HOUSE OF TECHNOLOGY

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EMC
Brugen af spektrum- og network-analyser

2014

Lkaa

Forskellen mellem spektrum- og network-analyser

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Spektrum analyser

- Modtager kun signaler og viser dem på skærmen
- Benyttes til:
  - Antennesignaler
  - Støj

Network analyser

- Består af både en modtager og en sender
- Benyttes til:
  - HF forstærkere
  - Filter karakteristikker
  - Refleksioner

Forskellen mellem spektrum- og network-analyser

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Spektrum analyser

Network analyser

– DUT

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Front view

RF input
Connector for headphones
Ext. trigger input
Ext. reference input
IF output/video output
Bias input
Connector for accessories
LAN/USB interface
Simple menu-based operation via softkeys
Function keys
Kensington lock
Call-up of user-defined settings

Tracking generator output
Connector for power sensor
USB interface, type A [1]
SD memory card
Color LCD (640 × 480 pixel), can be switched to high-contrast monochrome display in extreme sunlight
Selection between different operating modes ("spectrum analyzer", "vector network analyzer", "power meter", etc.)
Selection of the measurement function (channel power, occupied bandwidth, etc.)
General instrument setup
Screenshot
Rotary knob with Enter button
Cursor keys

[1] Interface integrated into instruments with serial numbers ≥ 105000. For connecting the R&S®NRP-Zxx power sensors and USB sticks.

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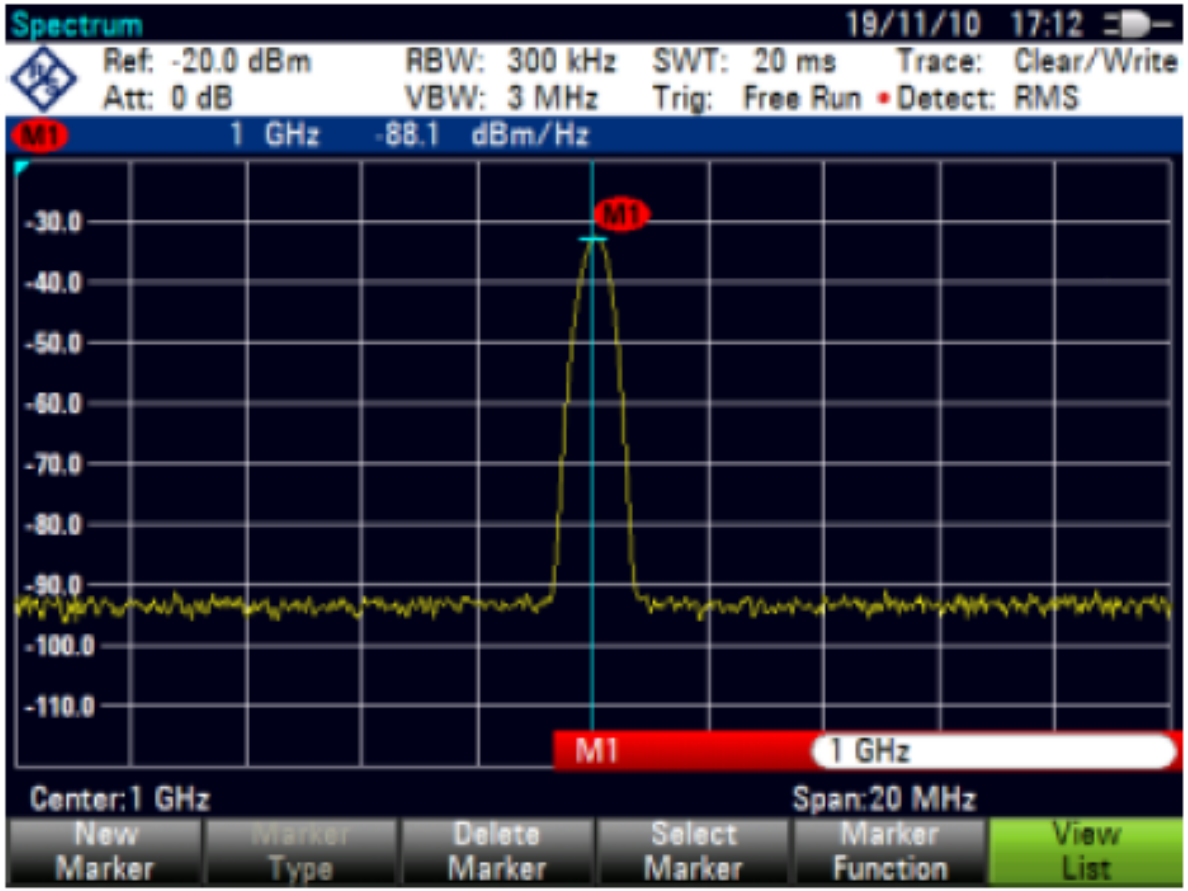
Skærm visning



