



NHT-310

Broadband EM Field Meter: DC÷40 GHz

Key Features:

- Broadband measurement capability from DC up to 40 GHz utilising a range of probes
- Interchangeable probes for measuring Electric, Magnetic and Electromagnetic fields
- Magnesium Shell
- Integrated temperature sensor and GPS unit
- X,Y,Z analogue output
- Battery autonomy > 70 hours
- Data logger > 21000 samples
- Multiple monitoring and logging capability
- Over 24 hours of recording time (step 5s)
- Microlink software for displaying measurements and data
- Optical Interface / USB



Information subject to change without prior notice



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DESCRIPTION

The NHT-310 meter is capable of measuring a wide frequency of electric, magnetic and electromagnetic fields. By selecting and inserting the appropriate probe the instrument covers all frequencies from DC to millimeter waves.

TECHNICAL SPECIFICATION			
Frequency Range		0 ÷ 40GHz	
Display	Type	Transflective LCD, monochrome	
	Size	7cm (2.76"), 128x64 dots	
	Backlight	Off / 10s / Permanent	
	Refresh rate	200ms	
Measurement	Measurement units	mW/cm ² , W/m ² , V/m, A/m, Tesla	
	Measurement type (Isotropic, RSS)	Actual (ACT), Max (MAX), Moving Average (AVG), Median	
	Measurement type (X – Y – Z mode)	Actual X, Y, Z	
	Moving Average		Moving average made by the analyzer from 6 to 192 min
			Moving average in post processing with time frame from 6 min to 24 hours
Spatial averaging		Discrete	
Memory		21.504 monitoring samples, 432 single shot	
Interfaces	Optical Interface	Serial, full duplex	
	Probe Input	Plug-and-play auto detection, LEMO™ connector	
	Analogue Output	3 separated outputs X, Y, Z - SMA Female connectors	
GPS		Integrated (selectable)	
Software		MicroLink (S.O.: Windows XP, 7 and Vista, Windows 8)	
GENERAL SPECIFICATION			
Power supply		Alkaline o rechargeable NiMH, 4 x AA size batteries	
Operation time		>70 hours (backlight off)	
Charging time		4h	
Battery level (on display)		4 voltage levels (bar graph)	
Temperature Range	Operative: -10°C a +50°C		
	Storage from -20°C a +70°C		
	Charging Temperature: 0°C ÷ 40°C		
Humidity		5% ÷ 95% non condensing	
Dimensions (h x w x d)		160 x 98 x 30 mm (without Probe)	
Weight		500g (batteries included, without probes)	
Country of origin		Italy	



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Typical Applications

Control and verification of the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields) as specified by the DIRECTIVE 2013/35/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 June 2013 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields) (20th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) and repealing Directive 2004/40/EC. This includes:

- Industrial ovens, welding systems, RF heating, tempering and drying equipment.
- Diathermy equipment and medical devices, RF generating devices, NMR machines.
- Electricity generating power plants and related systems maintenance.
- Sensitive sites (Imaging and NRM).
- Railways and ground transport systems.
- Wireless telecommunication systems such as mobile-phone base stations, satellite communication equipment, Broadcasting equipment, Wi-fi, Wi-Max and LTE systems

Controls and monitoring of population exposure in public and private environments:

- *CEI EN 211-6: Guide for the measurement and evaluation of electric and magnetic fields in the frequency range 0 Hz - 10 kHz, with regard to human exposure*
- *CEI EN211-7: Guide for the measurement and evaluation of electromagnetic fields in the frequency range 10 kHz - 300 GHz, with regard to human exposure.*
- High Voltage power lines
- Power and Electricity plans
- TV and Radio Transmission sites and radio base stations



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Multiple Monitoring/Data Logging

The instrument allows the user to perform continuous monitoring activities and to periodically store the measured values by activating a START / STOP function at will.

