

FAQs and best practice for Area **Monitoring**

Do you have a probe for the 3 GHz band?

For the 8059:

Version with E field probe EP-1B-01 100 kHz to 3 GHz Version with E field probe EP-1B-03 100 kHz to 7 GHz Version with E field probe EP-1B-04 10 Hz to 5 kHz Version with E field probe EP-1B-05 300 kHz to 18 GHz Version with E field probe EP-1B-06 300 kHz to 40 GHz Version with E field probe EP-1B-08 100 kHz to 8GHz Version with Tri-Band EP-3B-01

Wideband: 100 kHz to 3 GHz low pass: 100 kHz to 862 MHz high pass: 933 MHz to 3 GHz

Version with Quad-Band EP-4B-01

- Wideband: 100 kHz to 3 GHz
- GSM 900
- GSM 1800
- **UMTS**

Version with Quad-Band EP-4B-02

- Wideband: 100 kHz to 7 GHz
- **GSM 900**
- GSM 1800
- **UMTS**

Version with magnetic field probe HP-1B-01

- 10 Hz to 5 kHz
- For the 8061:
 - Version with E/H field antenna EHA-2B-01 100 kHz to 6 GHz
 - Version with H field antenna HA-1B-01 100 kHz to 110 MHz
 - Version with E field antenna EA-1B-01 110 MHz to 6 GHz
 - Version with E field antenna EA-1B-02 27 MHz to 3 GHz



The 8061 gives you a full FFT of the signal?

o No, the 8061 has a spectrum analyzer in the background, but it doesn't provide a spectrum view. A spectrum contains too much information which could lead to misinterpretation and misunderstanding for public. That is why 8061 is doing an integration over the user defined bands and provides just the integrated results. This is much easier to understand for anybody. Remember, 8061 is built to inform public, not for scientists 😊. If you need a spectrum view, use the Narda SRM-3006. SRM can provide the spectrum view and the integrated results (and more). But it's not for 24/7 outdoor, needs a cover and a power supply to do so. If you like to do real spectrum monitoring, have a look for the Narda SignalShark Outdoor Unit.

Is the area monitor calibrated?

Yes, every area monitor is calibrated and comes with a calibration certificate.

Where can we do the re-calibration of an area monitor?

The calibration is provided by Narda Italy. They can also do repair, adjustment etc. They can also provide an accredited. But please don't send the instrument directly to Italy, please contact your local sales partner, they will arrange everything for you. Only they can provide you the mandatory RMA-number etc.

How can I perform a verification of function before I start a measurement on site?

 We normally test an Area monitor by a walky-talky. We check, if the measured level goes up, see if an alarm is transmitted by SMS etc. A real verification if the fieldstrength is correct, you can only do by a TEM/GTEMcell.

Can you please let us know, why there is summation of % values in a multi frequency environment?

o If the limit value has a frequency dependence, as for example with the limit value curves of the ICNIRP, then a simple summation of the power density at different frequencies can lead to an incorrect result. This can be avoided by evaluating the power density against the respective limit value valid for the frequency. This now relative result, for example expressed in percent, can then simply be added up.

Do the shaped probes have different data structure than the rest?

- 0 No.
- When will a data sheet for the shaped probes be available?

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In the mobile system, how do you overcome the effects of reflections off a car roof?

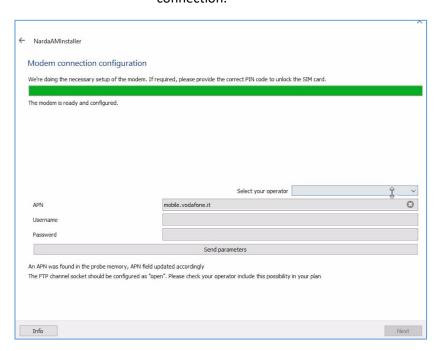
 When you are driving, reflection condition will change every meter. But this you can't avoid. Our suggestion is, to average a bit. If the car is stationary, the distance between the rooftop and the sensor is helping a lot. Vehicle and



mobile system are galvanically separated the connection between area monitor to Pc is due to optical fiber.

