



Rapid Radon Monitor

Model: FR-5-FS

Model – FR-PII: Collection Unit with Quiet Pump and Filter Holder



PRS-7 Electronics

Description

Model – FR-PII Collection Unit

- Regulated Air Sampler complete with Quiet Pump, flow meter and filter/cartridge holder.
- Quiet air pump capacity is 227 liters/minute under constant surveillance by flow meter.
- 10 cartridges included.
- **Model – PRS-7 Electronics**
- **Sensitivity:** 1 pico Ci/liter with 3 minute air collection and 3 min count after 1 hour wait
- **Daily Variations:** Radon concentration varies dramatically during each day. To measure daily average value, leave pump operating in place for 24 hours, then wait at least one hour and make measurement. Quiet pump will not disturb most sleepers in adjacent rooms.

Features

- Radon System System Gives Quick Measurement
- 1 Picocurie Per Liter in 3 Minute Sampling
- Increased Sensitivity with Longer Sampling
- Portable (AC Operated)
- Replacement Cartridges Widely Available

Reuse of Cartridge

- Cartridges may be reused if the count of the cartridge shows zero counts above background.
- The cartridge will rid itself of Radon in approximately 2 weeks with no action, or can be rid completely of Radon in 1 hour by heating in oven for 1 hour at 250 degrees F.
- Additional charcoal cartridges are available



TECHNICAL ASSOCIATES OVERHOFF TECHNOLOGY

7051 ETON AVENUE, CANOGA PARK, CALIFORNIA 91303

PHONE: 818-883-7043 | FAX: 818-883-6103

SALES@USNUCLEARCORP.COM | TECH-ASSOCIATES.COM | USNUCLEARCORP.COM

DIVISIONS OF



USNUCLEARCORP

OTCQB-UCLF

Rapid Radon Monitor

Model: FR-5-FS

Application

- Take the pump and filter holder to the area to be tested
- Pull air through the filter for a period of at least 3 minutes.
- A 3-minute count based on a 3 minute sample achieves 1 pico Ci per liter.
- A 10-minute count based on a 10 minute sample achieves a 0.1 pico Ci/liter sensitivity.
- A waiting period of approximately one hour after taking the sample and before counting is required to maximize the sensitivity.
- Longer or shorter waiting times (from ten minutes to seven days) will still allow detection and accurate measurement of Radon in air but at lesser sensitivity than above.

Specifications

Model:	FR-P11
Portability	Portable
DETECTOR	PGS-3L
Size/Material	1" x 0.8" NaI(Tl)
Window	Aluminum 5mil
Detects	Low + Middle Gamma
Pump	227 liters/minute
Filter	Charcoal Cartridge 2.5" dia.
WEIGHTS:	
Electronics	5 lbs with Batteries
Detector + Filter	4 lbs (1.8 kg)
Pump	30 lbs (13.6 kg)
Shielding	None
Electronics	PRS-7



TECHNICAL ASSOCIATES OVERHOFF TECHNOLOGY

7051 ETON AVENUE, CANOGA PARK, CALIFORNIA 91303

PHONE: 818-883-7043 | FAX: 818-883-6103

SALES@USNUCLEARCORP.COM | TECH-ASSOCIATES.COM | USNUCLEARCORP.COM

DIVISIONS OF



USNUCLEARCORP

OTCQB-UCLF

Rapid Radon Monitor

Model: FR-5-FS

Electronics PRS-7

Specifications


- **Digital Readout:** 6 digit LCD Rate, 8 digit integrate
- **Recessed or Internal:** Discriminator level, high voltage, alarm set
- **Time Base:** Crystal controlled 1-10,000 seconds, user settable
- **Display Modes:** Rate, Integrate
- **Range:** 1×10^{-13} to 1×10^{-7} μ Ci/cc or Ci/m³ Depends on count time
- **Alarm:** 2000 Hz audio tone with audio "mute" switch + RED LIGHT, high current relay.
- **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
- **Front Panel Controls:** On-Off Toggle; Alarm-Mute; Rate; Integrate; Reset;
- **Supply:** High Voltage is adjustable & repeatable with the 10-turn dial.
- **Engineering Units:** User Settable: input correct conversion factor, change units.
- **Controls:** Front Panel: On-Off, Alarm-mute, Rate, Integrate, Reset.
- **Calibration:** User settable calibration factor adjustment.
- **Computer interface:** Two-way, RS-232 standard, USB optional.
- **Batteries:** 5 amp-Hour Battery Pack with built-in charger.
- **Battery Life:** 100 Hours in Non-Alarm Status
18 Hours in Alarm Status
- **Power:** 115-125 volts, 50-60 Hz (220 V optional)
- **Environmental:** 10° C to 60° C, RH: 50% - 95%
- **Construction:** NEMA-4X polycarbonate gasket sealed case with handle:
Rugged / splash-proof with handle.
All plug in circuit cards.
- **Electronics Dimensions:** 10" L x 4.1" W x 7" H (25 cm L x 10.5 cm W x 18 cm H)
Includes handle
- **Weight:** 5 lbs (2.5kg) including batteries.
- **Optional:**
 - USB
 - Alarm Relay



TECHNICAL ASSOCIATES OVERHOFF TECHNOLOGY

7051 ETON AVENUE, CANOGA PARK, CALIFORNIA 91303
PHONE: 818-883-7043 | FAX: 818-883-6103

SALES@USNUCLEARCORP.COM | TECH-ASSOCIATES.COM | USNUCLEARCORP.COM

DIVISIONS OF
 USNUCLEARCORP
OTCQB-UCLF

Rapid Radon Monitor

Model: FR-5-FS

Detector and Pump System

- **Detector:** PGS-3L Scintillator
- **Air Pump:** High Flow Pump and Filter holder
- **Air Flow Rate:** 227 liters/min
- **Filters:** 10 pack charcoal filter papers
- **System Power:** 115 V 50-60 Hz 2A (**Optional:** 230 V 50-60 Hz)

Weight and Dimensions

- **Pump Assembly:** 12" W x 20" H x 14" D (30.4 cm W x 50.8 cm x H x 15.2 cm).
- **Detector Assembly:** 5" W x 10" H x 6" D. (12.7 cm W x 28.4 cm x H x 15.2 cm).
- **Weight:** See Chart

Optional

- **Computer Interface:** USB
- **Tripod for Breathing Zone Monitoring**
- **Detector Shielding**



TECHNICAL ASSOCIATES OVERHOFF TECHNOLOGY

7051 ETON AVENUE, CANOGA PARK, CALIFORNIA 91303

PHONE: 818-883-7043 | FAX: 818-883-6103

SALES@USNUCLEARCORP.COM | TECH-ASSOCIATES.COM | USNUCLEARCORP.COM

DIVISIONS OF



USNUCLEARCORP

OTCQB-UCLF