Model 79 Stretch Scope Exposure Ratemeter

Features
- Light Weight - Approximately 1/3 the Weight of Comparable Instruments
- 1.1m (45 in.) to 4.5 m (177 in.) Telescoping Carbon Fibre Pole
- 10 μSv/h–10 Sv/h (1 mR/hr–1000 R/hr)
- 1 μSv/h (0.1 mR/hr) Display Resolution
- Backlit Auto-Ranging LCD with Adjustable Viewing Angle
- Simple Green, Yellow, and Red Status
- 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 radiation 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), piercing 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 the Model 79 to be used outdoors.

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

DETECTOR: Geiger-Mueller (GM)

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

LINEARITY: reading within 10% of true value

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

LOSS OF COUNT ALARM PROTECTION: after preselected time interval (default 60 seconds) of no pulses from detector, audible and visual alarms will be activated

LCD DISPLAY: 3 digit LCD with large 13.4 mm (0.53 in.) digits, (k)cps, (k)cpm, (k)Bq, (k)dpm, (μ)(m)R/(h), (μ)(m)Sv/(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 μR/h to 999 R/h; 0.00 μSv/h to 999 Sv/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 - 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 - alternates between NORMAL (count rate), MAX (captures peak rate), and COUNT (user-selectable pre-set count time from 0 to 10 minutes). Number of modes can be reduced in setup.
- UNITS - changes the units between primary or secondary units

RESPONSE TIME: user-selectable from 1 to 60 seconds, or Auto-Response Rate FAST or SLOW

AUDIO: greater than 75 dB at 0.6 (2 ft), approximately 4.5 kHz

POWER: two alkaline or two rechargeable “AAA” batteries

BATTERY LIFE: approximately 100 hours of operation, 16-hour low battery warning

CONSTRUCTION: high-impact plastic with water-resistant rubber seals and separate battery compartment

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: 1.0 kg (2.3 lb), including batteries

Options

Stereo Audio Option: Part Number 4498-697
Triad Calibration Software: PN 4498-1010
Case: (shown) water, crush and dust proof case with custom foam pads protect transport of instrument Part Number 4272-598