



ABM

EMF BROADBAND METER

FREQUENCY RANGE DC - 65GHz



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ABM is a Broadband (wideband) Electromagnetic Field Meter.

ABM is designed to measure and control the field strengths in compliance with personal health and safety regulations/requirements in according to international limits (ICNIRP, IEC, IEEE).

ABM allows accurate measurements in real time with minimum effort for the operator.

FEATURES

- Broadband Measurement (DC - 65 GHz)
- Interchangeable Plug&Play Probes
- High Measurement Stability
- High Dinamic Range
- Multi datalogger 24H (up to 2 million records)
- GPS receiver integrated
- Temperature & Humidity sensors available on board
- Compact and Light (300g only)
- Operation time > 5 days
- Rechargeable Battery
- Anti-shock protective cover

MAIN APPLICATIONS

- Telecommunication & Broadcast
- Military & Defence
- Aeronautical
- Railway
- Energy
- Automotive
- Industry
- Medical
- EMF Worker's safety

Measuring and monitoring field strengths in accordance with general safety regulations (EMF EU Directive 2013/35, FCC, SC6, CEI 211-6, CEI 211-7)

Establishing safe zones and demonstrate compliance with human safety international standard limit values (ICNIRP, IEC, IEEE)

Certification and audit of telecommunication services (Radio TV broadcast, GSM, 3G, LTE, 5G, WiFi, WiMax, IoT)

Assessment of military sites and personnel exposure protection.

Assessment of industrial processes for worker's exposure protection.

Measurements for medical devices that generate high-frequency radiation

Measuring field strength in TEM cells and absorber chambers to demonstrate electromagnetic compatibility (EMC)



Minimum health and safety requirements regarding the exposure of workers



2013/35/EU



STANDARD CONFIGURATION

- ABM meter
- USB optical converter
- Fiber-optic cable (10m)
- USB power supply
- USB cable for PC connection
- Software
- User manual
- Standard calibration certificate (or ISO 17025 on request)
- Protective bag



Kit Example

COMPATIBLE FIELD PROBES

ALDENA provides a full range of E-Field/H-field probes covering different frequency ranges. Probes are plug&play, with individual calibration certificate.

Example of probes



- EP-8 wideband probe
Electrical field (100kHz ÷ 8 GHz)

MOST USED



- EWB-DIG Narrow band probe
Digital signals (5G)

NEW AVAILABLE SOON





- EP-40 wideband probe
Electrical field (1 ÷ 40 GHz)



- EP-65 wideband probe
Electrical field (20 ÷ 65 GHz)



Custom probe available on request

ACCESSORIES

NMR-01	Fiberglass non magnetic and non reflective tripod. Extendable up to 2m.
NMR-UNI	Universal adapter of 1/4"
NMR-ARJ	Positioner for H/V polarization
NMR-TT-01	Telescopic support up to 4m
NMR-BAG	Shoulder Bag for the NMR-01 tripod

FIBERGLASS NON MAGNETIC AND NON REFLECTIVE TRIPOD

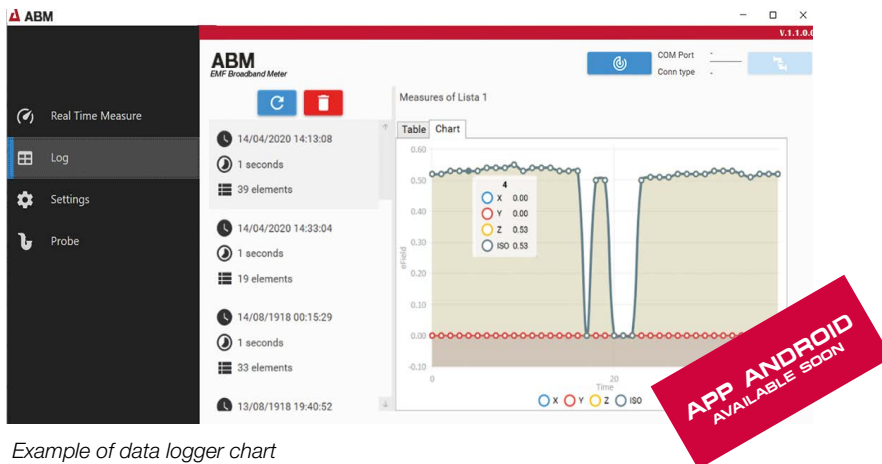


100% METAL FREE

IEC61786 compliance
Not affected by humidity

ABM SOFTWARE

The software used in conjunction with the ABM meter, provides an intuitive real-time management of the meter.



APP ANDROID AVAILABLE SOON

Example of data logger chart

Specification are subject to change without notice

TECHNICAL SPECIFICATIONS



ISO 9001 - Quality management

FIELD MEASUREMENT

Measurement range	0,3...1000 V/m (depending on the probe)
Frequency gamma	DC...65GHz (depending on the probe)
Dynamic	<110dB
Resolution	0,1 V/m... A/m
Measuring units	V/m; kV/m; A/m; mT

CALIBRATION

Parameters memorization	EEPROM
Calibration interval	2 years (recommended)

DISPLAY

Type	Graphics 102x64 pixel
Updating time	300 msec
Settlement time	1 sec (typical 90% of the measured value)
Representation	Total value X;Y;Z; Isotropical

KEYBOARD

Alphanumeric	For setup and configuration
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ALARMS

LED RGB	Flashing red light for settable limit exceeded in V/m (or A/m)
APP Android	Acoustic alarm and vibration on limit excess

DATALOGGER

Working	Minimum; Maximum; Media
Storage interval	10 s, 15 s, 30 s, 1 min, 2 min, 5 min, 6 min, 10 min, 30 min, 60 min
Acquisition start	Manual or scheduled (multi datalogger available)
Memory capacity	More than 2 million records

GPS

Sensitivity	-165 dBm
Number of channels	66
Updating	< 1 sec

INTERFACE & CONNECTION

Fiber-optic	Serial full duplex; for real time data reading
Bluetooth	For connection with APP Android (optional)
USB	Updating FW; batteries charger
Probe	LEMO™ connector with automatic probe identification

BATTERY

Autonomy	AA Alkaline or rechargeable (NiMH @2,6A/h) (2 pcs included)
Charging time	> 120 hours (typical; with GPS, Bluetooth and low power display)
	6 hours

WEATHER CONDITIONS

Temperature range	-10...+50°
Humidity range	5...95% without condensation
Immunity	180 V/m (@50MHz)

MECHANICAL DATA

Dimensions	150 x 50 x 30 mm
Weight	300g
Protection grade	IP51
Assembly to tripod	Threaded insert 1/4"