

#### 4.1 Narda SignalShark – Compare the competition



Narda SignalShark vs. Rohde & Schwarz PR100® / DDF007® or Keysight Fieldfox N9935A?

A measurement is a comparison with a known quantity. Our Narda SignalShark is our ultimate benchmark. So, let's measure it and compare it with other analyzers like the ones mentioned above, or with the Tektronix RSA507A and RSA6120B. And, speaking of heavyweights, of course we haven't forgotten the Rohde & Schwarz DDF205 / EB500. What, compare a handheld device like the SignalShark with desktop instruments? We're confident. "The lab in your hand" is a reality. At last, you can have laboratory quality to take with you, independent of AC power. 40 MHz real-time and outstanding RF performance at an attractive price. Don't wait, try it out for yourself. Then it will become your ultimate benchmark, too. Call us or one of our Sales Partners around the world to arrange a demo. Let yourself be convinced.



**Narda SignalShark vs. Rohde & Schwarz PR100® / DDF007® Profile Comparison**

**Narda SignalShark 331E – The Monitoring Receiver**

- ✓ Real-time signal detection: 40 MHz real-time bandwidth. High resolution with a 100 kHz resolution (low dynamic range PR100) 100 % Probability of Detection for signal range from -132 dBm
- ✓ Demodulation: Two digital baseband processors (DBP) for modulation measurement and demodulation. Real-time and digital demodulation
- ✓ Signal processing: Real-time FFT analysis. No averaging and 100 dB dynamic range for additional signal processing
- ✓ Weight: Only 1.4 kg in 40 MHz mode + 230 mm x 100 mm x 30 mm. Weight: 1.4 kg with case battery. Power consumption: 10 W. No computer required for program measurement
- ✓ Full automatic detection: Real-time and digital

**Rohde & Schwarz PR100® / DDF007®**

- Limited signal detection due to only 10 MHz real-time bandwidth (PR100), missing PR100 and lower PR100
- Two digital baseband processors (DBP) for modulation measurement and demodulation. Real-time demodulation
- No FFT analysis (limited FFT averaging)
- Size: 100 mm x 100 mm x 100 mm + 100 mm x 100 mm x 100 mm. Weight: 1.1 kg. Power consumption: 10 W
- Full automatic detection: Real-time

**High Dynamic Range (HDR) Receiver**

In real life, you often have to measure signals with a low power level in an environment with strong signals. This is called the HDR measurement. It is difficult to do with a 100 MHz receiver.

As the same problem as taking a picture of an object in the shadow while being in bright sunlight. Like the traditional camera cannot take a picture of both the bright object and the shadowed object, our receiver cannot take a picture of both the high and low power signals. A measurement is a comparison with a known quantity. In our case, the known quantity is the signal level.

The special hardware design of SignalShark allows measuring signals with a low power level as well as in high dynamic range. The receiver is able to do this. This is accomplished by separating the receiver's receiver parameters at the same time for a HDR measurement.

- The Receiver Filter (RF) allows measuring signals with a low power level
- And at the same time the FFT allows HDR (11) allow accurate good system for receiver in other measurement in an environment with strong signals.

**Narda SignalShark vs. Keysight Fieldfox N9935A Profile Comparison**

**Narda SignalShark 331E – The Lab in Your Hand**

- ✓ Real-time signal detection: 40 MHz real-time bandwidth. High resolution with a 100 kHz resolution (low dynamic range PR100) 100 % Probability of Detection for signal range from -132 dBm
- ✓ Demodulation: Two digital baseband processors (DBP) for modulation measurement and demodulation. Real-time and digital demodulation
- ✓ Signal processing: Real-time FFT analysis. No averaging and 100 dB dynamic range for additional signal processing
- ✓ Weight: Only 1.4 kg in 40 MHz mode + 230 mm x 100 mm x 30 mm. Weight: 1.4 kg with case battery. Power consumption: 10 W. No computer required for program measurement
- ✓ Full automatic detection: Real-time and digital

**Keysight Fieldfox N9935A**

- Limited signal detection due to only 10 MHz real-time bandwidth (PR100), missing PR100 and lower PR100
- Two digital baseband processors (DBP) for modulation measurement and demodulation. Real-time demodulation
- No FFT analysis (limited FFT averaging)
- Size: 100 mm x 100 mm x 100 mm + 100 mm x 100 mm x 100 mm. Weight: 1.1 kg. Power consumption: 10 W
- Full automatic detection: Real-time

**Key Specification Comparison**

Parameter	Narda SignalShark 331E	Keysight Fieldfox N9935A
Real-time bandwidth (MHz)	40 MHz	10 MHz
Resolution (kHz)	100 kHz	100 kHz
Dynamic Range (dB)	132 dB	132 dB
Weight (kg)	1.4 kg	1.1 kg
Power consumption (W)	10 W	10 W
Price (€)	1,200.00	1,500.00

Come and visit us at [Electronic Warfare Europe 2018](#) from 5<sup>th</sup> until 7<sup>th</sup> June 2018 in Lausanne/Schweiz at booth A12 (L3 Technologies) or at [IMS 2018](#) from 10<sup>th</sup> until 15<sup>th</sup> June 2018 in Philadelphia, USA at booth 535 (L3 Technologies) and convince yourself of our SignalShark.