

ARM Series Radiation Area Monitors

Model ARM-1, ARM-2, ARM-3 Comply with ANSI™ 42.33/1, 42.32 ve IEC 62401.

Instruction Manual



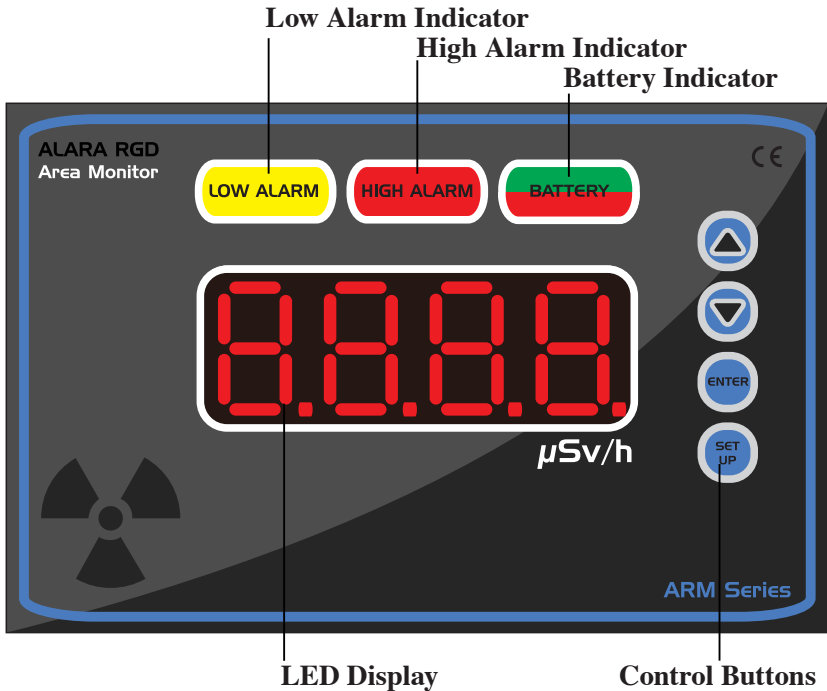
ALARA RGD, ARM Series Digital Area Monitors are designed for a wide range of radiation area monitoring applications. They are completely self-contained units with energy compensated GM detectors, DC powered with internal battery backup and have user settable low and high alarms. An optional remote alarm is available for added security.

ALARA RGD, ARM Series Digital Area Monitors can be used wherever there is a need to detect and warn personnel of increasing radiation levels and to control the exposure of personnel to gamma radiation. The versatility of the ALARA RGD, ARM Series Area Monitors allows it to be used from industrial applications to medical settings.

I. SPECIFICATIONS



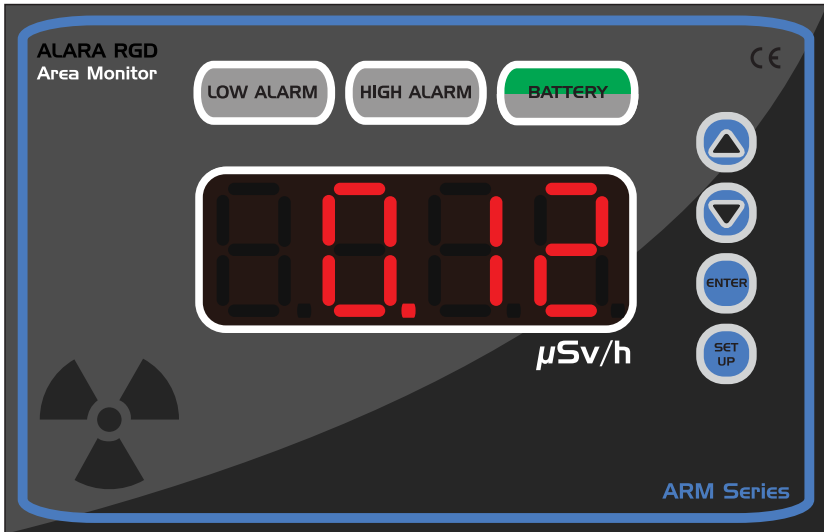
Radiation Type:	Gamma/X-Ray
Detector Range:	ARM-1, 1 μ Sv/h to 10 mSv/h ARM-2, 10 μ Sv/h to 1 Sv/h ARM-3, 0.01 μ Sv/h to 1 mSv/h
Display:	4 digit LED display with 38 mm character height
Display Units:	Can be made to display in μ R/hr, mR/hr, R/h, μ Sv/h, mSv/h, Sv/h, cpm, cps and others
Linearity:	$\pm 10\%$ of true value
Response:	2 seconds refresh
Low alarm:	Indicated by a orange light and slow beep
High alarm:	Indicated by a red light and fast beep
Low battery	
Indicator:	Indicates 3 hours of battery power remaining
Calibration	
Controls:	Accessible from set up menu
Dead time:	Depending on GM Tube 5-100 μ Sn
Overload:	Senses detector saturation and indicates on display
Data output:	9 pin RS-232 and USB output
Power	
Requirements:	220 Volt (AC), 50 Hz single phase
Rechargeable	
Battery life:	96 hours (24 hours in alarm condition)
Battery charger:	Battery is continuously trickle charged when instrument is connected to line power and turned on
Construction:	Aluminum housing
Temperature	
Range:	- 20° to 50°C.
Size:	250 x 156 x 44 mm (wxhxd)
Weight:	1.8 kg



