

xylem



# MultiLab® ordering guide for multiparameter laboratory instruments

# MultiLab<sup>®</sup> ordering guide

Some instrument configurations are offered as kits. Please visit [YSI.com](https://www.ysi.com) for a complete list of kit options.

## Step 1: Order MultiLab meter

Each MultiLab meter includes power supply and electrode stand. Each meter is capable of wireless sensor communication when used with the optional wireless sensors and adaptors. All sensors and adapters are sold separately. See steps 2 and 3.

- ☐ **1FD350Y:** MultiLab 4010-1W one channel benchtop instrument
- ☐ **1FD760Y:** MultiLab Pro 20 IDS, two-channel benchtop instrument with built-in OUR/SOUR software
- ☐ **1FD780Y:** MultiLab Pro 40 IDS, four-channel benchtop instrument with built-in OUR/SOUR software



MultiLab 4010-1W



MultiLab Pro 20 IDS



MultiLab Pro 40 IDS

## 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 contact 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

The MultiLab Pro 20 IDS and the MultiLab Pro 40 IDS are capable of ISE measurement when equipped with a BNC adaptor (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

☐ **400393:** TruLine chloride electrode kit

☐ **400406:** TruLine fluoride electrode kit

☐ **400421:** TruLine nitrate electrode kit

☐ **400427:** TruLine potassium electrode kit

☐ **400439:** TruLine sodium electrode kit

## Speciality pH electrodes with BNC connection

Analog pH electrodes can be connected to the MultiLab Pro IDS using the BNC/DIN adaptor (part number 108133). You may attach as many of these adaptors as there are channels on the instrument, so you can mix and match your IDS and analog ports to suit your specific needs. Check out the [YSI pH Electrode Application Guide](#) and the [YSI pH Electrode Selection Guide](#) for more information on selecting a pH electrode. For even more information on the measurement of pH, check out the [YSI pH Handbook](#).

☐ **400360:** Science pHT-Pt, pH electrode with double junction, 3 in 1, Platinum junction, 170 mm length, glass shaft, 1 meter cable

☐ **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

## 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 adaptors available for the attachment of additional probe types.

☐ **108161Y:** Adapter for BOD, required for attaching optical or polarographic BOD probes

Order a BNC adapter for the MultiLab if using electrodes with BNC connection. This can only be used with the MultiLab Pro 20 IDS and MultiLab Pro 40 IDS. The BNC adapter covers one of the digital channels on the instrument and features a banana plug for temperature.

☐ **108133:** Adaptor for BNC, allows connection of ISEs, Truline pH probes, other analog probes

## Step 4: Order solutions

Please visit [YSI.com](https://www.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:** 8x 1 pint bottles 1413  $\mu\text{S}/\text{cm}$  conductivity standard; this is the only standard that can be used to calibrate the 4310 and 4310W
- ☐ **109705Y:** 250 mL 3M KCl solution for refillable pH electrodes

## Step 5: Additional accessories

- ☐ **903850Y:** Cable (1.5 meter) for wireless MultiLab sensors; connects any wireless MultiLab sensor directly to the instrument
- ☐ **930851Y:** Cable (3 meter) for wireless MultiLab sensors; connects any wireless MultiLab sensor directly to the instrument

## Typical system configurations



The YSI MultiLab continues the legacy of YSI instrumentation dedicated to biochemical oxygen demand (BOD). The MultiLab Pro 20 IDS works seamlessly with the ProOBOD optical BOD probe to give you the most accurate results for your BOD laboratory. A typical configuration includes the following part numbers, and would have one additional channel available for pH, conductivity, or other compatible IDS probes:

- MultiLab Pro 20 IDS two-channel benchtop instrument (item #1FD760Y)
- Pro OBOD IDS Probe, optical BOD probe with stirrer (item #626500)
- BOD power cable (item #108161Y)



The YSI MultiLab Pro IDS is versatile and can fit easily into any lab environment. The MultiLab Pro 40 IDS can be equipped with essential lab parameters, with the flexibility to have additional parameters added to fulfil the requirements for your specific needs. This recommended setup gives you pH and conductivity capabilities, with two additional channels available:

- MultiLab Pro 40 IDS two-channel benchtop instrument (item #1FD780Y)
- IDS 4130, Combination pH and temperature, glass, refillable (3 mol KCl), digital, double junction probe, 1.5 meter cable (item #103780Y)
- IDS 4310, Conductivity and temperature, epoxy body, 4-graphite electrodes, digital probe, 1.5 meter cable, (item #301710Y)

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