narda Safety Test Solutions
an L3 Technologies Company

NARDA EMF MONITORS

AMS-8063

Frequency selective area monitoring

ITU-T K.83 compliant

- **Frequency range 9 kHz to 30 MHz**
- **Built in spectrum analyzer for monitoring up to 100 user defined frequencies**
- **Simultaneous monitoring of electric and magnetic fields**
- **Fully autonomous operation:**
  - Solar panel
  - Wi-Fi, optical or RS232 communication
  - Automatic data transfer
- **Suitable LW, MW and SW broadcasting antenna installations**
- **Easy software for spectrum analysis**
- **Low weight, robust design, compact size for indoor and outdoor operations**

Area Monitor AMS-8063 with Solar Panel

INTRODUCTION

Narda EMF Monitors are equipped with exclusive field analyzer having high sensitivity, accuracy and reliability. Their robust, uncluttered construction is perfect for long-term outdoor installation. The AMS-8063 combines a tried and tested measurement method with spectrum analysis.

MINIMUM OUTLAY, MAXIMUM RESULT

An EMF monitoring system is made up from a series of EMF monitors installed wherever the EMF presence needs to be assessed continuously or by long term observation. The EMF monitors store the data and report them using conventional mobile data communication at set time intervals to a central unit, e.g. PC or data server. The system size can range from a single location up to countrywide coverage. Narda EMF monitors combine all the features that are essential for this purpose: autonomy, outdoor usability, mobility, robustness, and low operating costs.
You can be certain to find the ideal solution for every area of application with Narda. And you can depend on its reliability, thanks to our decades of experience coupled with cutting edge technology, backed up by our own certified calibration laboratory.

THE AMS-8063 SERIES

The frequency selective monitoring system AMS-8063 is a reliable, accurate solution for monitoring remotely electromagnetic fields in the frequency range from 9 kHz to 30 MHz, by measuring separately the electric and magnetic components as total value of the field strength and as frequency selective spectrum analysis. Its unique features make the AMS-8063 particularly suitable for monitoring the exposure levels in proximity of LW, MW and SW broadcasting antenna installations. The information obtained contribute to evaluating the antenna efficiency too.

The electric and magnetic field strengths are measured at regular intervals and sent to a central data logging and control unit based on a PC, which provides the mass memory for all AMS-8063 units installed in the local network

There are three available models:

Unit designation	AMS-8063/00	AMS-8063/01	AMS-8063/02
Solar panel	✓	✓	
Back up battery pack	✓	✓	✓
Wi-Fi	✓		
RS232		✓	
Optical link			✓
Wall mounting kit	✓	✓	✓

THE ANALYZER

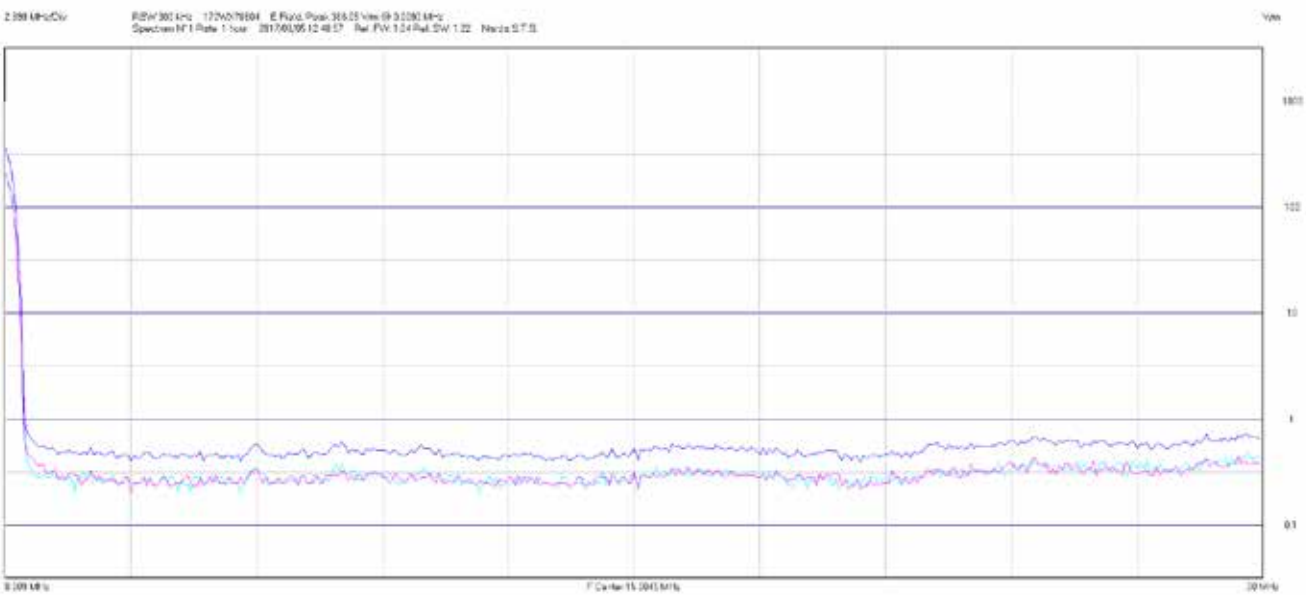
The sensing and analyzer assembly is contained in a small, cubic housing of about 10 cm size, together with the analog - digital conversion, digital receiver and CPU control unit for optimal isotropic and rejection of internally generated signals.