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Spektrum analyser

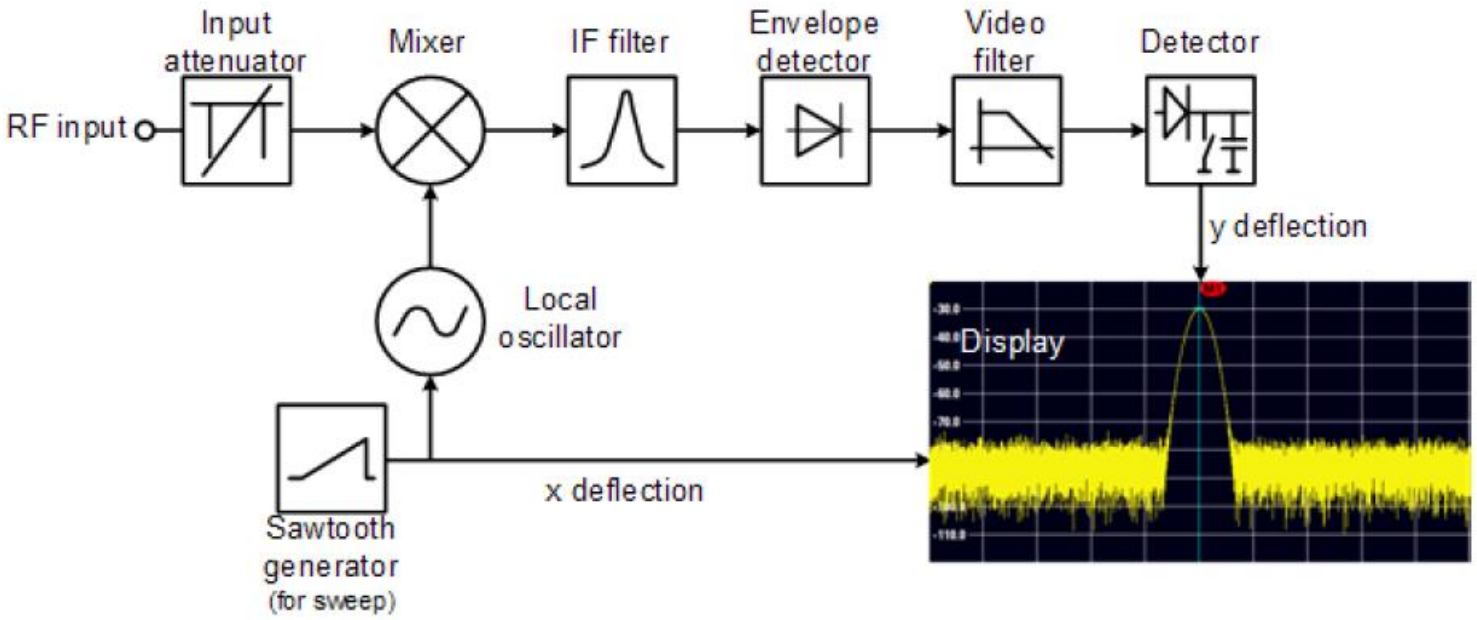
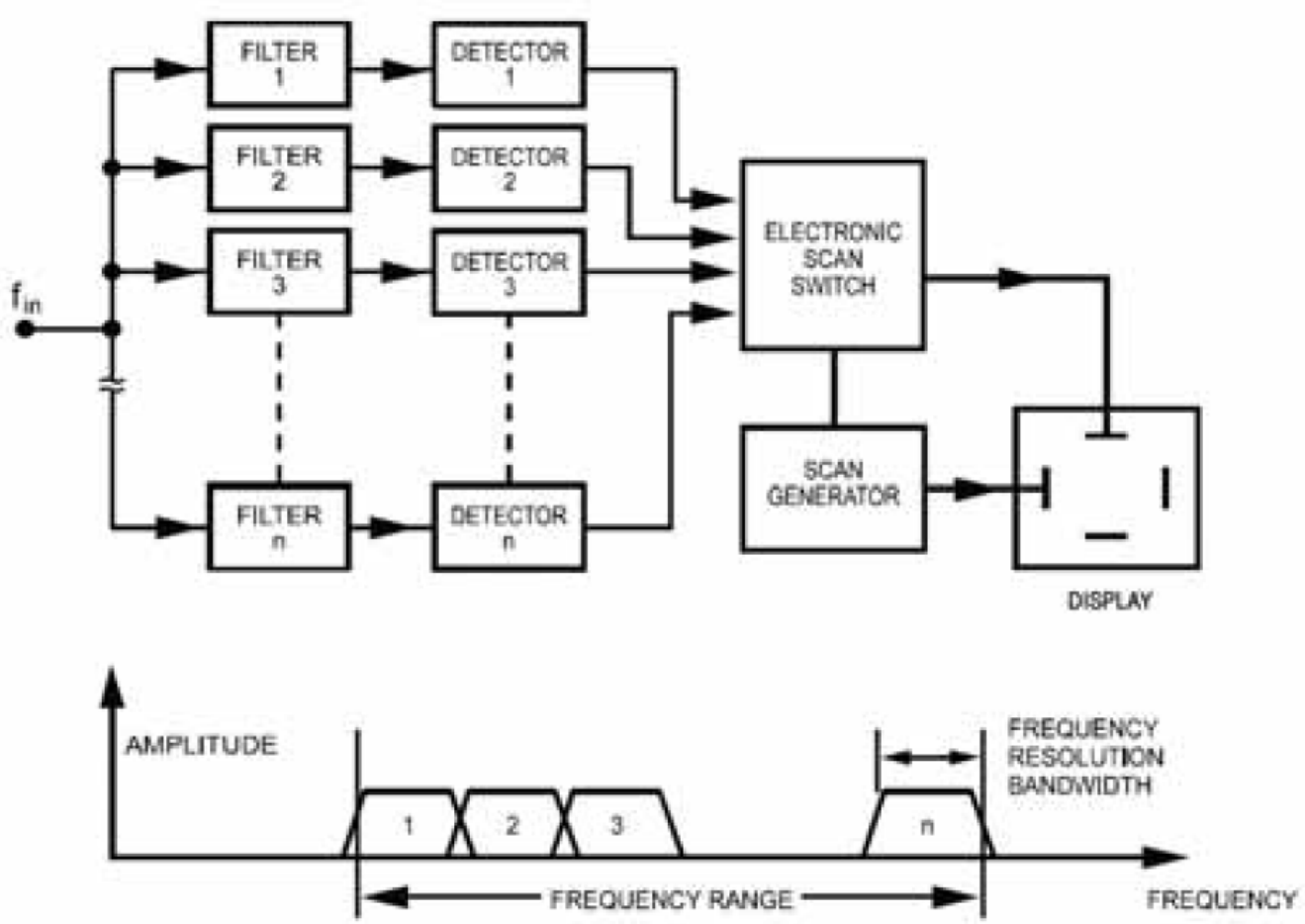