There are 3 led visual indicator (YELLOW-Low Alarm Indicator, RED-High Alarm Indicator and GREEN/RED Battery Indicator), 4 Control Buttons (UP, DOWN, ENTER and SET UP) and 4 digit LED display on the front panel of the detector.

Unit of monitor is set to uSv/h for common demand but can also order as mR/h, CPM, or CPS.

3. POWER ON

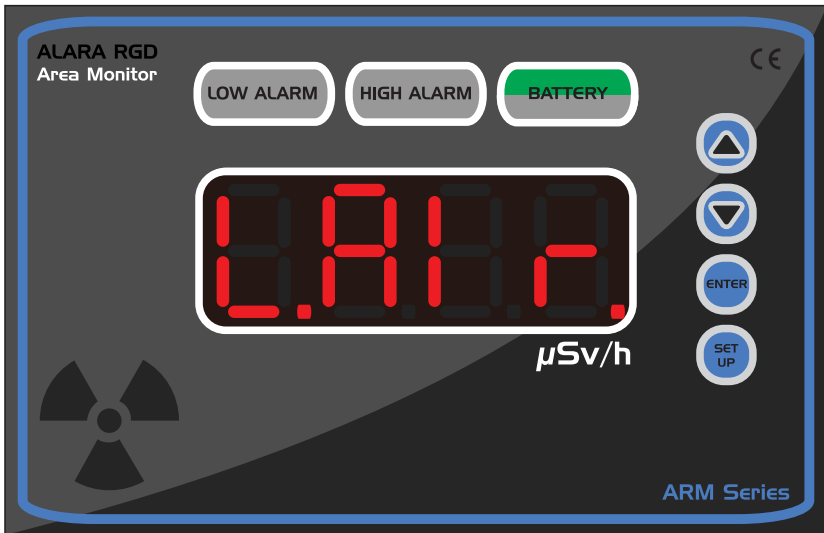


Once power and turn on position the power switch (shown on back page), monitor starts to measure and show ambient radiation dose rate.

Can be seen Set Low Alarm Value pressing DOWN button and Set High Alarm Value pressing UP button during measurement. As factory default, Low Alarm was set to 1 uSv/h and High Alarm was set to 5 uSv/h.

If monitor plugged external power by AC cable, battery indicator will be continuously green. In case of AC power goes out, monitor will be fed by back up battery without any interruption and battery indicator will turn blinking red and green warning state. If the battery reaches last 3 hours GREEN blinks will stop and just RED blinks continue.

4. SET UP



Can be reach set up menu by pressing SET UP button. SET UP menu allows you change 3 parameters; LOW ALARM VALUE, HIGH ALARM VALUE and CALIBRATION CONSTANT

After pressing SET UP button L.Alr. letters will appear on the LCD display, you can press ENTER button to set LOW ALARM in this position. Also you can switch to HIGH ALARM and CALIBRATION CONSTANT options by using UP and DOWN buttons.

For HIGH ALARM, H.Alr. and for CALIBRATION CONSTANT, Cal.C. letters will be shown.

LOW AND HIGH ALARMS can be set 1 uSv/h to 9000 uSv/h seperately.



**Power Inlet
and Switch**

**Rs-232 and USB
Data Ports**

Buzzer

4 Years Warranty

Simple Installation and Setup

User Friendly Menu

7-Segment, 4 Digit, 38 mm Height Large Display

Programmable Low and High Alarm

Audio and Visual Alarms

Energy Compensated Geiger Müller Detector

Ready RS-232 Network Connection

96 Hours Battery Back-Up

Optional Remote Alarm

Anti-Jam Circuitry Prevents Erroneous Readings at Tube Saturation

Calibration Controls in Setup Menu

1 $\mu\text{Sv/h}$ to 10 mSv/h Dose Rate Range for ARM-1

10 $\mu\text{Sv/h}$ to 1 Sv/h Dose Rate Range for ARM-2

0.01 $\mu\text{Sv/h}$ to 1 mSv/h Dose Rate Range for ARM-3

MANUFACTURER

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