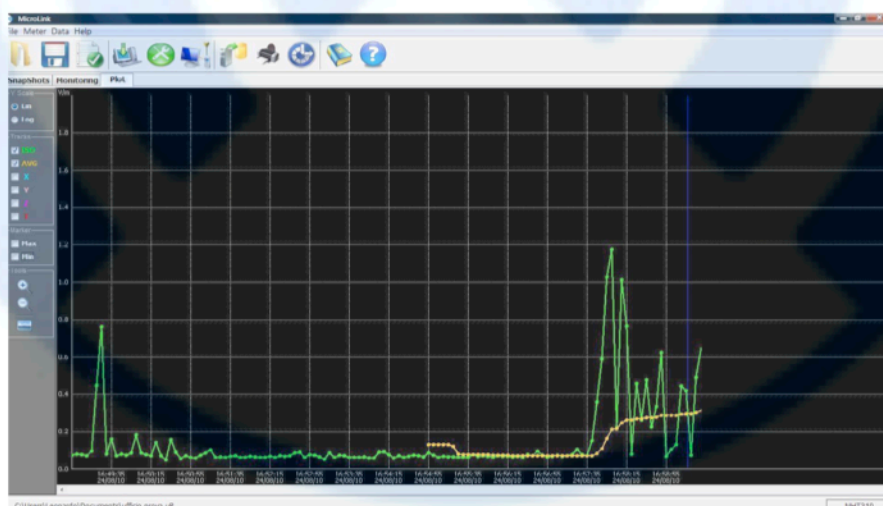
The user can store up to 8 monitoring sequences/events before downloading the data to a PC. A maximum limit of 21,504 samples can be recorded.

Microlink Software

The Microlink software supplied with the NHT310 instrument has dual functionality.

The first function allows the user to operate the NHT unit remotely by way of a PC to which it is connected via a fibre optic cable. This function significantly reduces disturbs caused by human presence in the area where the probe is located.

The second function allows the NHT device to download stored data, graphics and tabular reports of the acquired readings. The data can be exported to Microsoft Excel™ and elaborated further if required by the operator.



Time graph showing a monitoring sequence



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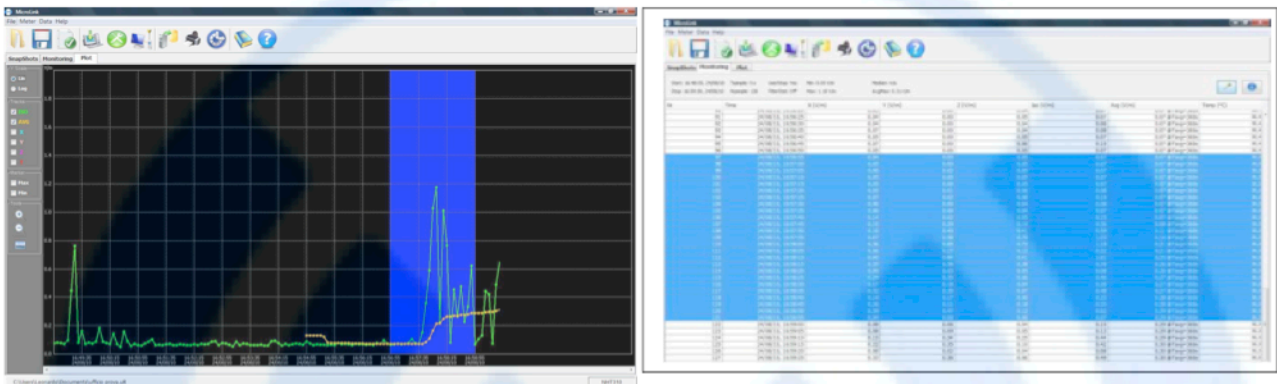
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The user can, by way of a mouse, highlight a portion of the graph and automatically focus on the corresponding readings or measurements within that area or period of the monitoring activity.