Figure 11-2: Block diagram showing the basic functionality of a spectrum analyzer

Spektrum analyser



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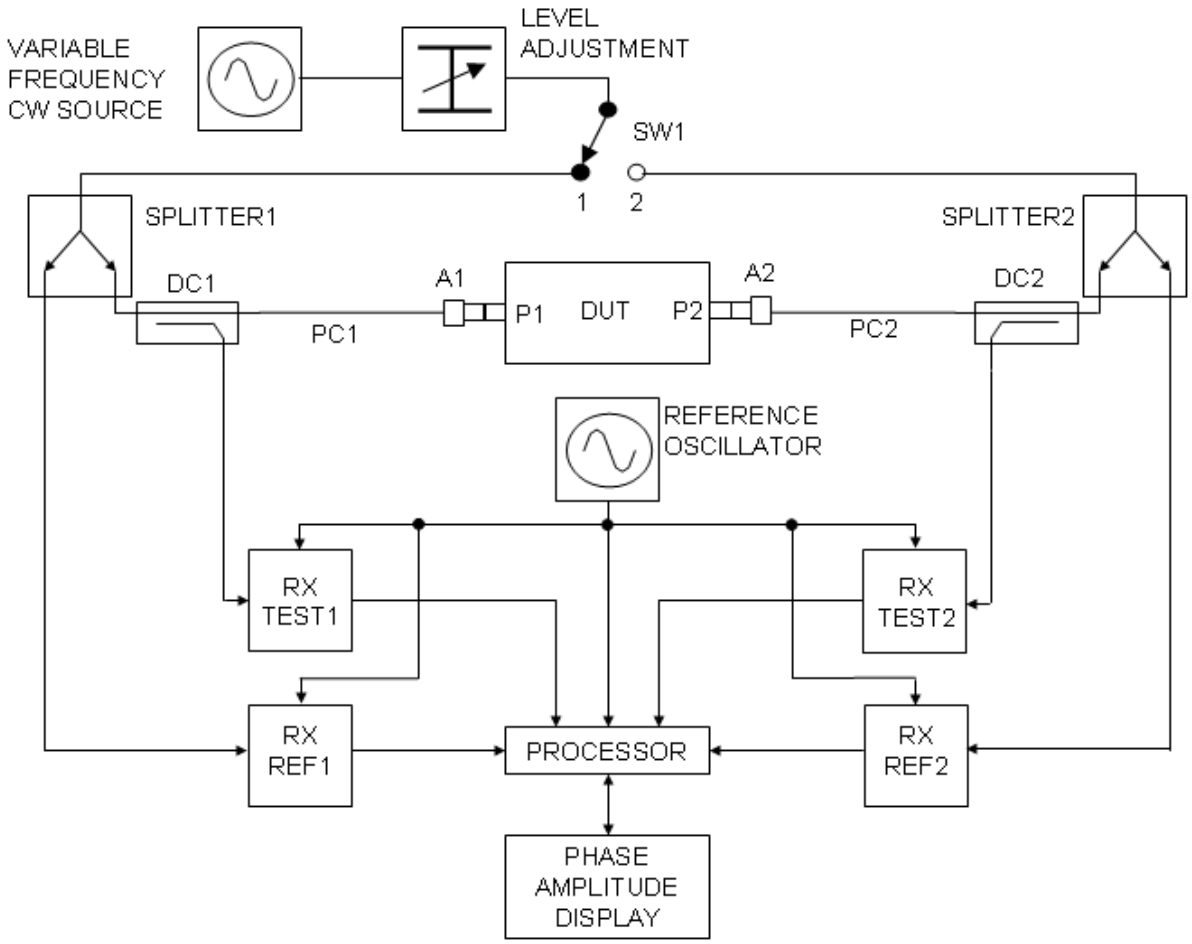
Network analyser



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Støj måling

The R&S®FSH with isotropic antennas.

