DZM
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-10m	DZM-100m	DZM-1	DZM-M5
DETECTOR USED	Internally Mounted Energy compensated GM tube			Externally connected Smart Probe
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	-
	10 nSv/h to 99.99 μSv/h	0.1 μSv/h to 999.9 μSv/h	0.1 μSv/h to 9999 μSv/h	-
	10 nGy/h to 99.99 μGy/h	0.1 μGy/h to 999.9 μGy/h	0.1 μGy/h to 9999 μGy/h	-
DOSE RATE LINEARITY	$\pm$ 15% with Co60			-
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: 0^0 to 50^0C Relative Humidity: 20% to 80% or better			

	DZM-10m	DZM-100m	DZM-1	DZM-M5
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			
CONSTRUCTION	Rugged, powder coated MS Chassis with IP65 Ingress Protection, Wall Mounting or Table Top			
WEIGHT	3.5 Kg	3 Kg		
DIMENSION	320 mm x 220 mm x 70 mm	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	VNIM0038	VNIM0040	VNIM0049	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