

RAD 7 WATER PROBE

Slow Response Monitoring of Radon in Water

The DURRIDGE Water Probe is used to collect radon samples from large bodies of water. The probe consists of a semi-permeable membrane tube mounted on an open wire frame. The tube is placed in a closed loop with the RAD7.

When the probe is lowered into water, radon passes through the membrane until the radon concentration in the air in the loop is in equilibrium with the water. The equilibrium ratio of radon in the air to radon in the water is determined by the temperature, which must be measured.

The probe has the same high sensitivity as the RAD AQUA. As such it can be used to monitor the radon concentration at a specified depth in open water. The probe has an advantage in that it does not need a pump for the water. It will, however, take more than two hours to make a spot measurement or to respond to a step-change in radon concentration. It is important that there be some flow of water around and through the device as it will remove radon from the water in its vicinity as the radon passes into the membrane tubing.

To monitor a water supply, the probe may be placed in a container with the incoming water released at the bottom of the container and overflowing or exiting through an outlet at the top. The water in the container should be completely refreshed with incoming water at least twice an hour.

Water Probe Physical Specifications

Dimensions	9" x 5.5" x 5.5" (23 cm x 14 cm x 14 cm)
Weight	10.8 ounces (306 g)
Shipping Dimensions	12" x 12" x 10" (30 cm x 30 cm x 25 cm)
Shipping Weight	3 pounds (1.3 kg)
Tubing	86" (218 cm) Accurel gas permeable tubing
Connections	(2) 3/16" tubing connectors

