



### **RADI-CEM 01** PERSONAL PROTECTION EQUIPMENT

FREQUENCY RANGE 40 Hz - 10 kHz

The RADI-CEM is a selective PPE (Personal Protection Equipment) that measures the magnetic field strength to which the operator is subjected.

The RADI-CEM is extremely lightweight and compact, so easy to use for the operator. Suitable for any work environment, it allows setting the alarm level and type (vibration, sound, LED), the automatic identification of the frequency and the battery replacement directly on the field, together with the data downloading via USB.





## PERSONAL MONITOR

The use of RADI-CEM allows the operator to monitor the emissions to which he is subjected in the workplace. Different types of alarm with selectable level, customizable by the operator. Lightweight and easily wearable, it does not affect the operator's work.



#### Measurement:

- alarm threshold adjustable from 10uT to 19mT
- alarm type: acoustic, vibration, and visual
- data and time storing
- isotropic measure and frequency selective or broadband

Easy to connect to the PC to download measurement data during the session

#### Software:

- Windows
- USB Connection
- Parameter setting
- stored data downloading
- firmware upload

RADI-CEM v.0.1 (MPB)	- D X
RADI - CEM	→ Disconnect 88%
Home	Save configuration 🛓 Settings and configuration
Log	Measures Unit Tesia A/m
Settings 🛔	
Firmware [	Mode Only Harm Notch
Exit	Alarm       No Alarm       Sound and Vibr.       Only sound       Only vibr.         Threshold [uT]       100         Logger interval       Disable       5 sec       10 sec       30 sec       120 sec         Logger time       Memory filing       7 days       24 hours       12 hours       8 hours         Display       Line 2       None       Status       Clock       X Y Z         Contrast       Low       Middle       High         Auto OFF       Aways on       20 min       60 min
	Backlight OFF Always on 2 min
	Configuration successfully imported

# SELECTIVE MAGNETIC TRIAXIAL METER

By setting the alarm threshold level in TEST mode, the device switches from Personal Monitor mode to Meter mode and actives the auto range algorithm, to make use of 96 dB of dynamics.

#### Measurement:

The METER can select the frequency:

- AUTO: auto detects the frequency of the maximum recognized level
- 50 or 60Hz: measures the 50 or 60Hz contribution of the magnetic field

The meter can evaluate:

- Only: evaluates the level of only the selected frequency
- Harm: evaluates the level at the selected frequency and the harmonics levels
- Notch: evaluates the level of the harmonics of the selected frequency

### Store data:

The METER can read and store the isotropic value every 5; 10; 30; 120 seconds; it can store data up to 7 days

## **Display:**

Data is shown on the LCD display: it can show frequency, isotropic measure and X;Y; Z

50Hz	z 5.18	BuT
2.79	2.79	3.35

### Some use:

- emissions of electric motors
   emissions of electric ovens
- emissions of power lines







## Data:

- CSV format
- Frequency of max level
- Iso : isotropic value
- X; Y; Z; level values
- unit:uT; mT; A/m ;kA/m

<b>J</b> 23	v	i	$\times$	$\checkmark$	fa	5					
1	A	B	5	С		D	E	F	G	Н	1
1	date	time		mode		frequency	iso	x	У	z	unit
2	01/01/2018	15:4	2:50		0	31	5.18	3.35	2.79	2.79	uT
3	01/01/2018	15:4	3:00		0	30	4.9	3.35	2.23	2.79	uT
4	01/01/2018	15:4	3:10		0	60	4.9	2.23	2.79	3.35	uT
5	01/01/2018	15:4	3:20		0	30	5.18	2.79	2.79	3.35	uT
6	01/01/2018	15:4	3:30		0	31	5.86	3.35	2.79	3.91	uT
7	01/01/2018	15:4	3:50		0	40	5.18	3.35	2.79	2.79	uT
8	01/01/2018	15:4	4:00		0	41	5.18	2.79	2.79	3.35	uT
9	01/01/2018	15:4	4:10		0	40	5.18	2.79	3.35	2.79	uT
10	01/01/2018	15:4	4:20		0	60	5.86	3.35	2.79	3.91	uT

# **TECHNICAL SPECIFICATIONS**

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EM	
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RA	1.0
REV	/IEW

Measurement Type	Selective
Sensor Type	3-axis winding
Frequency Range 3 dB 1 dB 3 dB Cevel Range Resolution Overload Dynamic	© Full Band (10 uT) 40 Hz48 Hz 48 Hz2 kHz 2 kHz10 kHz 300 nT 20 mT 10 nT 22 mT 96 dB
Measure Error Linearity Absolute Error	@ 48 500 Hz - 1 uT 10 mT 1.2 dB 1.6 dB
Unit of measure	auto range: uT; mT; A/m; kA/m
Measures user defined	Auto identification of the frequency with and without harmonics Selective at 50 Hz or 60 Hz; 50Hz or 60 Hz plus harmonics; the only harmonics of 50 Hz or 60 Hz; Broadband in the 40 Hz 400 Hz LB range Broadband in the 400 Hz10 kHz HB range
<b>Data logger</b> Recording Time Interval	8h ; 12h; 24h; 7 days; memory filling (until memory filling) 51030120 sec
Display	LCD 2 lines x 16 characters backlight
Configuration	from administrator
Multifunctions LED	Green LED – measure in progress Blue LED - storing in progress Red LED – alarm threshold exceeded
I/O Interface	USB
Alarm	Type - Acoustic (selectable) - Vibration (selectable) - Red LED (default)
Sleep	20 min; 60 min; disable
Date and time	settable by the operator
Reference Standards	Directive 2013/35/EU
Operating temperature	-10° 40° C
Calibration certificate	standard; LAT
Dimensions	118 x 79 x 25 mm
Weight	125 g
Power supply	2 AA Alkaline $>$ 80 h or 2 Ni-MH 2 A/h $>$ 168 h
Options	protective bag; tripod support; harness;

Subject to change without notice



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