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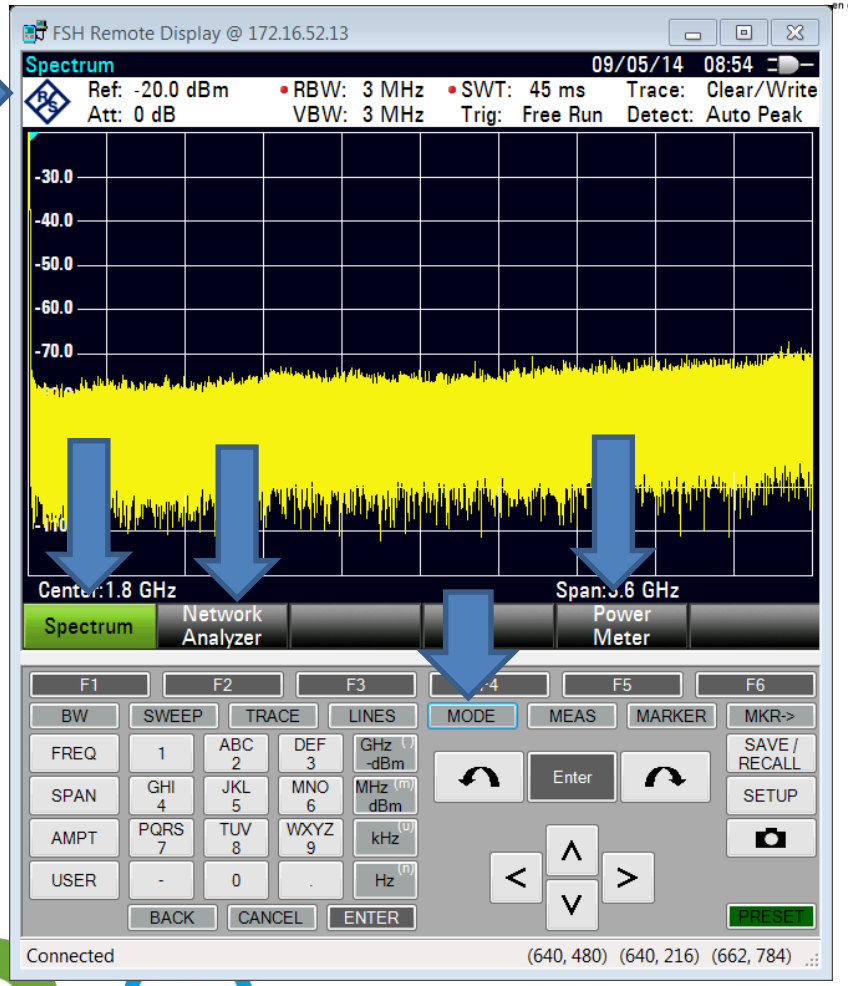
Mode

Oversigt over opsætning



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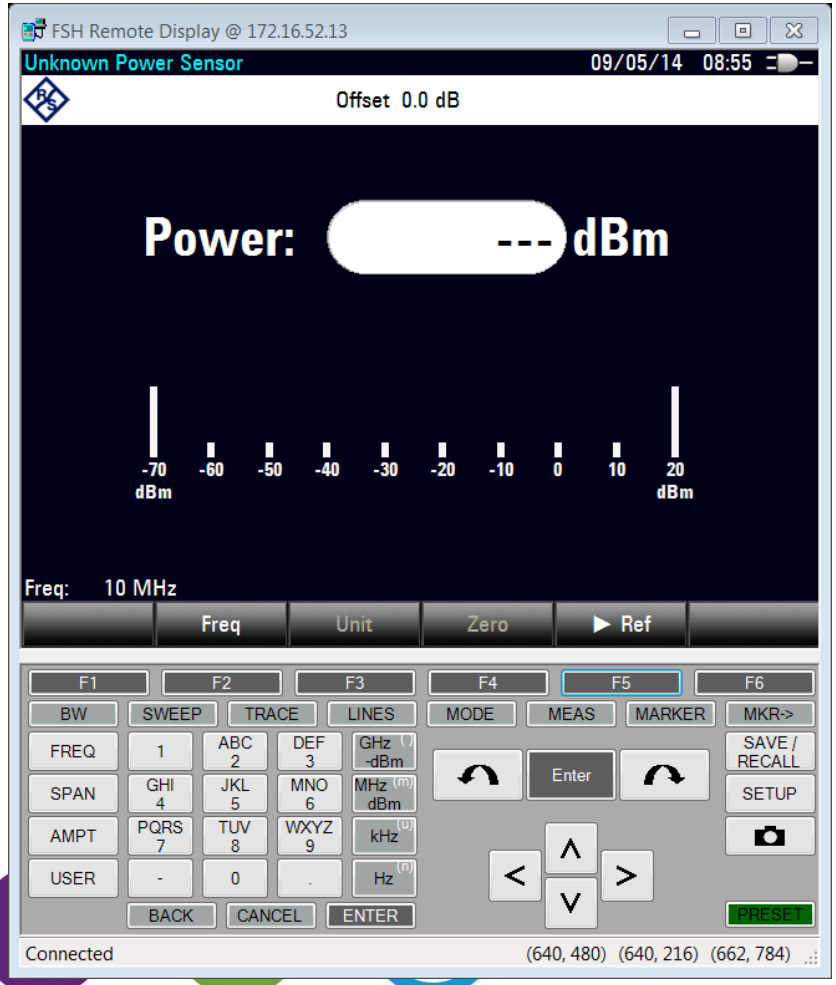
Powermeter



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Network analyser

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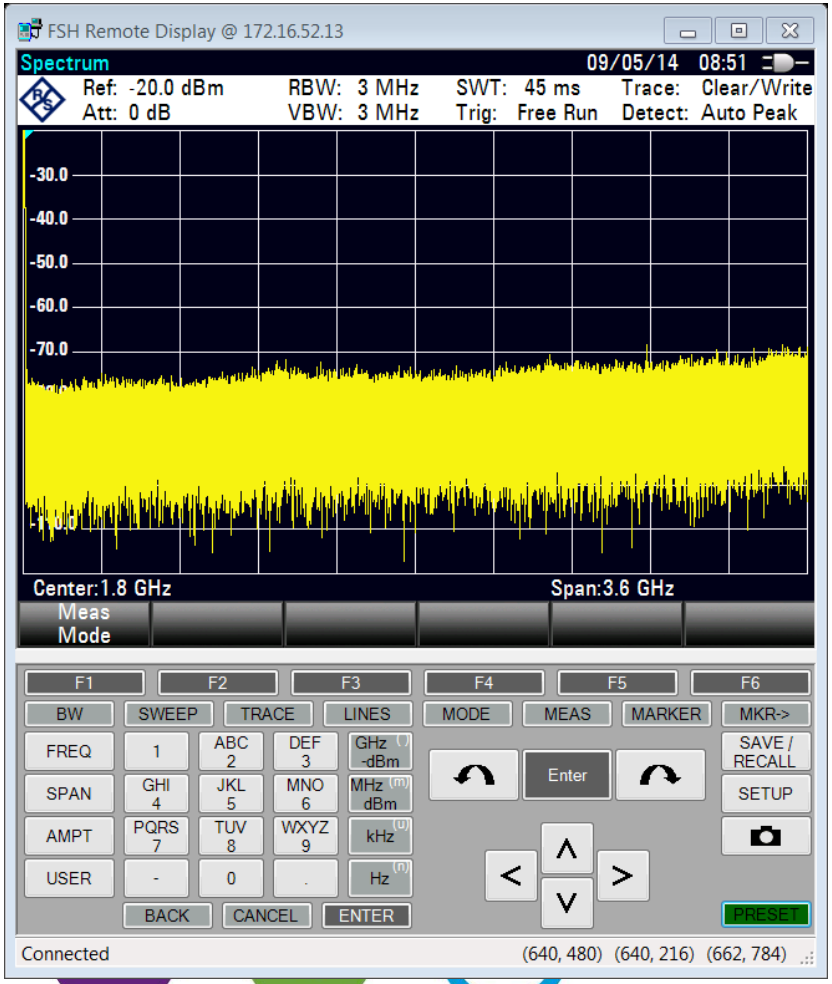
Spektrum analyser



