

Model 2000

General Purpose Scaler



Ludlum Measurements, Inc.

Features

- Self-Contained, General Purpose Scaler
- Supports Wide Range of External Detectors
- 95–250 Vac Power Input
- Portable Battery Operation
- RS-232 Interface to Printer or PC
- LED readout and Analog Dial



(front and back panels)

Introduction

The Model 2000 is a general purpose scaler typically used for counting samples. Rugged design and construction accommodates both benchtop and portable applications. The wide-ranging AC power supply and internal batteries are capable of powering the instrument upwards of 120 hours. The Model 2000 supports GM, proportional, and scintillator type detectors, and provides fine adjustment controls for setting the high-voltage and threshold settings. The scaler reading is presented on a digital, six-digit readout LED that can be set to count from 0.1 to 999

minutes via a front-panel dip switch. An internal switch facilitates counting in seconds rather than minutes, if desired. Other front-panel controls include a start-count button, an HV/Bat switch for displaying the current value on the accompanying analog meter, and a three-way switch for selecting Power Off, Battery, or Line Power. An RS-232 port on the rear panel allows connection to a PC or printer as set by a rear mounted switch (a RS-232 to USB adapter cable is included). When connected to a PC, the counting may be controlled and results recorded via application software.

Specifications

Part Number: 48-1648

INDICATED USE: gross counting

SUGGESTED DETECTORS: GM, scintillation, proportional

SCALER: six-digit LED display with a range of 0–999999 counts

SCALER LINEARITY: reading within 2% of true value

TIMER: push-wheel adjustment from 0–999 minutes with selectable X0.1 and X1 multipliers

METER: 1 mA, 6.4 cm (2.5 in.) arc, self shielded DC mechanism, analog type displaying 0 to 2.5 kV

HIGH VOLTAGE: adjustable from 200–2500 volts (will support 60 megohm scintillation loads)

THRESHOLD: adjustable from 1.0–10.0

DISCRIMINATOR: adjustable from 2–100 mV

CONNECTOR: series “C” (others available)

DATA OUTPUT: 9-pin RS-232 port for connection to PC for data download. A one meter RS-232 to USB adapter cable is included. PC interface software is available for download on our website.

POWER: 95–250 Vac 50–60 Hz or four “D” cell batteries (housed in externally accessible compartments)

BATTERY LIFE: typically 120 hours with alkaline batteries (battery condition can be checked on meter)

CONSTRUCTION: aluminum housing with beige powder coat paint, sub-surface printed front panel

TEMPERATURE RANGE: -20 to 50 °C (-4 to 122 °F)

SIZE: 21.6 x 12.7 x 23.5 cm (8.5 x 5 x 9.3 in.) (H x W x L)

WEIGHT: 3.1 kg (6.9 lb) without batteries

Options:

Printer: 40-column, serial-input impact printer records results of each scaler count, can be configured to print the time/date with each scaler count. Cable and adapter are supplied to fit any IBM-compatible PC's 9- or 25-pin serial port (P/N 4167-386)

Sample Counter Head Model 180-8: painted lead housing with choice of five preset spacings (P/N 47-1549)

Sample Planchets: 5.1 cm (2 in.) x 3.2 mm (0.125 in.) sample planchets in stainless steel (P/N 7525-371-01) or aluminum (P/N 7525-371); minimum order of 500