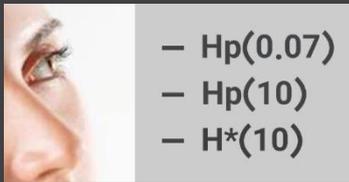




Innovator In Spectroscopy Equipment

PRM2415A

MOUNTABLE



**PORTABLE RADIATION
MONITORING MOUNTABLE NO
DISPLAY
MODEL PRM2415A-
MOUNTABLE**

www.cfp.co.ir



CATALOG



DOSIMETERS



FREE DOWNLOAD

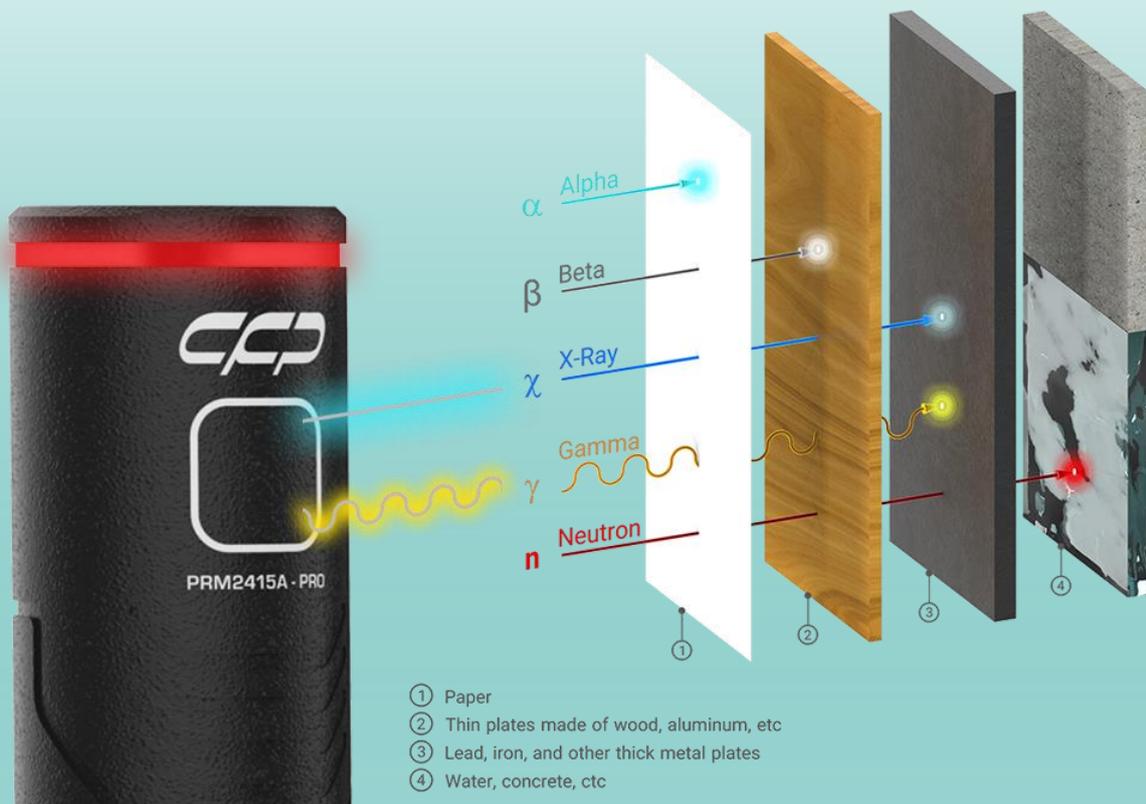
PORTABLE RADIATION MONITORING MOUNTABLE NO DISPLAY MODEL PRM2415A-MOUNTABLE

Features

- Equipped with cost effective semiconductor sensor.
- High sensitivity and uniform response.
- Low leakage current.
- Detection of gamma, X and beta radiation in six versions.
- Dose range from 0.1 uSv/h to 10mSv/h @¹³⁷Cs.
- Measurement count from 0.01 cpm to 300 kcpm.
- Monitor radioactivity permanently (over long periods of time).
- Light and sound alarm.
- Free software for windows.
- Easily configurable to ensure reliable and safe operation.
- Ready for field operation.
- Operation in a wide range of temperature.
- Compact and integrated design with low weight.
- Special rugged design, waterproof against streaming water and fully dust protected.
- Continuous operation under severe environmental conditions.
- Durable and easy to use.

