

RADIATION DETECTION

DPU-3 Area Monitor

Part of the WebiSmarts System



FEATURES

- Wall Mounted or Tabletop, IP65 high-impact plastic casing
- Large, easy-to-read, TFT (thin Film Transistor) display panel
- Displays user selectable units of measurement and detector name
- Ergonomically designed to operate using only four push buttons which activates multilingual menus
- Background color reflects radiation levels against threshold settings
- Audio Alarm when over threshold or detector failure
- Built-in dry contact for over threshold or detector failure
- User selectable threshold levels over the entire range
- Distinctive Display with bar graph capability showing measuring units
- Automatic internal diagnostics
- Fast time responses while keeping the reading fluctuations minimal
- Cable length of up to 100 meters between detector and DPU

DESCRIPTION

WebiSmarts is a web-based software package which receives online radiation data from DPU-3 Area Monitors which are strategically installed throughout the cyclotron lab. Users can access maps showing radiation levels on color-coded points therefore presenting a detailed yet concise radiological map.

The DPU3 is the latest addition to the renowned MediSmarts Area and Stack Monitoring System. Combining the same respected reliability which has made MediSmarts a world leader, with the latest state-of-the-art technology, the DPU3 brings the 21st century into your laboratory. The plastic (IP65) cased data processing unit is capable of supporting one internal and three external detectors.

FEATURES

- · Automatic recognition of detectors
- Supports our full range of detectors and others
- · Provides Wi-Fi, Ethernet, PoE, Xbee, RS-485 and USB connectivity
- The wide screen TFT color Display is configurable to show any of the parameters
- The Display can be setup to show up to four displays simultaneously
- Optional battery backup for nine hours after power failure
- Free software for diagnostics
- Calibration performed via the touch panel or remotely
- Data records are internally saved for a period of one month in cyclic fashion





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INCLUDES:



DPU-3 Meter BAK-4385



Internal Detector BEN-2418



Power Adapter BAK-1114



Wall Bracket MEC-9285



4 X Shoulder Screws BAK-0381



Ethernet Cable WIR-0012

DPU Integrated Monitor

The DPU3 Integrated Monitor is the latest innovative instrument designed to be used in clean rooms and provides the best possible user experience in area monitoring today.

The IP65 flush mount aluminum casing provides a cleaner look for new construction and locations that have access to run the cabling between the wall panels. The clean look allows easier wipe down of equipment since no cables are exposed.

This monitor has all the features of the other DPU version as well as the connection to WebiSmarts Software.



Front View



Rear View

TECHNICAL DATA

DPU-3 Monitoring Channel with Low Range Internal Detector

- Measuring Range: 0.1 μ Sv/h 40 mSv/h (0.01 mR/h to 4 R/h)
- · Sensitivity: 17 cps/mR/h
- Energy Range: 50 keV to 1.3 MeV
- Accuracy: ±10% over the full measuring range

DPU-3 Monitoring Channel with Wide Range Internal Detector

- Measuring Range: 0.1 uSv/h to 10 Sv/h (0.01 mR/h to 1,000 R/h)
- Sensitivity: 17 cps/mR/h, 0.3 cps/mR/h
- Energy Range: 50 keV to 1.3 MeV
- · Accuracy: ±10% over the full measuring range

Casing

- · Material: High-impact plastic (ABS-PC) with aluminum rear cover
- Dimensions: 230 x 76 x 252 mm (9 x 3 x 10 in.) (L x W x H)
- Weight: 1.7 kg (3.75 lb)
- · Environmental: Weather proof IP65, CE Certified

Electronics

- Display: 7-inch HD Color Display
- CPU Mainboard: ARM Cortex®-A7 core i.MX 6UltraLite (NXP)
- CPU Detectors: ARM® 32-bit Cortex®-M3 CPU

Power Source

 External power adapter 110 V ac/220 V ac to 12 V dc, PoE through Ethernet cable and optional battery backup (9 hours)

Interfaces

- 3 x External Detectors: Serial (RS-485) or Digital pulse or Analogue pulse
- AUX connector: RS-485, 4-20 mA, 24 V External Power, optional light tower and Dry contact
- RJ-45: Ethernet Cable

Telemetry Protocol

• Xbee Series: RF, 4G, Wi-Fi and others

ORDERING INFORMATION

- BAK-4384: DPU-3 Monitor without Internal Detector
- BAK-4388: DPU-3 Monitor with W.R. Internal Detector
- BAK-4392: DPU-3 Monitor with L.R. Internal Detector
- BAK-4385: DPU-3 Monitor (Spare Part)
- BAK-4399: DPU-3 Integrated Monitor without Internal Detector
- BAK-4397: DPU-3 Integrated Monitor with W.R. Internal Detector
- BAK-4398: DPU-3 Integrated Monitor with L.R. Internal Detector





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 $\label{lem:local_control_control} \mbox{Rotem Industries reserves the right to change specifications without advance notice.}$

