



PORTABLE SURVEY METER

AVIOR[®]-2

Desktop Dose-Rate and Survey Meter



FEATURES

- Measurement of contamination and dose-rate
- Two simultaneous probe channels
- Dual alpha/beta display for each probe
- Customized alarm set-point for each connected probe
- Multiple measurement modes: Frisking, Scaler-Timer and Go-NoGo
- Specific OneHand/OneFoot mode with body detection and automatic background management
- Manual background deduction for net measurement of contamination
- Small footprint: 845 mm x 782 mm
- Backlit graphical digital display
- Analog-like bargraph with digital display
- Back-up built-in rechargeable battery with no memory effect
- Rugged, light weight and easy to use
- Upgradable product through firmware upgrade

RELATED PRODUCTS

- CSP Probes : SAB-250, SABP-525, SPAB-15, SG-1R, SG-2R, SAB-100, SAB(G)-100, SA-100, SB-100, SA-20, SB-20, SX-2R...

DESCRIPTION

The AVIOR-2 is a versatile alarm desktop, portable or wall mounted dose-rate and survey meter for the contamination control and dose-rate assessment.

The extensive experience of MIRION (Canberra) in nuclear measurement combined with the exhaustive users' feedback drove us to create a new product for better supporting most situations encountered in the field such as laboratories, industrial sites, nuclear power plants, open air yards and emergency situations.

AVIOR-2 is equipped with two CSP™ inputs and features a simultaneous display of both probes. When an Alpha/Beta CSP probe is connected, the display automatically toggles to dual screen and provides user with discriminated alpha from beta measurement results, thus allowing to check and measure contamination twice as fast as most instruments available on the market.

PHYSICAL CHARACTERISTICS

- Units displayed (depending on probe):
c/s, Bq_{eq}, Bq_{eq}/cm², Sv/h, Sv_{eq}/h

Alarm Threshold

- CSP probe : 10 values for each unit to display, stored in probe memory. Each value is editable via PC setup software CSPS™ or directly on AVIOR-2

Response Time

- As fast as 1/4 s for bargraph display depending on probe, on a semi-logarithmic scale
- 1 s for smoothed digital readout display

ELECTRICAL CHARACTERISTICS

- Built-in rechargeable Li-ion battery pack
- Battery Life with Backlight: (Maximum/turned off): 31/70 hours one SAB-100 connected, 29/60 hours with SA-100 and SB-100 connected
- Built-in charger
- Universal Mains power input, 100–240 V ac, 50/60 Hz. Rear-panel IEC-type connector. Cordset included
- Display of remaining charge with Battery pictogram

ENVIRONMENTAL CHARACTERISTICS

- Operating temperature: -20 °C to +50 °C
- Storage temperature: -25 °C to +60 °C
- Ingress protection: IP 54

MECHANICAL CHARACTERISTICS

Housing

- Molded rugged Polycarbonate

Dimensions

- 184 x 105 x 105 mm (L x W x H)

Weight

- 950 g, battery included

Connector for external probes:

- S 104 A066 137+ Fisher socket (CSP)

FUNCTIONAL CHARACTERISTICS

Two simultaneous CSP probe channels

- Specific OneHand/OneFoot mode with body detection and automatic background management

Display

- Grand DISPLAY: Large LCD display with constant backlight

Alarms

- Audible: > 85 dB(A) at 30 cm
- Visual: Flashing alarm pictogram and LED for each channel (Red, orange, green)

Keyboard

- Ruggedized keyboard with 5 buttons featuring primary and secondary function (2 seconds): Enter (Power on), Up arrow (Backlight), Down arrow (Audio on/off), Left arrow (Lock), Right arrow (Data Log)

Operating Control

- Complete and automatic self-test when switching on. Periodical control of main functions when in use

Wall Mounting

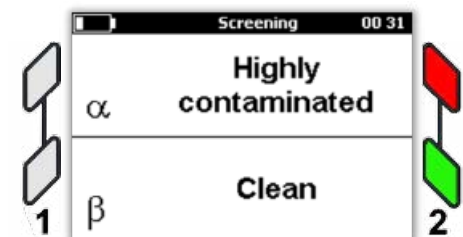
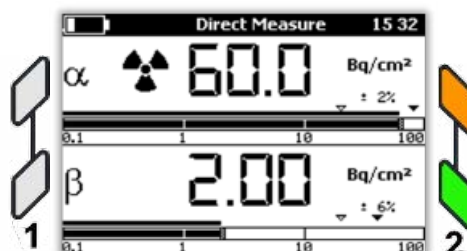
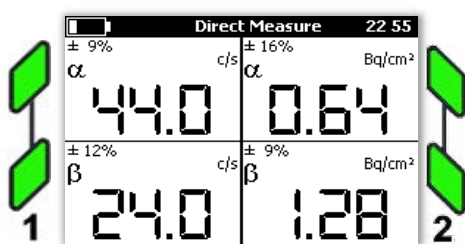
- Back panel with dedicated print for wall accessory

