

## Model 79 Carbon Fiber Stretch Scope

### Features

- Light Weight - Approximately 1/3 the Weight of Comparable Instruments
- 1.1 m (45 in.) to 4.5 m (177 in.) Telescoping Carbon Fiber Pole
- 40  $\mu\text{Sv/h}$ –10 Sv/h (4 mR/hr–999 R/hr)
- 1  $\mu\text{Sv/h}$  (0.1 mR/hr) Display Resolution
- Backlit Auto-Ranging LCD with Adjustable Viewing Angle
- Simple Green, Yellow, and Red Status Indicators
- 3-Button Intuitive Interface for Easy Operation
- USB Port and All-Digital Calibration



### Introduction

The Model 79 Stretch Scope provides the operator with the ability to investigate areas of suspected gamma contamination while remaining at a greater distance from potentially high fields of radioactivity. The 4.5 m telescoping pole allows the attached detector to reach areas difficult to access with other types of instruments.

A large, easy-to-read LCD display rotates to maximize ease of viewing. Padded shoulder strap (included), warning tone, and easy, intuitive design are also featured. The unit's body is made of durable, high-impact, plastic with splash-resistant construction allowing outdoor use.

The Model 79 has three modes of operation - RATE, MAX, and COUNT. Measurements can be collected in two sets of units (primary and secondary) for RATE and MAX modes in cps, cpm, Sv/h, mrem/hr, and R/hr units. The user can choose by simply pressing the Units button. An internal switch is used to enable or disable the front-panel setup feature to protect desired settings from inadvertent modification. Setup is also available via software from Ludlum Measurements.

### Specifications

Part Number: 48-3966 (an adjustable shoulder strap is included)

**DETECTOR:** Geiger-Mueller (GM) **DETECTOR RANGE:** 40  $\mu\text{Sv/h}$ –10 Sv/h (4 mR/hr–999 R/hr)

**ENERGY RESPONSE:** Within 25% of true value from 60 keV to 3 MeV

**LINEARITY:** Reading within 10% of true value

**LCD DISPLAY:** 3 digit LCD with large 13.4 mm (0.53 in.) digits, (k)cps, (k)cpm, (k)Bq, (k)dpm, ( $\mu$ )(m)R(/h), ( $\mu$ )(m)Sv(/h), ( $\mu$ )(m)rem(/h), low-battery indicator, MAX, ALARM, MUTE

**DISPLAY RANGE:** 0.0 cps to 99.9 kcps; 0.00 cpm to 999 kcpm; 0.00 Bq to 99.9 kBq; 0.00 dpm to 999 kdpm; 0.00  $\mu\text{R/h}$  to 999 R/h; 0.00  $\mu\text{Sv/h}$  to 999 Sv/h; 0.00  $\mu\text{rem/h}$  to 999 rem/h. Display range can be set to limit display to calibrated range

**BACKLIGHT:** Built-in ambient light sensor automatically activates low-power LED backlight, unless internal dipswitch is set to continuous-On (will reduce battery life). Alarm light intensity varies based on ambient light levels.

#### USER CONTROLS:

- ON/OFF/ACK - Long press to turn ON; Tap to acknowledge alarms and silence alarm tone; Press to reset Sigma Audio alarm; Turn "click" audio On/Off; Turn Sigma Audio beep On/Off; Hold for OFF
- MODE - Long press alternates between NORMAL (count rate), MAX (captures peak rate), and COUNT (user-selectable preset count time from 0 to 10 minutes). Number of modes can be reduced in setup.
- UNITS - Long press changes the units between primary or secondary units

**RESPONSE TIME:** User-selectable from 1 to 60 seconds, Auto-Response Rate FAST or SLOW, or Fixed FAST and SLOW

**WARM-UP TIME:** Less than 2 minutes

**ALARMS:** Count rate, exposure/dose, and scaler alarm setpoints adjustable over the display range

**OVERLOAD:** High count rate saturation protection prevents false display of lower count rates

**ZERO PROTECTION:** After a user-settable time interval (default 60 seconds) of no pulses from detector, the instrument will flash zero reading and the alarm audio will be triggered

**DEAD TIME CORRECTION:** Employs first and second order corrections for extended performance

**AUDIO:** greater than 75 dB at 0.6 (2 ft), approximately 4 kHz

**CLICK AUDIO DIVIDE:** x1, x10, x100, x1k

**POWER:** two alkaline or two rechargeable "AAA" batteries

**BATTERY LIFE:** approximately 100 hours of operation, 24-hour low battery warning

**CONSTRUCTION:** display unit: high-impact plastic with separate battery compartment; telescoping pole: carbon fiber

**TEMPERATURE RANGE:** -20 to 50 °C (-5 to 122 °F), may be certified for operation from -40 to 65 °C (-40 to 150 °F)

**SIZE:** 20.3 x 8.1 x 114 cm retracted; 4.5 m fully extended (8.0 x 3.2 x 45 in. retracted; 177 in. fully extended) (H x W x L; extended L)

**WEIGHT:** 1.4 kg (3 lb), including batteries and shoulder strap

### Options:

**Stereo Audio Option:** Part Number 4498-697

**Lumic Calibration Software Kit:** Part Number 4519-865

**Lumic Configuration Software Kit:** Part Number 4519-747

**Case:** (right) water-, crush- and dust-proof case with custom foam pads to protect and transport instrument (Part Number 2312979)



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Note: specifications subject to change without notification. We are not responsible for errors or omissions.