

# PYCKO SCIENTIFIC LIMITED

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Your Alternative  
To The Obvious

## Model 193-6 Gamma Survey Meter with Pole Extender

### Features

- Range: 0-10  $\mu\text{Sv/h}$
- Very Sensitive Pole Mounted Detector
- Dual Alarm Types
- Rugged
- 4-Decade Analogue Ratemeter



### Introduction

The Model 193-6 is a highly sensitive gamma meter with an extended reach capability. A very sensitive 15.2 cm diameter x 2.5 cm thick (6 x 1 in.) plastic scintillator detector is mounted at the end of a 1.2 meter (4 ft) long pole to facilitate reaching elevated areas.

Attached to the user-end of the pole is a four-decade analogue ratemeter employing an aluminium cast instrument housing with a separate battery compartment and accompanying metal handle. The overall design delivers industrial robustness and quality that promote long lasting protection and instrument life.

The ratemeter front-panel controls include a rotary switch for selecting the four-decade range, instrument shut-off, and battery test; an audio on/off switch; a fast/slow response switch; and a pushbutton for count reset. This instrument supports two types of alarms; a user adjustable fixed point alarm, and a deviation alarm that activates at levels above a floating background. An alarm light is mounted to the front panel and is accompanied by an audio signal.

### Specifications

**DETECTOR:** 15.2 cm diameter x 2.5 cm thick (6 x 1 in.) EJ212 plastic scintillator

**SENSITIVITY:** typically 2500 cps/ $\mu\text{Sv/h}$

**ENERGY RESPONSE:** energy dependent

**LINEARITY:** reading  $\pm 10\%$  of true value

**ALARM:** dual action alarm

**1. FIXED:** alarm point that can be set at any point from 10% of full scale to full scale, and is indicated by a constant audible tone, and the lamp turning on

**2. DEVIATION:** a quick alarm that is based on background radiation levels. When the instrument is turned on, it takes an eight-second measurement of background radiation levels and determines a deviation alarm setting. If the radiation level exceeds this setting, the alarm audio will beep every 1/8 second, and the lamp will flash.

**CONTROLS:**

**1. Rotary Selector:** switches between instrument off, battery check, ranges: x.1, x10, x100, x1000

**2. Response Switch:** toggles between FAST (4 seconds) or SLOW (22 seconds) from 10% to 90% of final reading

**3. Reset Pushbutton:** to zero meter, and also re-accumulate background data and recalculate the alarm point

**4. Audio Switch:** for audio on/off, built-in unimorph speaker, greater than 60 dB at 0.6 meters

**5. Calibration Controls:** accessible from front of instrument (protective cover provided)

**POWER:** two "D" cell batteries

**BATTERY LIFE:** typically 600 hours with alkaline batteries (battery condition can be checked on meter)

**CONSTRUCTION:** cast and drawn aluminium with beige polyurethane enamel paint

**WEIGHT:** 3.9 kg including batteries

**OVERALL LENGTH:** 1.3 m