Norms :

- EMC: Conform
- IEC: Conform to IEC60846-2002 and IEC60325-2006
- CE: Conform

AVIOR-2 Alarms

- Green/Orange/Red LED
- Linked to display channel
- Powerful sound
- Can be muted by pressing any button when alarming
- Visual display
- Depending on window arrangement



Alarms Display

AVIOR-2 SYSTEM CONFIGURATIONS A COMPLETE RANGE OF SOLUTIONS

AVIOR-2 Covers multiple applications with one instrument only for Contamination or Dose-rate measurement with or without background subtraction and with minimal training requirement



AVIOR-2H/F-S Self standing Hand/Foot System

- Hand/Foot monitoring
- Probes are permanently attached
- SAB-250 for hand, SABP-525 for foot.
- Small foot print
- Simple to move with integrated wheels
- Dynamic background reduction

AVIOR-2H/H-S Self standing Hand/Hand System

- Dual Hand monitoring
- SAB-250 probe for each hand
- Small foot print
- Simple to move with integrated wheels
- Dynamic background reduction



AVIOR-2H Wall Mounted Hand System

- Hand frisking or counting for Glove boxes
- Probe is either permanently attached or available for frisking (setup in AVIOR-2)
- Large area SAB-250
- Probe can be grabbed from holder after hand check in frisking mode
- Zero Footprint
- Dynamic background reduction



Can be upgraded with Foot probe

AVIOR-2H/F-W Wall Mounted Hand System

- Hand/Foot monitoring
- Minimal foot print
- Foot probe is placed at wall corner
- Fixed system
- Dynamic background reduction



Self standing Frisking System

- Using 100 cm² probe, alpha only, beta only of alpha/beta with discrimination.
- Basic and low cost
- No dynamic background reduction
- Extremely small footprint



Self standing Hand System

- Hand counting or frisking (setup in AVIOR-2)
- Probe can be permanently attached
- Large area SAB-250
- Probe can be grabbed from holder after hand check in frisking mode
- Small foot print
- Simple to move with integrated wheels
- Dynamic background reduction



AVIOR-2 | DESKTOP DOSE-RATE AND SURVEY METER

Part Number	Product name	Description
EM105053	AVIOR-2	Desktop survey meter with 2 CSP inputs
EM105470	AVIOR-2 I/O	Desktop survey meter with 2 CSP inputs i/o: relay outputs, RS485 mod bus, 24v DC input, audio jack
EM104616	SAB-250	Alpha/beta external 250 cm ² probe
EM106271	SABP-525	Alpha/beta 525 cm ² foot probe
EM102034	AVIOR/Wall	Wall mounting for AVIOR-2/MIP-2
EM105105	SAB-250/Wall	Wall mounting for SAB-250
EM105083	AVIOR-2-SAB-250/Combo wall	Wall mounting combo for AVIOR-2 & SAB-250
EM105118	AVIOR-2H/F-W	AVIOR-2 hand/foot complete system (wall mounted). Includes: AVIOR-2, SAB-250 probe, SABP-525 probe, combo wall, cable-2, coil cable
EM105119	AVIOR-2H	AVIOR-2 hand complete system (wall mounted). Includes: -AVIOR-2, - SAB-250 probe, combo wall, coil cable.
EM105575	AVIOR-2H/F-S	AVIOR-2 hand/foot complete system (self standing). Includes: AVIOR-2, - SAB-250 probe, SABP-525 probe, hand / foot support, Cable-2, Cable coil
EM105722	AVIOR-2H/H-S	AVIOR-2 hand/hand complete system (self standing). Includes: AVIOR-2, 2 each SAB-250 probe, hand /hand support, 2 each coil cable
EM105325	CSP-Meter coil cable	0.7 meter extends to 1.5 meter with 90 degree angle connector on one end
EM105028	CSP-Meter cable -2	Generic CSP probe/monitor cable 2 m length with 90 degree connector on one end
EM105378	H/F Support	Self standing hand /foot stucture for AVIOR-2 and SAB-250
EM105819	H/H Support	Self standing hand /hand stucture for AVIOR-2 and two SAB-250
EM18364	Digital stand	AVIOR-2, MIP-2 and MIP-10 Digital stand includes a hook for SBM-2D
EM86510	CSP Probes holder for stand	CSP probes holder that adapts on EM18364 stand.

CANBERRA

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