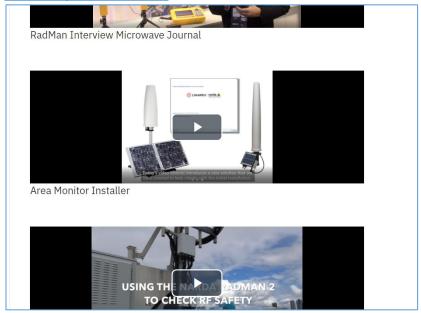
Is it possible, that AMB8059-03 can automatically send back one day's measurement data to their own FTP station every day?

o Yes. By the installer software or 8059NSTS you can define your own FTP connection.



There is also a video available. Please go to:

EMF Safety (narda-sts.com) and scroll down to the "Area Monitor Installer" video.





- Is it possible, to grab all of the measurement data directly from their FTP site every day?
 - Yes
- How long would it take to scan through all 20 bands? How long would it measure in each band on each scan? Approximate times are fine. E.G.:
 - 0 87-108
 - o 510-686
 - 0 758-778
 - 0 778-793
 - 0 793-803
 - 0 870-885
 - 0 935-945
 - o 945-960
 - 0 1805-1825
 - 1835-1855
 - 0 1855-1880
 - o 2110-2130
 - o 2130-2145
 - o 2145-2160
 - 0 2300-2370
 - o **2655-2675**
 - o 2675-2690
 - 0 3437-3497
 - o **3510-3570**
 - 0 3630-3690

Indicatively the time to process one single band from 20 MHz to 6 GHz with 1 MHz RBW is 15 second.

Indicatively the time to process one 30 MHz band with 1 MHz RBW is 1 seconds. Every added band with the same SPAN will require other 1 second. Frequency bands below 20 MHz, and in particular starting a 100kHz, need narrower RBW. RBW was automatically managed in order to prevent issues. The auto RBW is not a limitation but, in fact, an automatism that relieves the user from the setting that may not be easy to manage.

- Do area monitor have 4/5G decoding function?
 - No. There is no decoding option for the area monitors. This is only done by Narda SRM-3006. Both instruments, the handheld SRM and the stationary area monitor follow a different philosophy or different legislation. In Germany it is mandatory, to extrapolate to the maximum possible exposure. Here SRM with decoding is measuring the signalization of a base station and from that value you can extrapolate to the maximum traffic. This is a spot measurement, and it makes no sense to show this value versus time, as the maximum possible will not change. It's the maximum. In other countries, they prefer to show, how the radiation is changing over the day. So, they prefer to use area monitors.



And which of both approaches is the better one? The one, which is more accepted by public. Because the measurement is for them, and people are different in different countries. Luckily Narda can supply both solutions.

Will this be recorded?

No, the webinar was not recorded. But based on the PowerPoint used for the webinar we will make a video available soon. Stay informed by our NewsTicker. And we will also post the PDF of the PowerPoint.

What is the temperature range for this system?

Temperature range of AMB-8059 is - 20°C to +55 °C

Does meter with shaped probe display both EMF value (V/m) and limits (%)? or only % limits?

With a shaped probe, only % of standard is displayed. Shaped probes are built for 0 frequency dependent limit values like ICNIRP, FCC or SC6. Means if you want to calculate from % of standard back into e.g., V/m, you need to have the frequency information. But a broadband probe doesn't provide this information. Only a selective instrument like 8061 or SRM can do so.

Does AMB 8059 have both 4G modem & solar supply. Even with provision for battery?

4G modem and solar is possible. This is the model /03. Solar panel and (nonrechargeable) battery is not available. Only solar panel and rechargeable battery, model /01 and /03

Versions AMB - 8059	00	01	02	03
Solar Panel for continuous outdoor monitoring		•		•
Primary Lithium Battery for indoor monitoring	•		•	
Modem for wireless data transfer and remote control			4G/LTE	4G/LTE
Wi-Fi for wireless data transfer and remote control	•	•	•	•
Optical Fiber for "field free" communication	•	•		•
Accelerometer	•	•	•	•
USB for communication at site	• (1)	•	•	•
Ethernet for communication at site		•		•
RS232 for communication at site	• (2)	•		•
Car Mounting Adapter for drive testing	• (3)			
Humidity Sensor to control measurement & environment conditions	•	•	•	•
GPS for positioning of measurement data	•	•	•	•
Micro SD for logging measurement data	•	•	•	•

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