If the GPS unit is activated during an outdoor monitoring/logging session and the position of the activity recorded, all of the data associated with that activity including the GPS data can be downloaded to a PC (snapshots and monitoring). In addition to these GPS coordinates and the time at which the readings were taken, the user can easily view on **Google Maps** the location from where the measurements were taken by clicking on the "Maps" icon on their PC which is connected to the internet.

Monitoring X

Gps Data

Lat:

Long:

Date:

Time:



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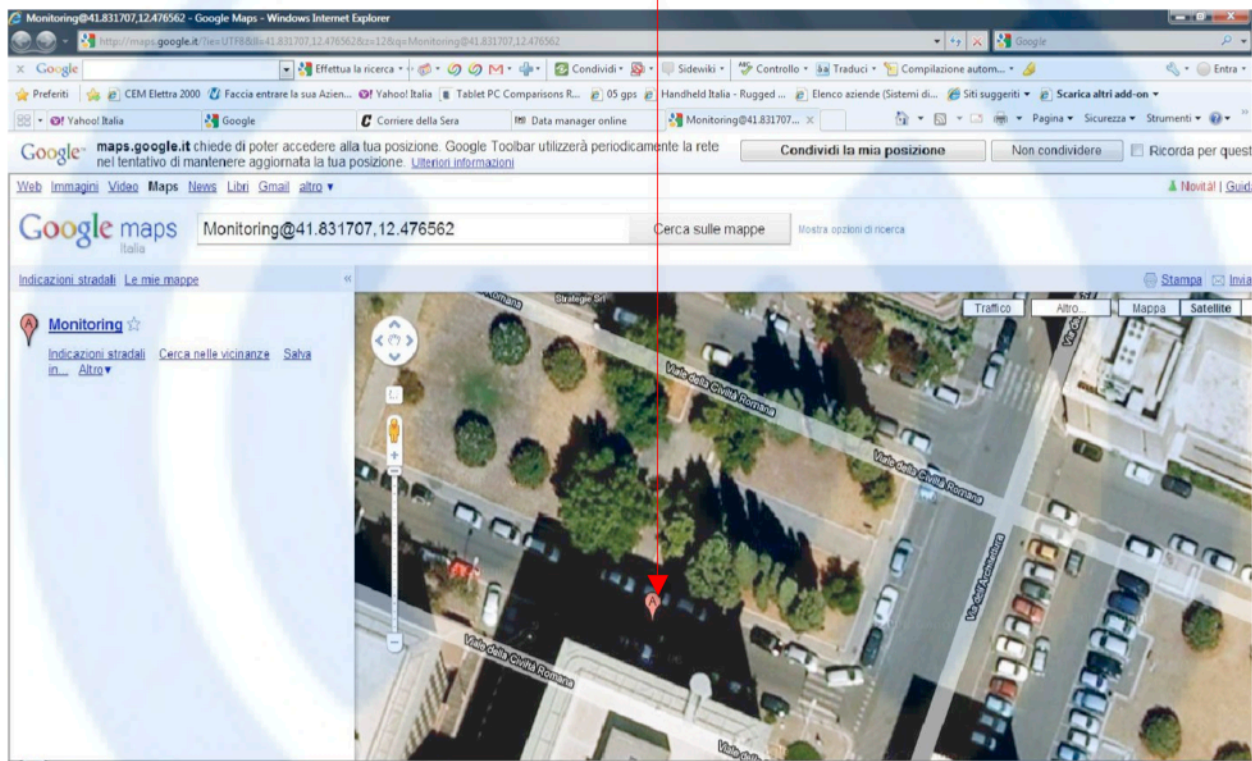


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This command automatically opens the Google Maps program showing the location of the site from where the measurements were taken.

site measurement location





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NHT – 310 Accessories Kit

- NHT-310 Meter
- Optical to USB converter
- Fibre Optic Cable (10mt.)
- AC/DC power supply
- Standard Calibration Certificate
- User Manual



Optional Accessories:

- Wooden Tripod (1-2 mt.) with soft carrying bag
- Accredited calibration certificate
- Rigid Case
- Probe

