

## **MLT1120 Oxygen Microelectrode (Dip-Type)**

*Transducer Series*

### **MLT1120 Oxygen Microelectrode (Dip-Type)**

An Oxygen Microelectrode with a 3 mm tip enables measurement of oxygen concentration in small volume samples. The Teflon® membranes are easy to clean or replaced and the electrolyte solution can also be replaced extending the life of the electrode. It is supplied with a MLT1121 Membrane Housing Kit. An O2-ADPT-BNC/DIN O2 Adapter (BNC/DIN) is required to use the electrode with a PowerLab and is ordered separately.



*MLT1120 Oxygen  
Microelectrode (Dip-Type)*

### **MLT1121 O2 Membrane Kit (Dip-Type)**

The membrane housing kit contains 6 replacement Teflon® membranes, a bottle of electrolyte solution, a bulb pipette and 5 polishing pads.



*MLT1121 O2 Membrane  
Kit (Dip-Type)*

### **O2-ADPT-BNC/DIN O2 Adapter (BNC/DIN) (purchased separately)**

Two versions of the O2-ADPT O2 Adapter are available that connects the MLT1120 Oxygen Microelectrode directly to any PowerLab BNC or DIN input respectively.

Please select 'differential input' in the Input Amplifier dialog of the LabChart software for the DIN input option.



*O2-ADPT-BNC  
O2 Adapter (BNC)*

Another two adapters are available and required for applications when the solutions are oxygenated with 95% oxygen (i.e tissue-organ bath studies). They are the O2-ADPT100-BNC and the O2-ADPT100-DIN.

### **Application**

The MLT1120 Oxygen Microelectrode (Dip-Type) is designed for applications that require a fast response time and negligible oxygen consumption. The electrode can be used in samples smaller than a drop of water.

## **Caution**

Read "Statement of Intended Use" on our website or in "Getting Started with PowerLab" before use.

## **Specifications**

Response range:	0 to 100 % O <sub>2</sub> Saturation
Response time:	<20 seconds
Reference electrode type:	Ag
Sensitivity:	1700 pA in air @ 25 °C
O <sub>2</sub> Consumption:	2.5 x 10 <sup>-4</sup> µL/hr @ 25 °C
Minimum depth of immersion:	0.1 mm
Membrane material:	Teflon®
Total length (probe):	86 mm (3.4")
Lead length:	2 m (6' 7")
Body OD:	3 mm (0.12")
Tip OD:	3 mm (0.12")

All specifications were tested at the time of printing and are subject to change.

## **Ordering Information:**

MLT1120 Oxygen Microelectrode (Dip-Type)

Includes:

MLT1121 O<sub>2</sub> Membrane Kit (Dip-Type)

Requires (purchased separately):

- O<sub>2</sub>-ADPT-BNC O<sub>2</sub> Adapter (BNC)
- O<sub>2</sub>-ADPT-DIN O<sub>2</sub> Adapter (DIN)
- O<sub>2</sub>-ADPT100-BNC O<sub>2</sub> Adapter (100, BNC)
- O<sub>2</sub>-ADPT100-DIN O<sub>2</sub> Adapter (100, DIN)

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WARRANTY: ADInstruments PowerLab data acquisition units (Product Number Prefix: PL), Front-end Signal Conditioners (Product Number Prefix: FE) are warranted against defects in materials and workmanship for a period of 5 years from the date of purchase. Other PowerLab data acquisition units and ADInstruments manufactured Front-end and Pod Signal Conditioners, and Instruments are warranted for a period of 3 years from the date of purchase. Third party products are covered by the manufacturer's warranty. Warranties are void if the product has been damaged due to negligence. Consumables and electrodes are not covered by a warranty. All questions regarding service and warranty should be directed to your nearest ADInstruments representative.