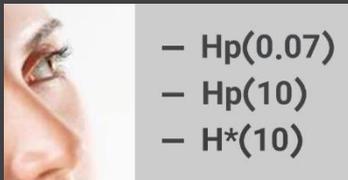




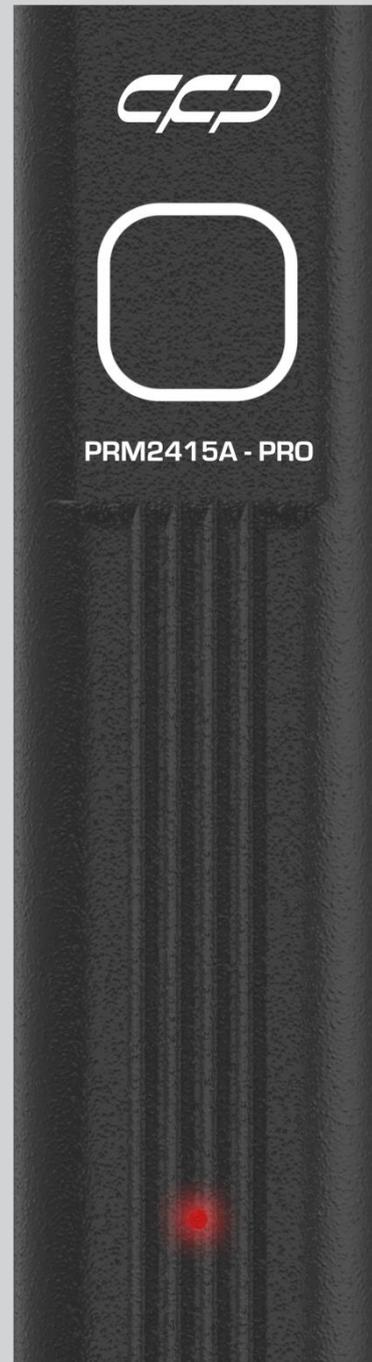
Innovator In Spectroscopy Equipment

PRM2415A

SIMPLE



PORTABLE RADIATION MONITOR MODEL PRM2415A SIMPLE



www.cfp.co.ir



CATALOG



DOSIMETERS



FREE DOWNLOAD

PORTABLE RADIATION MONITORING SIMPLE NO DISPLAY

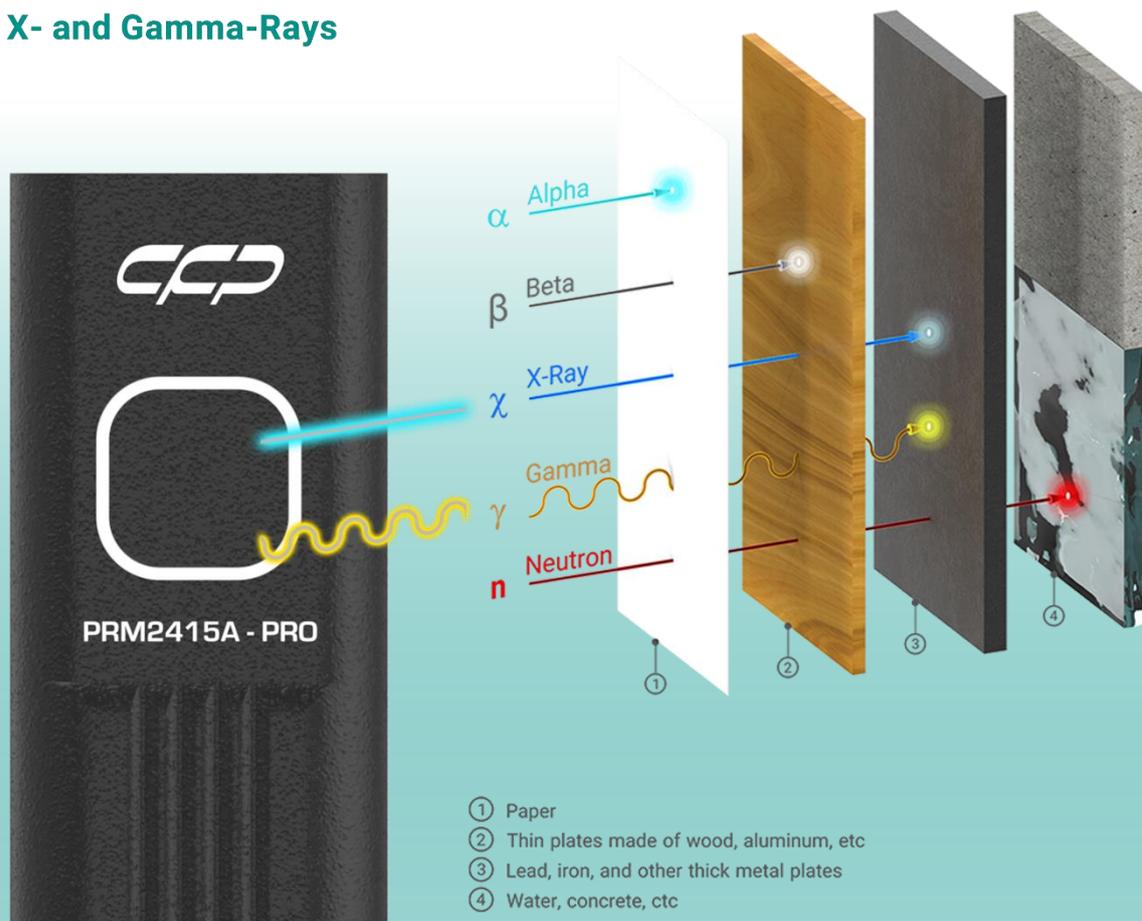
MODEL PRM2415A-SIMPLE

Features

- Light and sound alarm
- Monitor counts/interval (rate)
- Cost effective semiconductor sensor
- High sensitivity and uniform response
- Dose range from 0.1uSv/h to 10mSv/h @137Cs
- Measurement count from 0.01cpm to 300Kcpm
- Detecting beta, gamma & x-ray radiation source
- Monitor variation in background radiation at different elevations
- Monitor radioactivity in the environment over long periods of time.
- Durable, versatile
- Highly integratable
- Splash resistant design
- Wide temperature range
- Ready for field operation
- Compact design with low weight
- Easy to use and low maintenance
- Continuous operation under severe environmental condition
- Being robust and suitable for use in challenging conditions

COST EFFECTIVE SEMICONDUCTOR SENSOR & HIGH SENSITIVITY

X- and Gamma-Rays



Description