Fields are detected by 3 sensors in a X, Y, Z configuration for both electric and magnetic fields.

The architecture of these sensors guarantees an optimal sensitivity and anisotropy.

The power supply is provided by a Ni-Mh battery, installed internally to the cubic housing.

The electromagnetic field analyzer



Remote spectrum analysis

Technical Specifications	
AMS-8063 Selective Area Monitor	
Frequency range	9 kHz to 30 MHz
Measurement range	0.1 to 1000 V/m (from 9 kHz to 30 MHz) 0.03 to 300 A/m (from 9 kHz to 3 MHz) - Mode A* 0.003 to 30 A/m (from 300 kHz to 30 MHz) - Mode B*
Resolution	0.01 V/m, 0.1 mA/m
Sensitivity	0.01 V/m (depending on the RBW filter)
Measurement units	V/m, A/m
Measured field	Electric and magnetic
Storing interval	Table mode: selectable from 1 to 1440 minutes Spectrum mode → selectable 10, 15, 30 minutes or 1, 2, 3, 4, 5, 6, 12, 24 Hours or exceeding threshold setting
Functions	Spectrum Mode; Frequency Table, AVG, RMS
Communication	Wireless LAN 802.11b 2.4 GHz (AMS-8063/00), RS 232 (AMS-8063/01), Optical Fiber (AMS-8063/02)
Battery pack	Backup sealed Pb rechargeable battery, 12 V 32 Ah
Solar panels	2 x 40W 17.5V (AMS-8063/00 and AMS-8063/01 only)
Consumption	4W
External power supply	100-220 V, 50/60 Hz to 24 VDC, 1.25A
Autonomy with batteries only	> 48 Hours
Recharge time	> 12 Hours with external power supply
Operating temperature	-20 °C to +55 °C
Protection grade	IP54
Overall dimensions (L x H x D)	1480 x 1100 x 715 mm (AMS-8063/00 and AMS-8063/01); 1480 x 660 x 600 mm (AMB-8063/02)
Weight approx.	35 kg (AMS-8063/00 and AMS-8063/01) - 27 kg (AMS-8063/02)
Country of origin	Italy

* Mode A and Mode B cannot be used at the same time

ORDERING INFORMATION

AMB-8063	
Remote stations	
Area Monitor station powered by solar panel, back-up battery and Wi-Fi serial converter	**AMS-8063/00**
Area Monitor station powered by solar panel, back-up battery and RS232	**AMS-8063/01**
Area Monitor station powered by back-up battery and optical serial converter	**AMS-8063/02**
Included in delivery	
• Field Analyzer • FO-8053/1 optical fiber (1m) • Radome • Battery Pack • AC/DC Battery Charger • Operating Manual • Certificate of Compliance • Return for Repair Form • Tools • Software Media	
Optional accessories	
AMS-8063/WMK - Wall mounting Kit adapter	**650.800.016**

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