## **TURBIDIMETER**

# RADIATION DETECTOR

#### **TB1**

Turbidity is one of the most commonly used parameters for determining the quality of water. The turbidity value is an important factor in various fields of application such as drinking water, disinfection processes, industrial processes and water treatment plants.

VELP Scientifica has developed a **portable and impermeable** solution.

The portable turbidimeter **TB1** measures the turbidity of aqueous samples simply and accurately results are given directly in Nephelometric Turbidity Units (NTU).

High quality, intuitive and simple to calibrate, the TB1 offers premium results in a matter of seconds.

The TB1 is supplied with 4 calibration standards (800, 100, 20 and 0.02 NTU), NIST traceable, 3 vials, cloth, silicone oil, batteries and carrying case

INSTRUMENT	POWER SUPPLY	CODE No
TB1	-	R109B12150





### RADIATION DETECTOR

The **Radiation Detector** is standard industrial model of a **Geiger-Müller** tube with a thin mica output window.

It is factory-calibrated using a pulse generator and is the standard  $\pm 15\%$  of the full scale relative to Cesium-137.

It offers **reliable results** in milliroentgens/hour and events/minute (cpm) in three different periods. The unit is protected by an **anti-saturation circuit** up to a value equivalent to 100 times the maximum reading in the greatest interval. The radiation detected is indicated by the graduated scale, a blinking LED and an acoustic signal.

INSTRUMENT	POW	ER SUPPLY	CODE No
RADIATION DETECTOR	-		R10800340



SUPPLIED WITH		CODE No
Calibration set (800, 100, 20 and 0.0	D2 NTU)	CE0012020
Sample vials, 3 pcs/box		CE0012030
Silicone oil, 10 ml		CE0012050

#### (i) GENERAL FEATURES AND PERFORMANCE

MEASUREMENT RANGE	from 0 to 1000 NTU
ACCURACY	± 2% from 0 to 500 NTU,
	$\pm$ 0.5 from 501 to 1000 NTU
REPEATABILITY	± 0.01 NTU or ± 1% in reading
LIGHT SOURCE	Infrared emitting diode
	(850 nm wavelength)
PROTECTION RATING	IP67
DIMENSIONS (WxHxD)	68x50x155 mm (2.7x2.0x6.1 in)
WEIGHT	0.2 kg (0.4 lb)
POWER SUPPLY	4x1.5 V alkaline battery



#### (1) GENERAL FEATURES AND PERFORMANCE

MEASUREMENT RANGE 0.5 - 5.0 - 50 mR/h 500 - 5000 - 50000 CPM 5 - 50 - 500 μSv/h

SENSITIVITY

X: detected down to 2.5 MeV, with typical detection efficiency greater than 80% at 3.5 MeV

**ß:** detected at 150 keV with 75% typical detection efficiency

Y AND X RAYS: detected down to 10 keV through the end window and to 40 keV through the case

DIMENSIONS (WxHxD)	75x145x38 mm (2.9x5.7x1.5 in)
WEIGHT	0.25 kg (0.6 lb)
POWER SUPPLY	9 V alkaline battery, 2000-hour lifetime













