PYCKO SCIENTIFIC LIMITED
31 London Road, Grantham, NG31 6EX
Telephone 01476 401992
e-mail: bill@pycko.co.uk
www.pycko.co.uk

Your Alternative
To The Obvious

LIGHT WEIGHT NEUTRON MONITOR

MODEL 2363 GAMMA/NEUTRON SURVEY METER WITH MODEL 42-41 PRESCILA PROBE

- ***Digital LED Display with Backlight***
- ***Adjustable Alarm***
- ***Data Logging Capability***
- ***Utilizes an Energy-Compensated G-M Detector Internally and the Model 42-41 PRESCILA Probe Externally***
- ***RS-232 Data Download***

INDICATED USE: Gamma and Neutron Survey

SUGGESTED DETECTORS:
EXTERNAL: Model 42-41 PRESCILA detector
INTERNAL: Energy-compensated GM detector

SENSITIVITY:
Gamma: Around 17 cps per 10 usv/hr
Neutron: Around 6 cps per 10 usv/hr

ADJUSTABLE ALARMS (Indicated by front panel - red LEDS):
Gamma alarm
Neutron alarm
Integrated dose alarm

LOGGING PUSHBUTTON: Located in the handle; used to store a reading

DATA LOGGER: Capable of logging up to1000 individual data points with the following identifiers for each point (All data is stored in non- volatile memory, allowing batteries to be removed without loss of data):

Gamma and neutron sample counts
sample number
date/time stamp
current integrated dose
10 character location identifier

RS-232 PORT: Located on the can, this allows the instrument to be connected to a PC for data download, and adjustment of setup parameters.
AUDIO: Built in unimorph speaker with volume control (greater than 60 dB at 2 feet, full volume)
AUDIO DIVIDE: Selectable dual or individual click-per-event for gamma and neutron counts
METER: 6.4cm arc, 1 mA analogue type
LINEARITY: Reading within 10% of true value DIGITAL DISPLAY: 6 digit LCD with 7mm digits
SELECTOR SWITCH: Toggle switch to select gamma + neutron, gamma only, or neutron only
RESET/READ HV: A two position momentary action switch to allow for the meter to be reset or a reading of the current integrated dose on the digital display
RESPONSE: Will vary according to the number of counts present. Typically 2 - 11 seconds from 10% - 90% of final reading
POWER: 2 each "D" cell batteries (housed in sealed compartment that is accessible from front of instrument)
BATTERY LIFE: Greater than 150 hours (battery condition can be checked on meter)
CONSTRUCTION: Cast and drawn aluminium with beige polyurethane enamel paint
TEMPERATURE RANGE:
GAMMA: -20° C to 50° C
NEUTRON: -10° C to 50° C
SIZE: 16.5cmH X 8.9cmW X 21.6cm L
WEIGHT: 1.6kg including batteries

MODEL 42-41 PRESCILA PROBE

INDICATED USE: Neutron Survey

DETECTOR: PRESCILA Proton Recoil Scintillator

SENSITIVITY: Approximately 350 cpm per mrem/h

NEUTRON ENERGY RESPONSE: Thermal to 100MeV

ANGULAR DEPENDENCE: Within 15% over wide range of energies

GAMMA REJECTION: Approximately 500 cpm at 100mR/h (^{137}Cs)

SUGGESTED INSTRUMENTS: Ludlum Models 12, 2363, 2241 series, and 2350-1

OPERATING VOLTAGE: Typically 500 - 700 volts

CONSTRUCTION: Aluminium housing w/black powdercoat finish

SIZE: 25.7cm H X 10.80 cm W X 10.80 cm L

WEIGHT: 2.05kg