MICRORAD

AM40A/B RF WARNING PERSONAL MONITOR





The AM40A and AM40B are Microrad's personal monitors for assessing user exposure to electromagnetic fields.

When the measured field exceeds the alarm level, it warns the operator with three types of alert: visual, audio, and mechanical vibration.

Thanks to three sensors along the Cartesian axes X, Y, Z, it guarantees an accurate evaluation of the field not dependent on its direction.

The Microlink software allows the measurement data contained in the instrument's memory to be saved on a PC, to make them available in numerical and graphical form for subsequent analysis.

The AM40A /B can operate in Pulse mode for an effective response to the Radar and 5G pulse signals.

Using AM40A/B in combination with a helmet further minimizes the reflective effect of the body with consequential improvement of measurement accuracy. This solution guarantees the perception of the vibration alarm in any operating condition.

- Bandwidth 1 MHz – 40 GHz for AM40A, 1 MHz – 6 GHz for AM40B
- Isotropic E field sensor
- Adjustable alarm thresholds with frequency normalization
- Acoustic, optical and vibration alarms
- Pulse function to measure 5G signals
- Reference level selectable among Icnirp98 Pop, Icnirp98 Occ, 2013-35-UE, Manual
- Alarm and warning thresholds both settable
- 400 hours of autonomy
- Internal data logger
- Software for configuration and data visualization

The use of the personal monitor requires that it is always kept close to the user's body. For this purpose, the device is equipped with four possible fixing systems:

A belt can be slid into the rear slot of the monitor.



By inserting the elastic band, the monitor can be fixed to the operator's arm.





The monitor can be fixed to the helmet by means of a hooking device located at the rear.



By inserting the threaded pin equipped with a loop suitable for screwing into the back, the device can be fastened to the user's neck.

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TECHNICAL SPECIFICATIONS

SENSOR	
Frequency range	1 MHz – 40 GHz (AM40A) 1 MHz – 6 GHz (AM40B)
Measured field	Electric field
Standard sampling rate	1 sec
Sampling rate in Pulse Mode	20 msec
Linearity	+/- 0,5 dB (20% - 200%)
Frequency response	+/- 3 dB from 1 MHz to 6 GHz +6/-3 dB from 6 to 20 GHz +10/-3 dB from 20 to 40 GHz
Measurement interval	3 - 200 V/m (cw)
Anisotropy	+/- 1 dB @ 1 GHz
Immunity to 50/60 Hz electric field	> 5 kV/m
Data Logger storage interval	From 20 millisecond to 10 minutes
Storage capacity	200.000 field points (maximum, average and minimum)
OPERATOR INTERFACE	
Storage capacity	7 LED with percentage indication of 10/15/25/50/100/150/200 % exposure, acoustic and vibration with simultaneous operation if threshold values are exceeded
Power On/Off	Single button with two-color blue/red LED indication
Battery Charge Status	Two-color green/yellow LED
Data and charging connector	USB
Software	MicroLink
SW settings	Regulatory limits, 2 alarm threshold levels, data log interval, sampling rate, moving average window, frequency correction factor, alarm linked to current value or moving average
SW display functions	Minimum, average and maximum value, data printout, graph over time
GENERAL SPECIFICATIONS	
Recommended calibration interval	3 years
Battery	LiPo rechargeable
Charging time	3 hours
Autonomy without alarm	400 hours
Operating temperature	-5 °C to +45 °C
Humidity	5 to 95%, non-condensing
Size (L x W x H)	122 x 71 x 66 mm
Weight	170g
Protection rating	IP54
Origin	Italia

Information subject to change without prior notice

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