COST EFFECTIVE SEMICONDUCTOR SENSOR WITH HIGH SENSITIVITY

X- and Gamma-Rays



Description

The PRM2415A-Mountable manufactured by Control Farayand Pasargad (CFP) measures the amount of gamma and x radiation using a semiconductor detector. The crystal of the device is completely sealed inside its housing. This device has six versions whose information and specifications are listed below.

The PRM2415A-Mountable has a 5V DC boost processor circuit and low power consumption of 31 mW (6 mA current). CFP Company has a limited number of documents and simple samples of this test device that will be provided to the customer. The counter provided with an optional housing and a 3.5 mm jack that allows connection to mobile phones.

Further tips for measuring particles:

To measure low-energy gamma rays, the tip of the radiation sensor must be placed in front of the radiation source. Low-energy gamma rays (10-40 keV) cannot penetrate the PRM, but may be recorded through the entrance window.

Beta rays with a relatively high range in air can be absorbed by aluminum foil. High-energy beta particles can be detected through the back of the case.

Radioactive isotopes that are well detected by PRM are: ^{137}Cs , ^{60}Co , $^{99\text{m}}\text{Tc}$, ^{32}P , and ^{90}Sr .

It is very difficult and sometimes impossible to detect some radioactive isotopes by this device. For example, beta ray emitted by tritium has very low energy that cannot be detected even at high intensities. Also, it will not be practical to record the gamma emissions of ^{241}Am with PRM.

PRO Version



STD Version



Specifications

Unit: PRM2415A-MOUNTABLE						
Type	MOUNTABLE					
Version type	STD	STD SSDL	PRO	PRO SSDL	BETA	BETA SSDL
Particle detection	Gamma and X-ray		Gamma and X-ray		Beta, Gamma and X-ray	
Input(s)						
Port	DC +5V LEMO 5 pin (200 mA)					
Output(s)						
Output signal	No output signal					
Control(s)						
port	Setting configure via LEMO 5 pin (A) to USB (B) cable (set and read data)					
Indicator(s)						
Ring	Green color (safe), red color (alarm)					
Buzzer	Not included		Available		Available	
Technical performance						
Energy range (gamma & x-ray)	120 – 3000 keV		60 – 3000 keV		60 – 3000 keV	
Energy range (beta)	Not detect		Not detect		> 170keV	
Dose rate range	0.1 – 10000 μ Sv/h					
Accuracy	$\pm 20\%$ @ ^{137}Cs		$\pm 10\%$ @ ^{137}Cs		$\pm 10\%$ @ ^{137}Cs	
Count range	0 – 3500 cps					
Continuous run time	In normal conditions ≥ 1000 h In economy mode ≥ 5000 h					
Detector						
Beta, Gamma, and X-ray detector	Semiconductor (Si)					
Data Acquisition and Analysis						
OS	Built in Windows 7 or higher versions					
Software	PRM2415A-MOUNTABLE software					
Measurement/spectroscopy						
Energy calibration	^{137}Cs					
Battery						
Type	Not included					
Certificate						
SSDL (Iran Atomic Energy Organization calibration)	x	✓	x	✓	x	✓

* = This Certificate of Compliance can be checked for validity, please refer to www.cfp.co.ir





Application

- Security control.
- Accelerator sites.
- Nuclear industry.
- Background radiation measurement.
- Radio-nuclide half-life determination.
- Monitoring raw materials and food.
- Laboratory measurements.
- Personal protection in radiative environment
- Radiation protective measures in case of nuclear disasters.
- Educational and research centers.
- Health physics (for contamination monitoring of surfaces, clothing and objects etc.)
- Nuclear medicine laboratories.

