



DZM-M5

Area Radiation Monitor



- Compact, self contained, Mains operated
- Large and bright 7 Seg display with 5" Touch screen TFT Display and fault / error messages displayed on Display with Alarm annunciation
- Compact and rugged case construction , IP-65 ingress protection
- N42.17 compliance for Environmental and EMC
- SCADA based Modbus RTU - RS485 or TCP/IP communication protocol, Web based browser for monitoring upto 250 instruments

APPLICATIONS

- Nuclear Power Industry
- Nuclear Process Labs
- Radiography
- Environmental Survey / Health Physics Labs

SCOPE

- Area Radiation Monitor, Model DZM is a compact, simple to use, stand alone instrument to monitor Gamma Radiation. It is useful in Health Physics applications in Nuclear laboratories, reactors and power plants.
- It is ideally designed for area and process monitoring in Nuclear facilities.
- Area Radiation Monitor, DZM is completely self contained, mains operated and SBC based unit.
- Main function of DZM is to display Dose rate level of the area and give visual indication if any alarm situation arises.
- It includes Geiger Muller detector to detect Gamma Radiation, necessary high voltage to operate the GM detector and pulse processing electronics.
- DZM provides 7seg LED and 5" touch screen TFT LCD display. It also provides Audio and Visual indication for Alarm whenever Dose rate exceeds threshold level.
- DZM is housed in robustly constructed wall mounting type enclosure to provide immunity against EMI/RFI or line transients and IP65 rated.

SPECIFICATIONS

	DZM-M5
DETECTOR USED	Externally connected Smart Probe
RADIATION DETECTION	-
ENERGY DETECTION RANGE	-
DOSE RATE RANGE	-
DOSE RATE LINEARITY	-
DISPLAY UNITS	R/h, Sv/h, Gy/h and CPS
RESPONSE TIME	Auto: 1 to 30 seconds as per dose rate Abrupt Detection: within 1 second
DISPLAY	6 Digit 7 Segment LED Display 5" Touch Screen TFT Display
ALARMS	Green Lamp for Normal Yellow Lamp for HV and Detector Failure Red Lamp and Hooter for Alarm condition ACK and RST push buttons for Alarm Acknowledgment and Reset. OL - Over load OR - Over range DET - Detector Fail EHT - High Voltage Fail
OUTPUTS	Two changeover Potential free Relay contacts (230VAC, 3 A) for Radiation alarm and Power failure Alarm operating in Fail safe mode. 4-20mA current output equivalent to Dose-rate Range. Remote ACK and RST Contacts.
COMMUNICATION	Display of Doserate, Alarm status and ACK / RST Alarms. TCP/IP MODBUS RS485 MODBUS RTU Web access over Ethernet
SELF DIAGNOSTICS	POST(Power On Self Test) inclusive of all functions with display of error messages
POWER SUPPLY	88-264 VAC, 47-63 Hz with Power line harmonic filters and choke fuses provision.
ENVIRONMENTAL COMPLIANCE	As per IS 9000 / ANSI 42.17 Operating Temperature: 0° to 50°C Relative Humidity: 20% to 80% or better
EMI /EMC COMPLIANCE	As per IEC 61000 / ANSI 42.17 as per IEC 61000-4-3 as per IEC 61000-4-6 as per IEC 61000-4-8

	DZM-M5
CONSTRUCTION	Rugged, powder coated MS Chassis with IP65 Ingress Protection, Wall Mounting or Table Top
WEIGHT	3 Kg
DIMENSION	250 mm x 220 mm x 70 mm
PC SOFTWARE (OPTIONAL)	RadMonitor PC Software
STANDARD ACCESSORIES	USB Pendrive with User Manual
	Standard Wall mount
ORDER CODE	VNIM0050

OPTIONAL ACCESSORIES

Optional Accessories	Order Code
RadMonitor PC Software License	VNIA0104
External Siren and Tower Lamp	VNIA0101
Calibrator TG-10	VNIA0105
USB Keyboard	VNSXA130
Magnetic Door lock for enclosure	VNIA0103
Large External Digital Display	VNIA0102
Extended Warranty for 2 Years	VNF2A014

Optional Accessories	Order Code
SGX-10m	VNIM0051
SGX-100m	VNIM0052
SGX-1	VNIM0053
SGX-10	VNIM0054
SGX-1K	VNIM0070
SGX-1KD	VNIM0071
10 Meter Cable	VNIA0107
Custom Length Cable	VNIA0108



SGX
Smart Gamma Probe



- Stand Alone or Compatible with DZM- M5 Area Radiation Monitor
- Suitable for Remote measurements
- Rugged and durable S.S. Housing

SCOPE

- Smart Gamma Probe is housed in S.S. Chassis with microcontroller and necessary electronics.
- Data / Dose rate logging is done through digital communication protocol.
- SGX Series Probes can be used independently or it is compatible with DZM-M5 series.
- Main feature of SGX Series is for Remote sensing application

SPECIFICATIONS

	SGX - 10m	SGX - 100m	SGX - 1	SGX - 10	SGX - 1K	SGX - 1KD
DETECTOR USED	Energy Compensated GM tube					Two Energy Compensated GM Tubes for Low and High
RADIATION DETECTION	gamma & X-ray					
ENERGY DETECTION RANGE	48 KeV to 3 MeV					
DOSE RATE RANGE	0.001 mR/h to 10 mR/h	0.01 mR/h to 100 mR/h	0.01 mR/h to 1000 mR/h	0.1 mR/h to 10000 mR/h	1 mR/h to 1000 R/h	0.001 mR/h to 1000 R/h
DOSE RATE LINEARITY	± 15% with Co60					
POWER REQUIREMENT	External +12V DC					
OPERATING TEMPERATURE	-10°C to 75°C					
CONSTRUCTION	S.S housing with IP65 Ingress Protection					
DIMENSION	280(L) x 42(D) mm	175(L) x 36(D) mm				
WEIGHT	-	380 gms				
CONNECTOR	4 Pin MIC Digital Connector					
CABLE	1m to 25 m					
STANDARD ACCESSORIES	Pendrive for PC Communication					
	Wall mount bracket					
ORDER CODE	VNIM0051	VNIM0052	VNIM0053	VNIM0054	VNIM0070	VNIM0071

OPTIONAL ACCESSORIES

Optional Accessories	Order Code
10 Meter Cable	VNIA0107
Custom Length Cable	VNIA0108