The PRM2415A-SIMPLE from Control Farayand Pasargad (CFP) is a highly sensitive radiation sensor designed for the embedded systems market by means of semiconductor detector. Capable of detecting gamma, x and beta radiation, it has a simple pulsed output that can be used with any interface. The PRM2415A-SIMPLE has six types, they're information is visible below. This radiation monitoring has an onboard DC boost circuit, so the board can be supplied with a friendly 5V. Using only 31mW (6mA @ 5V), it is very low power. CFP has a handful of documents and example sample to get you up and running. They have also written a Windows and Android example program written in C# to output graphs to a computer using a USB as the reader.

Further tips for monitoring radiation:

To measure gamma and x-rays, hold the tip of the radiation monitor toward the source of radiation. Low-energy gamma radiation (10–40keV) cannot penetrate the side of the PRM, but may be detected through the window. To detect hard beta radiation, point the window toward the source of radiation. Beta radiation has a longer range through air, but can usually be shielded (e.g., by a few millimeters of aluminum). High energy beta particles may be monitored through the back of the case. Some isotopes detected relatively well are ^{137}Cs , ^{60}Co , $^{99\text{m}}\text{Tc}$, ^{32}P , and ^{90}Sr . Some types of radiation are very difficult or impossible for this PRM to detect. Beta emissions from tritium and gamma emissions from ^{241}Am are too weak to detect using the radiation monitor.

