

5.2 Do you get the same results with a **selective measuring device** and a **wideband measuring device**?

Yes and no! Why not just plain yes? If both devices are **calibrated** and in good condition, why should there be any differences?

Scenario 1: You are making measurements close to an FM transmitter, which is the dominant field source. Both the selective Narda **SRM** as well as the wideband Narda **NBM** are equipped with antennas that capture the FM transmitter. As long as you don't do something stupid like acting as a human shield and standing in front of one of the devices, or standing behind it like a reflector, it is most likely that both devices will indicate the same result. So far so good.

Scenario 2: You are standing on a rooftop terrace. There are several mobile communications antennas on the next-door rooftop, and you want to check that their immissions are within the prescribed limits. Off in the distance you can also see the silhouette of the local FM transmitter tower. If the **SRM** is fitted, say with a 420 MHz to 6 GHz antenna, it will not detect the FM transmitter in the 100 MHz band, because this is outside its reception bandwidth. In contrast, if the **NBM** is equipped with a 100 kHz to 6 GHz probe, it will definitely measure the FM transmitter as well. More likely than not, the **SRM** and **NBM** will then display different results. Both results are correct! But they are measuring different field sources according to their frequency ranges. If you get different results like this, take a look around you. The answer is often easy to see. Of course, there are antennas available for the **SRM** that will capture the FM radio as well, if that's what you want to measure.

Can't decide whether a wideband or a selective measuring device is the right one for you? Let your **contact partner** advise you.



→ Our seminar "**Exposure measurements on radio frequency transmitters using the SRM-3006**" is aimed at beginners, more advanced and professional users of selective measuring devices. You can find details of our seminars here, or ask our local **sales partner** for individual arrangements.