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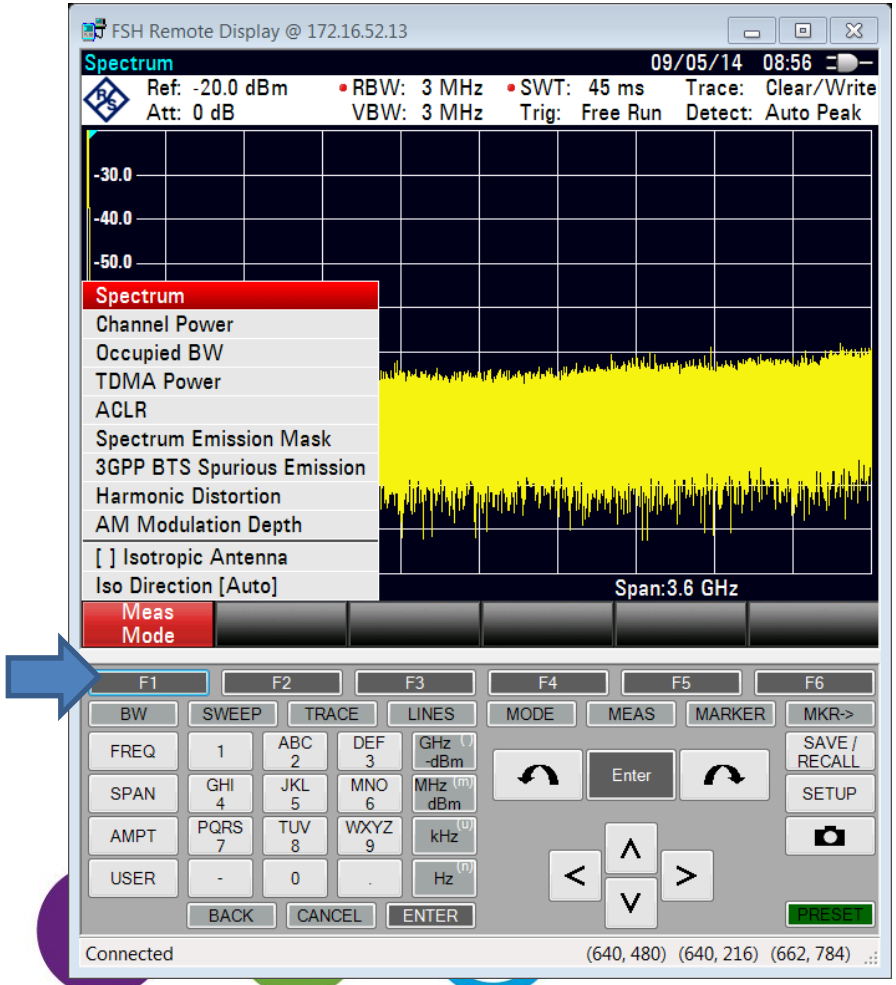
Meas mode
Spektrum analyser



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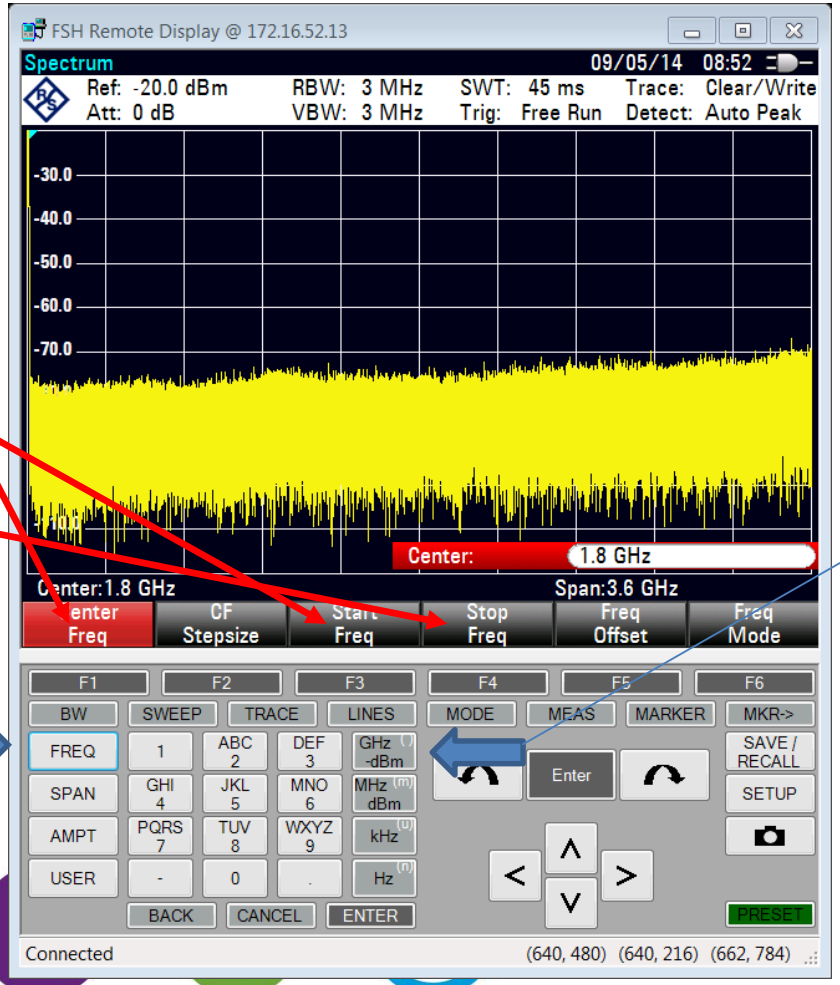
Freq