PRO Version



STD Version



Specifications

Unit: PRM2415A-SIMPLE						
Type	SIMPLE					
Version type	STD	STD SSDL	PRO	PRO SSDL	BETA	BETA SSDL
Energy detection	Gamma and X-ray		Gamma and X-ray		Beta, Gamma and X-ray	
Input(s)						
Port	DC +5V USB (200mA)					
Output(s)						
Output	No output signal					
Control(s)						
USB port	Setting configure via USB (set and read all data)					
Indicator(s)						
Ring	Green color (safe) & red color (alarm)					
Buzzer	Not included		Available		Available	
Performance						
Energy range (gamma)	120 – 3000keV		60 – 3000keV		60 – 3000keV	
Energy range (beta)	Not detect		Not detect		> 170keV	
Dose range	0.1 - 10000 μ Sv/h					
Accuracy	Typically \pm 20% @ 137Cs		Typically \pm 10% @137Cs		Typically \pm 10% @137Cs	
Operating range	0 – 3500cps					
Continuous run time						
In normal conditions	\geq 1000 h					
In economy mode	\geq 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-SIMPLE (SOFTWARE)					
Battery						
Type	Not included					
Certificate						
SSDL ⁺	x	✓	x	✓	x	✓

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

Application

- Lantern Mantles
- Research activities
- Background Radiation
- Search X-ray apparatus
- Accelerating installation
- Emergency rescue service
- Medical and health physics
- Radioecology and Radiology
- Customs and border control
- Nuclear medicine and industry
- Dose monitoring of population
- Individual radiation and protection
- Civil protection, security and police
- Belding protection and emergency service
- medical procedures (X-Rays, CT scans, etc.)
- Half-Life Determination (Counts/Interval vs. Time)
- Counts/Interval vs. Distance and Shielding Studies
- X-Ray crystallography and X-Ray fluorescence spectroscopy, electronic microscopy
- Detects all Gamma & X-Ray radiation: Check radiation levels during air travel or during



Electrical, Mechanical and Environmental

Unit: PRM2415A-SIMPLE

Type	SIMPLE					
Version type	STD	STD SSDL	PRO	PRO SSDL	BETA	BETA SSDL
Electrical						
Power required	0.1W					
Physical						
dimensions ($\phi \times H$)	29.50mm x 110mm					
Weight	98gr					
Protection class	IP40					
Mechanical						
Unit: mm						
Environmental						
Storage temperature	10°C to 50°C					
Operating temperature	0°C to 50°C					
Relative humidity	10 to 80%					



Software

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

- Windows based Tablet and PC Computer via host USB port
- Android based Tablet or smartphone via OTG USB port



Software main window



Software report

Ordering info

Standard package includes PRO Version

Part #	Image	Description
PRM2415ASIMPLE-PRO		RRM 2415A-PRO mountable version
ACCE2415A001-PRO		CD User guide (1 Pack)
ACCE2415A002-PRO		box with foam inserted (1 Pack)
ACCE2318003*		Guarantee (one year)
ACCE2415A011-Simple		Phone jack 3.5mm cable

Standard package includes STD Version

Part #	Image	Description
PRM2415ASIMPLE-STD		RRM 2415A-STD mountable version
ACCE2415A002-STD		CD User guide (1 Pack)
ACCE2415A003-STD		box with foam inserted (1 Pack)
ACCE2318003*		Guarantee (one year)

ACCE2415A001-Simple		Phone jack 3.5mm 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 (DLS2115 - Manual)

Optional accessories and services

Part #	Image	Description
ACCE2415A004		installation
ACCE2415A005		Training
ACCE2318006**		Re-calibration services

** = 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).