PORTABLE ANALYZING SCALER/RATEMETER

Model # PRS-5

FEATURES:

- THREE SINGLE CHANNEL ANALYZER WINDOWS, SWITCH SELECTABLE
- FULL AUTOSCALER FUNCTION AUTO-CYCLE
- FULL ANALOG FUNCTION
- CRYSTAL CONTROLLED
- ANY T/A GM, PROPORTIONAL, OR SCINTILLATION, ALPHA, ETA, GAMMA, X-RAY, NEUTRON PROBE
- LIGHTED SCALES
- SPLASH PROOF

DESCRIPTION: The PRS-5 is a sturdy portable instrument designed for rugged field use, but incorporating both scaler and ratemeter functions, single channel analyzer with three presettable windows, variable high voltage 0-2500V. All calibration pots are available from outside the case as is the leakproof battery compartment. All closures are gasketed or otherwise sealed to result in a splashproof instrument. The meter is a taut band type for maximum ruggedness; additionally both meter and LCD scaler readout are recessed for protection against damage. Both displays are illuminated when the "illuminate" button is depressed and remain lighted for approximately 6 seconds.



Figure 1: PRS-5

Pulses are seen via a red LED for visual service in dark areas and the time base for scaler operation is indicated by a flashing green LED. Accommodates pulses from all types of detectors including scintillators, proportional and GM detectors. Four ranges are incorporated into the ratemeter. Gate times for the scaler may be set from 1 to 99 seconds (and 1 to 99 minutes) and free running mode. The scaler has an autocycle capability particularly useful for increasing the accuracy of rate measurements and for operating optional printer. Power switch and HV pot and other controls are designed to prevent inadvertent change. The output of the "beeper" is varied by a volume control from completely silent to loud enough to be used in quite noisy environments. Standard features include jack for optional AC adapter and output jack for optional chart recorder. Yet the overall instrument, including all of these functions and including battery life up to 300 hours, still weighs only 62 ounces, making it one of the lightest instruments of this type available.

TECHNICAL ASSOCIATES

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SPECIFICATIONS:

DIGITAL

Readout: 6 digit LCD

Time Base: Crystal controlled 1-99 sec, 1-99 min, and free running

Run Modes: Single shot, autocycle

Display Modes: Latched, continual update

Gate Monitor: Green LED, 1 second cycle

ANALOG

Meter: 0-500 cpm recessed rugged (optional SI units).

Ranges: x1; x10; x100; x1,000 (0-500, 5k, 500k cpm).

Time Constant: 2 sec 11 sec

Pulse Monitor: Red LED one flash per pulse

Range: Usable probes cover range 1 μ R/hr to 1000 R/hr; 1 cpm to 500,000 cpm; 0.1 mRem/hr

to 10 Rem/hr

Audio Indicator: Piezo electric sounder with volume control.

Strip Chart Recorder Output: Standard feature 0-1 Volt

Single Channel: 3 switch selectable windows

2 preset (resettable) window positions plus one "variable"

Analyzer/Discriminator: 10-turn, 1000 division pot for each threshold

10-turn, 1000 division pot for window width

Detector: Mates with T/A probes, any GM, proportional or scintillation, alpha, beta, gamma,

positron, x-ray, neutron or tritium.

Detector Connector: BNC bulkhead mount (MHV optional)

Detector Bias: 0-2500V regulated and filtered

Supply: High Voltage is displayed on meter by pushing a button

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POWER

Batteries: 3 each D cells, accepts Alkaline, Carbon-Zinc, Lithium, or rechargeable NiCads with

no adjustment required. Separate sealed battery compartment available from outside

case.

Battery Life: Nominal 300 hours with alkaline batteries

Battery Check: On main range switch and meter marking

AC Operation: Connector for optional AC adapter

Splashproof: Seals and gaskets throughout

Construction: All plug in circuit cards; essentially no wires. Sturdy deep drawn aluminum case

Dimensions: 23cm L x 10.5cm W x 14.5cm (9" x 4.1" x 5.7"). Includes handle and tilt stand both in

folded position

Weight: 1.7 Kg (62 oz) including batteries.

Shipping Weight: 3 Kg (6.6 lbs)

Options: Connection for interface to printer or computer SI units

Accessories: Printer

Strip Chart Recorder

AC Adapter

Over 50 different T/A probes and sample counter detectors

Probe holder supplied - no charge if probe and PRS-5 purchased together

A. PG-LB, B. PAS-9, C. BGS-IN, D. Collimator, E. PLS-04, F. DMU-1000, G. P-15, H.

STB-TF-6, I. TS-26, J. PN-13



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