Centerfrekvens

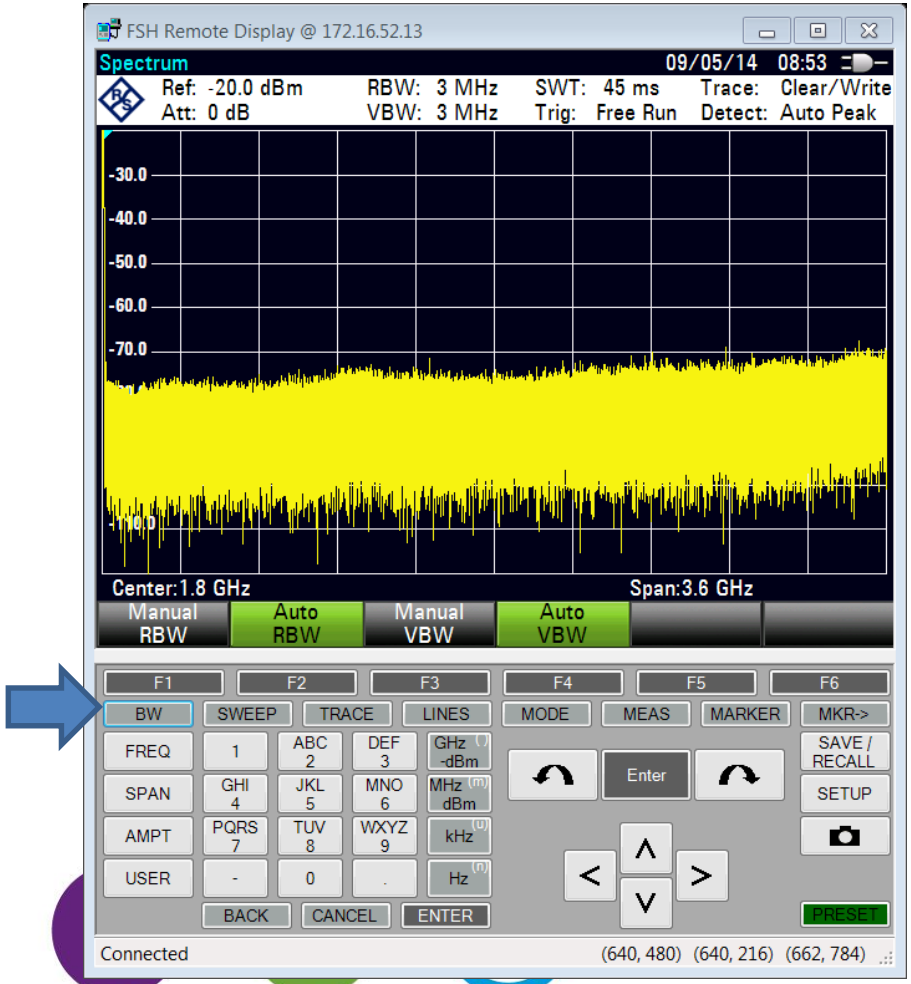
Start frekvens

Stop frekvens



Indtast tal og derefter på
For eks. GHz

BW (Båndbredde)
Båndbredde af filter



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Manual RBW
Filter båndbredde

