exception of ammonia, the TruLine ISEs are refillable and feature a built-in double-junction reference system. The TruLine ISEs do not have a built-in temperature sensor. Small bottles of reference/electrode fill solution, ionic strength adjuster, and 1000 mg/L standard (not cyanide or sulfide standards) are included with each TruLine ISE.

☐ **400365**: TruLine Ammonia electrode kit

☐ **400371**: TruLine Ammonium electrode kit

☐ **400377**: TruLine Bromide electrode kit

☐ **400382**: TruLine Cadmium electrode kit

☐ **400387**: TruLine Calcium electrode kit

☐ **400393**: TruLine Chloride electrode kit

☐ **400445**: TruLine Copper electrode kit

☐ **400403**: TruLine Cyanide electrode kit

☐ **400406**: TruLine Fluoride electrode kit

☐ **400411**: TruLine Iodide electrode kit

☐ **400416**: TruLine Lead electrode kit

☐ **400421**: TruLine Nitrate electrode kit

☐ **400427**: TruLine Potassium electrode kit

☐ **400433**: TruLine Silver/Sulfide electrode kit

☐ **400439**: TruLine Sodium electrode kit

Specialty pH Electrodes with BNC Connection

It is possible to connect analog pH electrodes to the MultiLab 4010-2W and 4010-3W by installing a BNC adapter in the back of the instrument – see step #3. This adapter covers one of the digital channels on the instrument and features a banana plug for temperature. Only one BNC adapter can be installed in each instrument. Please see the YSI pH Electrode Application Guide and the YSI pH Electrode Selection Guide for more information on selecting a pH electrode. The YSI pH Handbook is also an excellent source of information.

☐ **400358**: IoLine pH electrode with built-in temp, glass body, triple junction, refillable, iodine/iodide reference is ideal for use in Tris Buffer and protein solutions

☐ **400359**: IoLine Micro pH electrode with built-in temp, glass body, triple junction, refillable, iodine/iodide reference is idea for use in Tris Buffer and protein solutions, micro tip for small sample sizes

☐ **400357**: TruLine pH 21 piercing tip pH electrode without built-in temp, plastic body, not refillable, spear tip membrane; ideal for unique applications such as food (e.g. meat and cheese)

☐ **400354**: TruLine pH 27 flat glass pH electrode without built-in temp, plastic body, not refillable, flat membrane; ideal for unique applications such as surface measurements (e.g. paper and skin)

☐ **400361**: Science pHT-G pH electrode with built-in temp, glass body, double junction, refillable, ground-joint junction; ideal for samples high in solids or with low ionic strength

☐ **400362**: Science pHT-Micro pH electrode with built-in temp, glass body, double junction, refillable, micro tip for small sample sizes

Temperature Probes

An external temperature sensor is needed only if a BNC electrode without a built-in temperature is used. Alternatively, the temperature reading from another connected probe that does have a built-in temp sensor, like any one of the IDS sensors, can be used.

☐ **400363**: ScienceLine Temp135, stainless steel body for fast temperature measurements

☐ **400364**: ScienceLine Temp136, glass body for use in different kinds of solvents

Step 3: Order Adapters and Modules

Wireless modules are needed if using a wireless sensor. One WA-S wireless sensor module is needed for each wireless sensor, while only one WA-M wireless meter module is needed for each MultiLab instrument. A wireless adapter kit (WA-Kit) should be purchased for the first wireless sensor–to–instrument connection. For each additional wireless sensor connection, order (1) of each: WA-S and 108143Y AC charger.

☐ **108144Y**: IDS WA Kit; includes one WA-S wireless sensor module, one WA-M wireless meter module, one charger for WA-S modules, and a USB power supply

☐ **108141Y**: IDS WA-S wireless sensor module

☐ **108142Y**: IDS WA-M wireless meter module

☐ **108143Y**: AC charger for battery in WA-S wireless sensor module

There are two adapters available for BOD probes.

☐ **902873Y**: 4011 Adapter; allows connection of the YSI 5010 BOD probe

☐ **108160Y**: Stirrer Adapter; allows connection of up to 3 BOD probe stirrers to the MultiLab

Order a BNC adapter for the MultiLab if using electrodes with BNC connection. This can only be used with the MultiLab 4010-2W and 4010-3W. The BNC adapter covers one of the digital channels on the instrument and features a banana plug for temperature.

☐ **108132Y**: BNC adapter

Step 4: Order Solutions

Please see YSI.com for a complete offering of solutions, including TruLine ionic strength adjustor and electrode filling solutions.

☐ **603824**: 2 pints each of 4, 7, and 10 pH buffers

☐ **060906**: 1413 µS/cm conductivity standard; this is the only standard that can be used to calibrate the 4310 and 4310W

☐ **109705Y**: 3M KCl solution for refillable pH electrodes

Step 5: Additional Accessories

☐ **625120**: BOD Analyst Pro Desktop Software

☐ **903850Y**: Cable (1.5 meter) for wireless MultiLab sensors; connects any wireless MultiLab sensor directly to the instrument

☐ **903851Y**: Cable (3 meter) for wireless MultiLab sensors; connects any wireless MultiLab sensor directly to the instrument

Typical System Configurations

As the direct replacement for the YSI 5000, the MultiLab 4010-1W is most often used in water resource recovery facilities (WRRF) for the determination of biochemical oxygen demand (BOD). A typical 4010-1W configuration includes:

- MultiLab 4010-1W one channel benchtop instrument (item #1FD350Y)
- Optical DO/BOD probe with stirrer (item #626500)

In addition to BOD, WRRFs are also interested in measuring ammonia and pH. A typical 4010-3W configuration for the simultaneous measurement of all three parameters includes:

- MultiLab 4010-3W three channel benchtop instrument (item #1FD570Y)
- Optical DO/BOD probe with stirrer (item #626500)
- 4130 pH electrode, glass body, refillable, 1.5 meter cable (item #103780Y)
- TruLine Ammonia ISE kit (item #400365)
- BNC adapter for connection of ISEs (item #108132Y)
- 2 pints each of 4, 7, and 10 pH buffers (item #603824)

Interested in ordering a system but still have questions?

Please use the contact information below. We will ensure the system you order is right for your application.

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