Electrical, Mechanical and Environmental

Unit: PRM2415A-MOUNTABLE						
Type	MOUNTABLE					
Version type	STD	STD SSDL	PRO	PRO SSDL	BETA	BETA SSDL
Electrical						
Power required	0.1W					
Mechanical						
dimensions (L×W×H)	135 mm × 35 mm × 15 mm					
Weight	98 gr					
Protection class	IP40					
Mechanical design						
Environmental						
Storage temperature	10°C to 40°C					
Operating temperature	0°C to 50°C					
Relative humidity	10 to 80%					

Software

PC software

This sensor can be used with one of the below interfaces and the following PRM2415A-Mountable software.

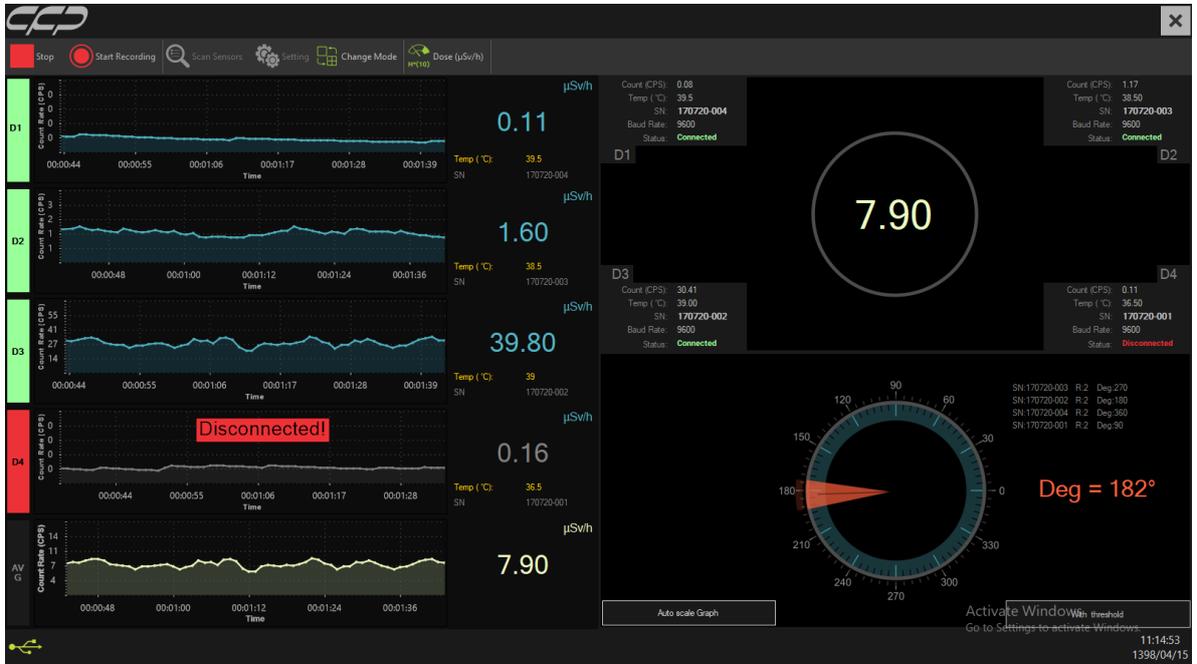
- Windows based PC via USB port.
- Android based Tablet or smartphone via OTG USB port.

Input /Output (Use for software)

LEMO 5 pin (A) to USB (B)

Data Output formats

CSV, TXT, MCA, KML, XLS, LOG



Software main window (Mode 1).



Software main window (Mode 2).

Ordering info

Standard package includes STD Version

Part #	Image	Description
PRM2415AMOUNT-STD		Portable radiation monitoring system (gamma and x-ray) standard mountable version without display model PRM2415A-MOUNTABLE-STD.
ACCE2415A001-STD		CD User guide (1 Pack).
ACCE2415A002-STD		box with foam inserted (1 Pack).
ACCE2415A003 ⁺ -STD		Guaranty (one year).
ACCE2415A011-STD		LEMO 5 pin (A) to USB (B) cable.

