

Model 3030E

Alpha/Beta Sample Counter

Radiation Detection for a Safer World



Ludlum Measurements, Inc.

Specifications

INDICATED USE: simultaneous alpha beta sample counting

SCALERS: 2 each six-digit LCD displays with back lights providing a range of 0–999999 counts

SCALER LINEARITY: reading within 2% of true value

COUNT TIMER SETTINGS: 0.1, 0.5, 1, 2, 5, 10, and 60 minutes. PC position facilitates other user-defined values set by software program.

BACKGROUND:

alpha: 3 cpm or less

beta gamma: typically 50 cpm or less (10 μ R/hr field)

AUDIO: built in unimorph-type speaker with volume control to provide a dual tone click-per-event audio

STATUS INDICATORS:

backlit indicators for daily QC check needed (QC)

overload condition (OL)

counting in cpm or dpm mode (CPM/DPM)

count has exceeded alpha alarm set point (α AL)

count has exceeded beta alarm set point (β AL)

CONNECTOR: series "C"

THRESHOLDS:

alpha: -120 mV

beta: -4 mV

beta window: 50 mV



Part Number: 48-3448

SCALERS: two each six-digit LCD displays with backlights providing a range of 0–999999 counts

SCALER LINEARITY: reading within 2% of true value

SAMPLE TRAY: capable of holding samples 2.5 cm (1 in.) or 5.1 cm (2 in.) diameter samples (with provided insert), up to 1.02 cm (0.4 in.) thick

COUNT TIMER SETTINGS: 0.1, 0.5, 1, 2, 5, 10, 60 minutes or the user-defined PC setting defined during setup using the RS-232 port. User-defined count time may be set from 0.1 to 546.1 minutes.

HIGH VOLTAGE: adjustable from 200–2500 Vdc

DATA-OUTPUT: 9-pin RS-232 port

POWER: 250 watts at 95–250 Vac, 50–60 Hz single phase; internal 12 Vdc, 1.2A/hr, trickle-charged battery will provides power up to eight hours

CONSTRUCTION: aluminum housing with gray powder coat paint and sub-surface printed front panel

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

SIZE: 24.1 x 13.5 x 25.4 (9.5 x 5.3 x 10.0 in.) (H x W x D)

WEIGHT: approximately 2.7 kg (6 lb)

Model 3030E utilizes an external, side-mounted sample counter. Common external counters are Model 43-10 (alpha only) or Model 43-10-1 (alpha beta).

SOFTWARE: computer based to perform setup and calibration routines including: background subtract, crosstalk correction, cpm/dpm modes, daily QC check parameters, alarm levels, and automatic plateaus. All parameters are stored in the instrument in non-volatile memory. The supplied software is capable of logging and storing the following: Sample Number, Sample Date, Sample Time, Alpha Count, Beta Count, Sample Type, Comments.