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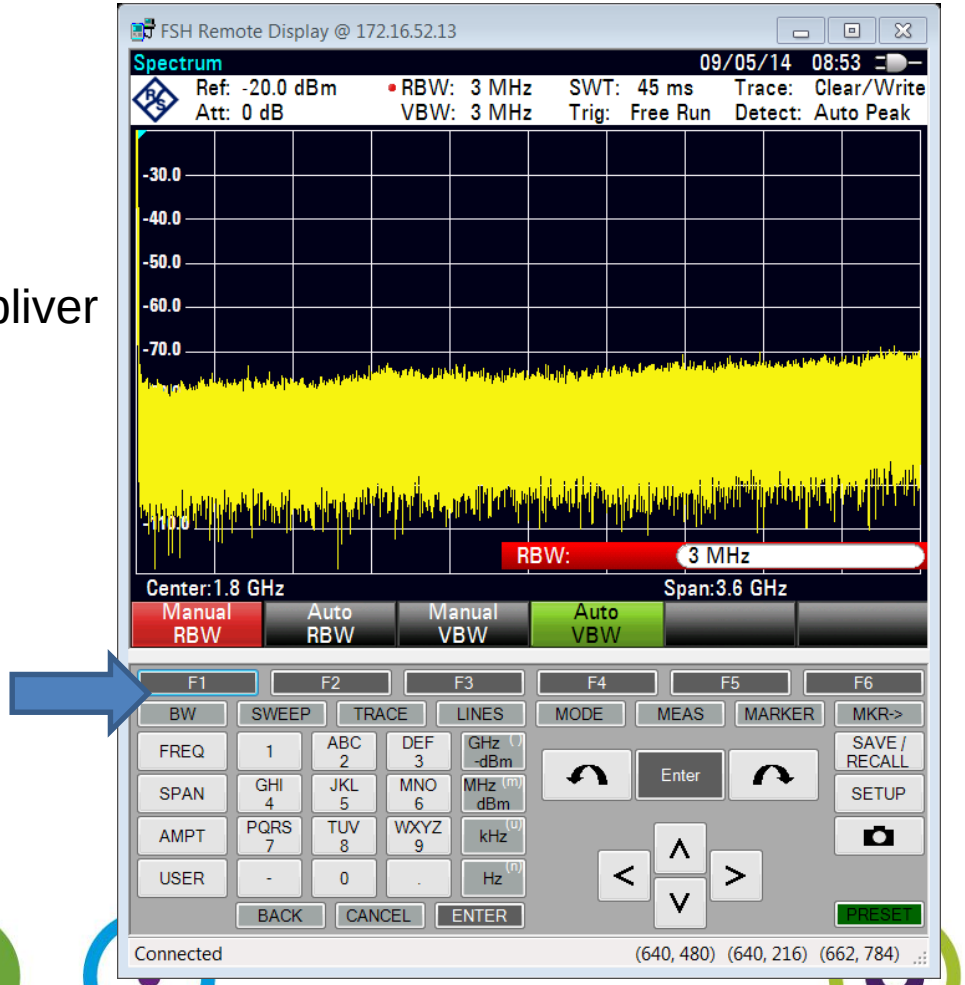
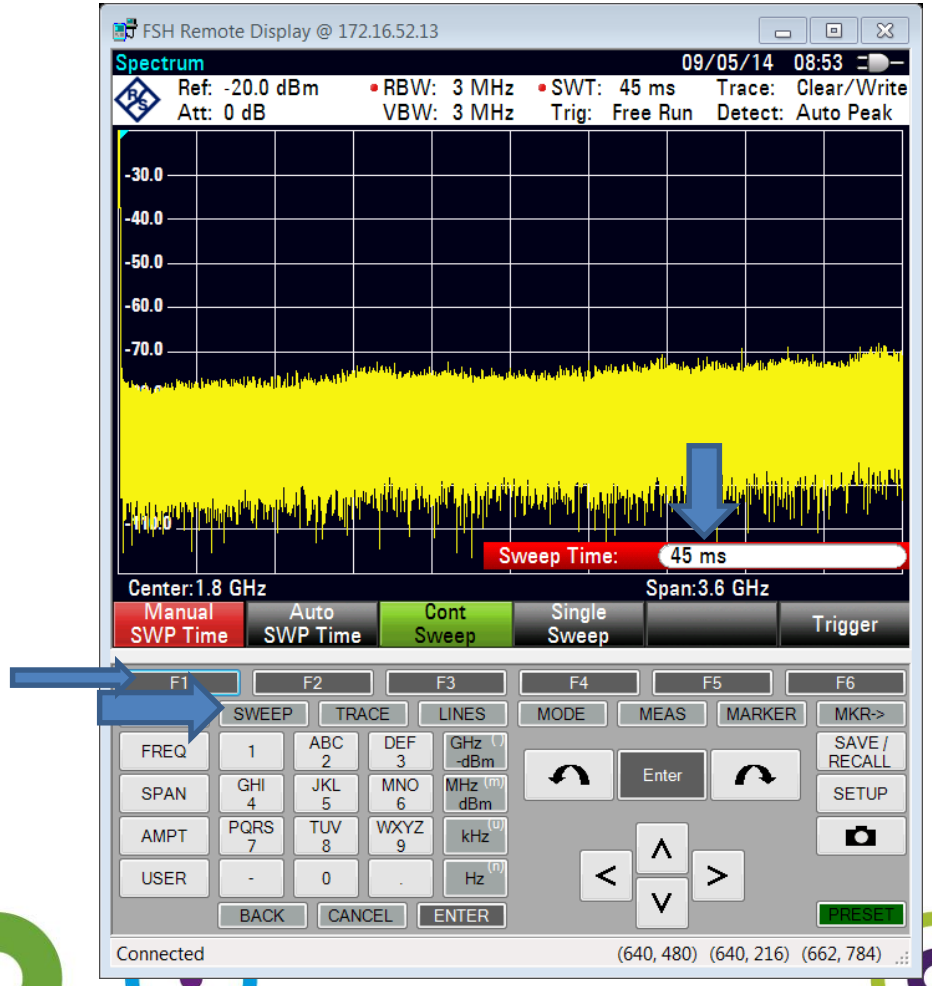
Det tager længere tid
At opdatere skærmen, men målinger bliver
Mere nøjagtig!