Standard package includes PRO Version

Part #	Image	Description
PRM2415AMOUNT-PRO		Portable radiation monitoring system (gamma and x-ray) professional mountable version without display model PRM2415A-MOUNTABLE-PRO.
ACCE2415A001-PRO		CD User guide (1 Pack).
ACCE2415A002-PRO		box with foam inserted (1 Pack).
ACCE2415A003 ⁺ -PRO		Guaranty (one year).

ACCE2415A011-PRO		LEMO 5 pin (A) to USB (B) cable.
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Standard package includes BETA Version

Part #	Image	Description
PRM2415AMOUNT-BETA		Portable radiation monitoring system (gamma and x-ray) BETA mountable version without display model PRM2415A-MOUNTABLE-BETA.
ACCE2415A001-BETA		CD User guide (1 Pack).
ACCE2415A002-BETA		box with foam inserted (1 Pack).
ACCE2415A003-BETA		Guaranty (one year).
ACCE2415A011-BETA		LEMO 5 pin (A) to USB (B) cable.

Standard package includes STD-SSDL Version

Part #	Image	Description
PRM2415AMOUNT-STD-SSDL		Portable radiation monitoring system (gamma and x-ray) standard mountable version without display with SSDL certificate model PRM2415A-MOUNTABLE-STD-SSDL.
ACCE2415A001-STD-SSDL		CD User guide (1 Pack).
ACCE2415A002-STD-SSDL		box with foam inserted (1 Pack)

ACCE2415A003*-STD-SSDL		Guaranty (one year).
ACCE2415A008-STD- SSDL		SSDL Certificate.
ACCE2415A011-STD- SSDL		LEMO 5 pin (A) to USB (B) cable.

Standard package includes PRO-SSDL Version

Part #	Image	Description
PRM2415AMOUNT-PRO-SSDL		Portable radiation monitoring system (gamma and x-ray) professional mountable version without display with SSDL certificate model PRM2415A-MOUNTABLE-PRO-SSDL.
ACCE2415A001-PRO- SSDL		CD User guide (1 Pack).
ACCE2415A002-PRO- SSDL		box with foam inserted (1 Pack).
ACCE2415A003*-PRO-SSDL		Guaranty (one year).
ACCE2415A008-PRO- SSDL		SSDL Certificate.
ACCE2415A011-PRO- SSDL		LEMO 5 pin (A) to USB (B) cable.

Standard package includes BETA-SSDL Version

Part #	Image	Description
PRM2415AMOUNT-BETA-SSDL		Portable radiation monitoring system (gamma and x-ray) BETA mountable version without display with SSDL certificate model PRM2415A-MOUNTABLE-BETA-SSDL.
ACCE2415A001-BETA-SSDL		CD User guide (1 Pack).
ACCE2415A002-BETA-SSDL		box with foam inserted (1 Pack).
ACCE2415A003-BETA-SSDL		Guaranty (one year).
ACCE2415A008-BETA-SSDL		SSDL Certificate.
ACCE2415A011-BETA-SSDL		LEMO 5 pin (A) to USB (B) cable.

* =we stand behind our products. We guarantee your satisfaction in the quality of our instruments by providing a complete one-year warranty covering any defect of workmanship, material, and/or design. If our products do not perform, we will provide complete repair and/or replacement. for guaranty conditions, please refer to manual device (PRM2415A-MONTABLE - Manual).

USBOIC2517 modem package includes:

Part #	Image	Description
USBOIC2517 device		USBOIC2517 isolated modem.
ACCE2517001		LEMO 5 pin to USB cable.
ACCE2517002		LEMO 5 pin to LEMO 5 pin cable with desired length in meters.
ACCE2517003		CD User guide (1 Pack).

ACCE2517004		box with foam inserted (1 Pack).
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Optional accessories and services

Part #	Image	Description
ACCE2415A004		Installation.
ACCE2415A005		Training.
ACCE2415A006**		Re-calibration (interval) services. (1year factory maintenance suggested, not required)
ACCE2415A007		Hard case with foam insert.
ACCE2415A012		USB to USB extension cable (10, 20 and 30 meters long).

** = The proper maintenance & calibration of your instruments is critical to ensure proper performance & accuracy. for Re-calibration (interval) services, please call with CFP company (021- 46045383).