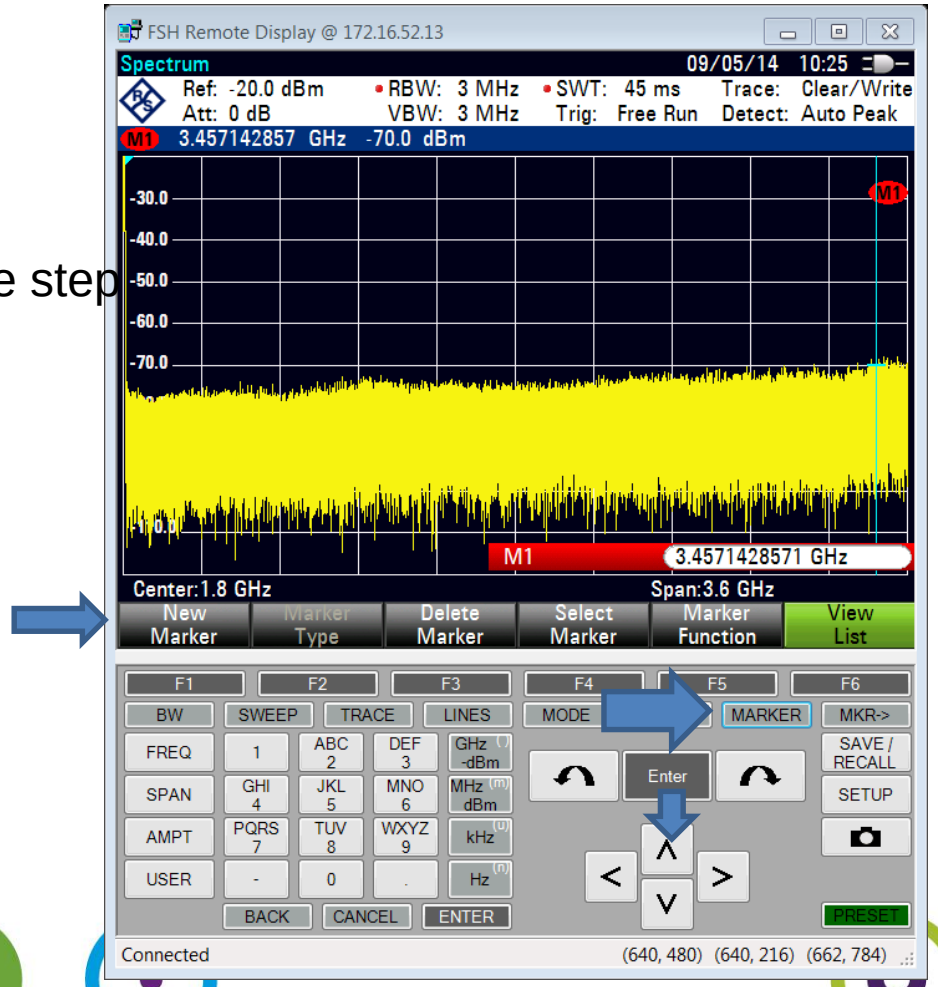
Sweep time

Tiden det tager at scanne over
Det indstillede frekvensområdet.

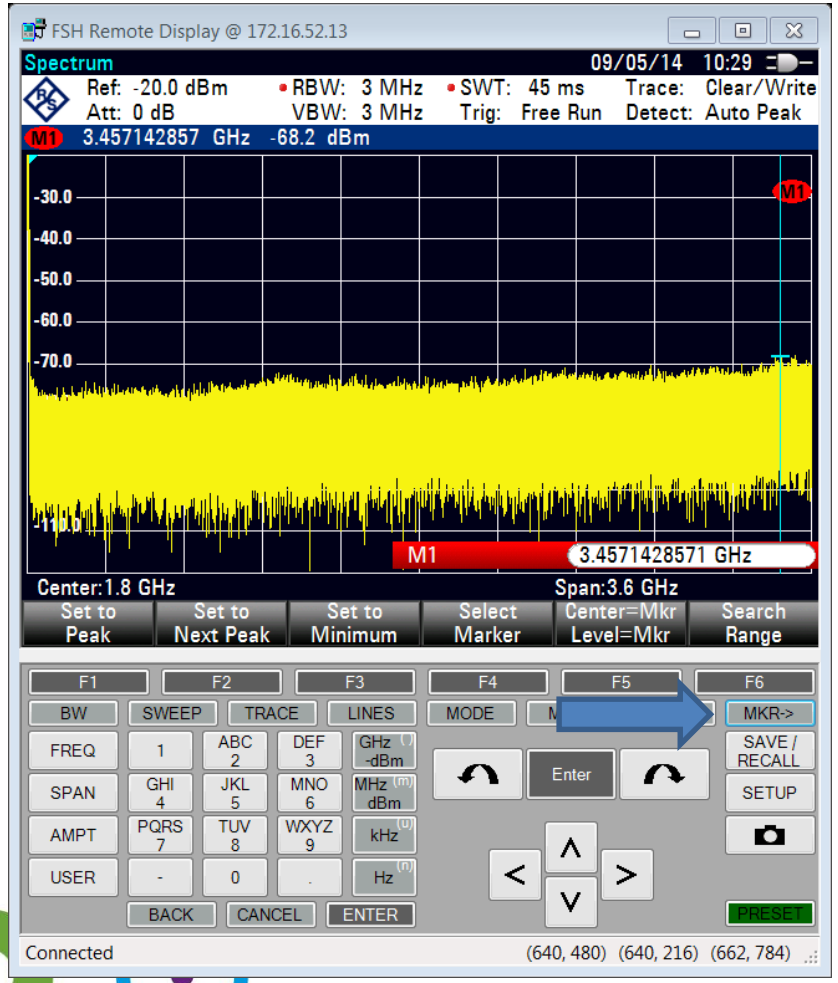


Markeres

M1 er marker til måle med.
New Marker opretter en ny marker.
Pile op og ned springer marker i store step



MKR
Peak søgning m.m.



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Opgave

- Mål med R&S 6050-2 på Swichmode supply og sparepære både med Agilentscope(FFT) og spektrumanalyser