

# WebSDR, PhantomSDR Plus Server and KiwiSDR

Installed and operated by HB9RYZ

Lucerne

JN47GA at 1'660m

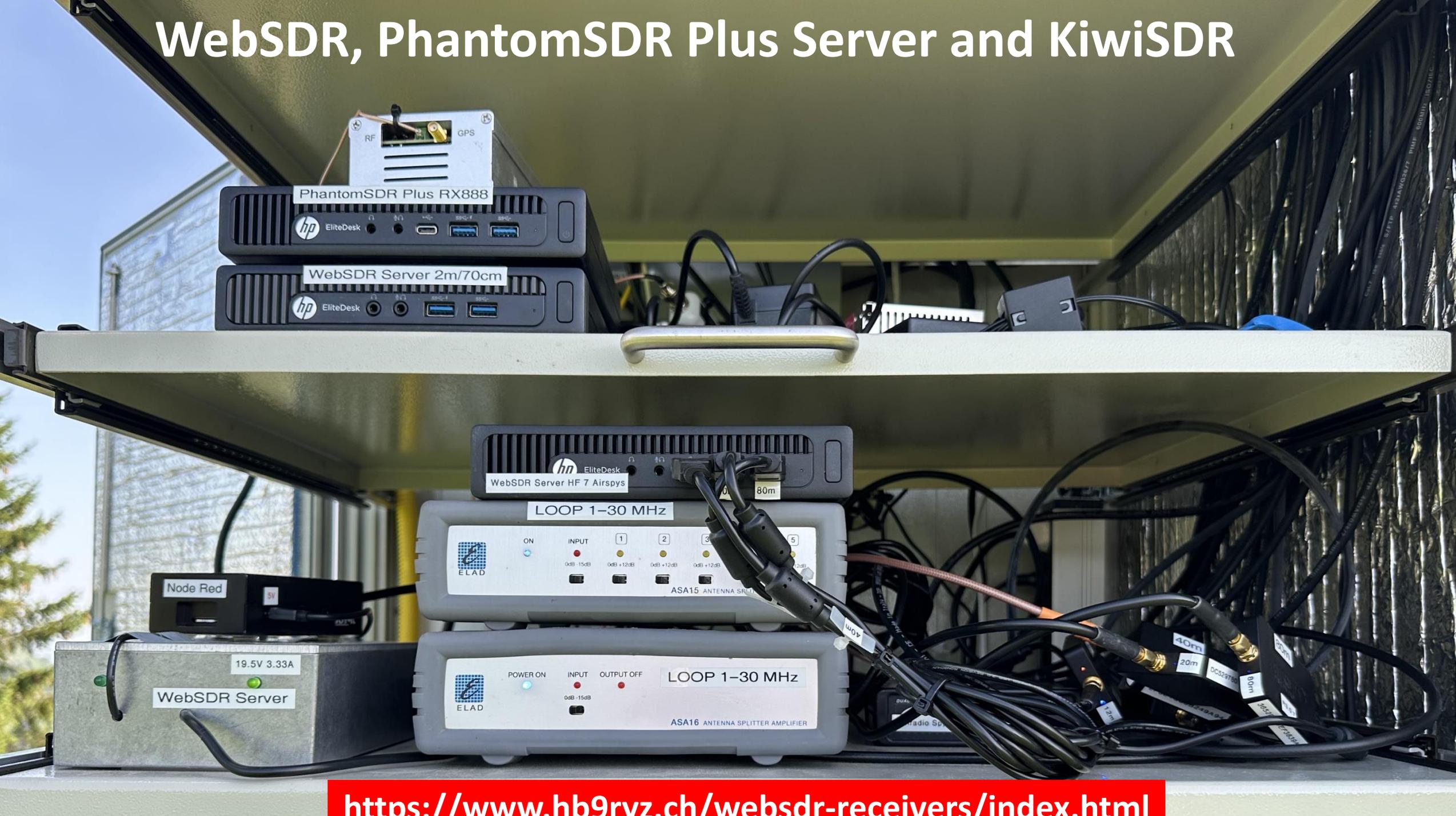
Wellbrook Loop ALA1530NL

30 kHz – 30 MHz

Diamond X50N  
2m/70cm

<https://www.hb9ryz.ch/websdr-receivers/index.html>

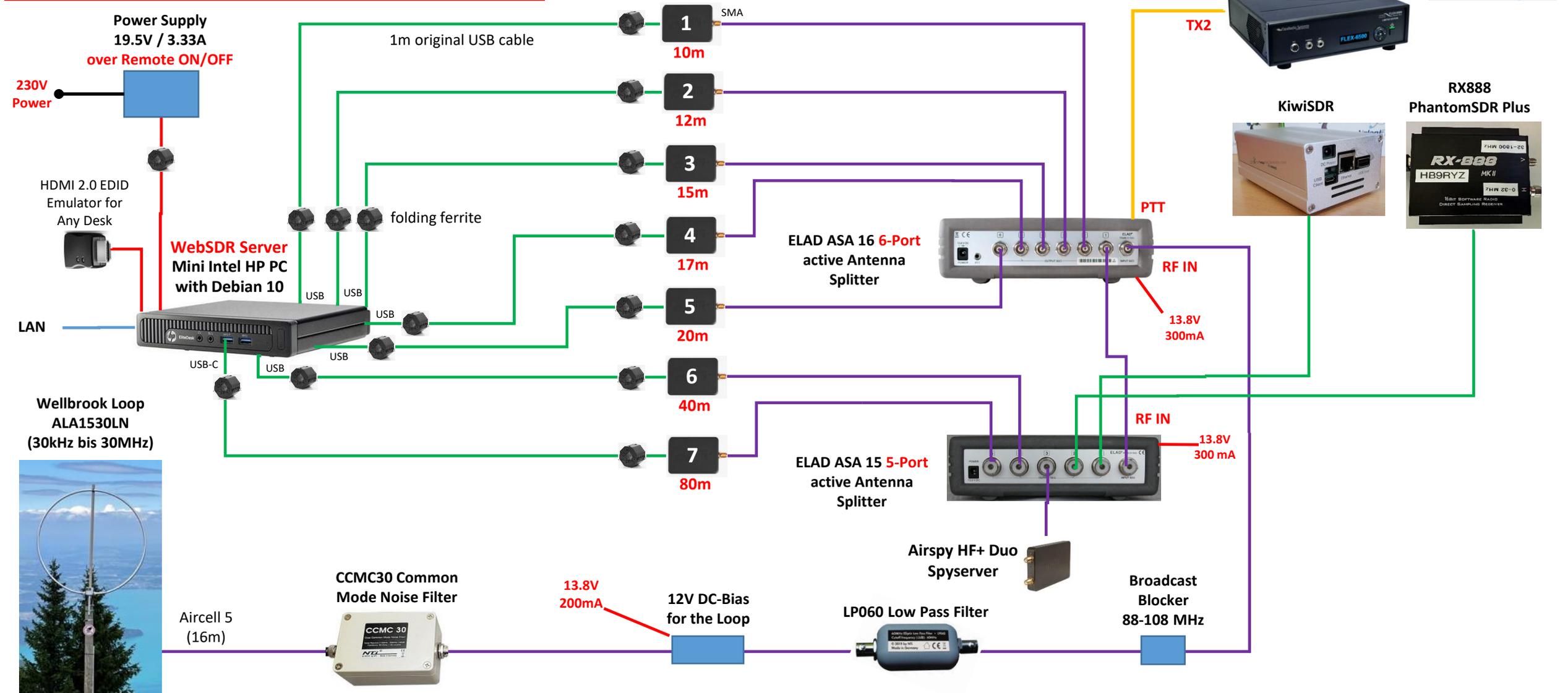
# WebSDR, PhantomSDR Plus Server and KiwiSDR



<https://www.hb9rvz.ch/websdr-receivers/index.html>

# BluePrint WebSDR Server's Rigi Scheidegg

HB9RYZ  
[www.hb9ryz.ch](http://www.hb9ryz.ch)



230V Power

HDMI 2.0 EDID Emulator for Any Desk

LAN

Wellbrook Loop ALA1530LN (30kHz bis 30MHz)



WebSDR Server Mini Intel HP PC with Debian 10

Aircell 5 (16m)

Loop is 2.5m above Ground

CCMC30 Common Mode Noise Filter

NTi's Coaxial Common Mode Noise Filter **CCMC30** has been especially optimized for maximum common mode noise rejection of >30dB wide band in the frequency range of 150kHz - 30MHz. With slight limitations a much wider frequency range is covered. In the medium wave range for example a noise suppression of up to 45 dB can be achieved.

13.8V 200mA  
 12V DC-Bias for the Loop

LP060 Low Pass Filter

The elliptically-formed low pass filter **LP060** from NTi suppresses all frequencies above 60 MHz. Highly effective antennas combined with near-by strong FM stations often overburden the input of the radio and cause interference and phantom signals. The LP060 was developed aiming at the highest possible suppression in the 88MHz - 108 MHz FM band, whereas as the 6m amateur radio band at 50MHz is still totally within the pass band. For the greatest possible effectiveness, the low pass filter should be inserted directly before the receiver input.

7x Airspy HF+ Discovery

1m original USB cable

folding ferrite

ELAD ASA 16 6-Port active Antenna Splitter

ELAD ASA 15 5-Port active Antenna Splitter

Airspy HF+ Duo Spyserver

Broadcast Blocker 88-108 MHz

Flex 6700



KiwiSDR



RX888 PhantomSDR Plus



PTT

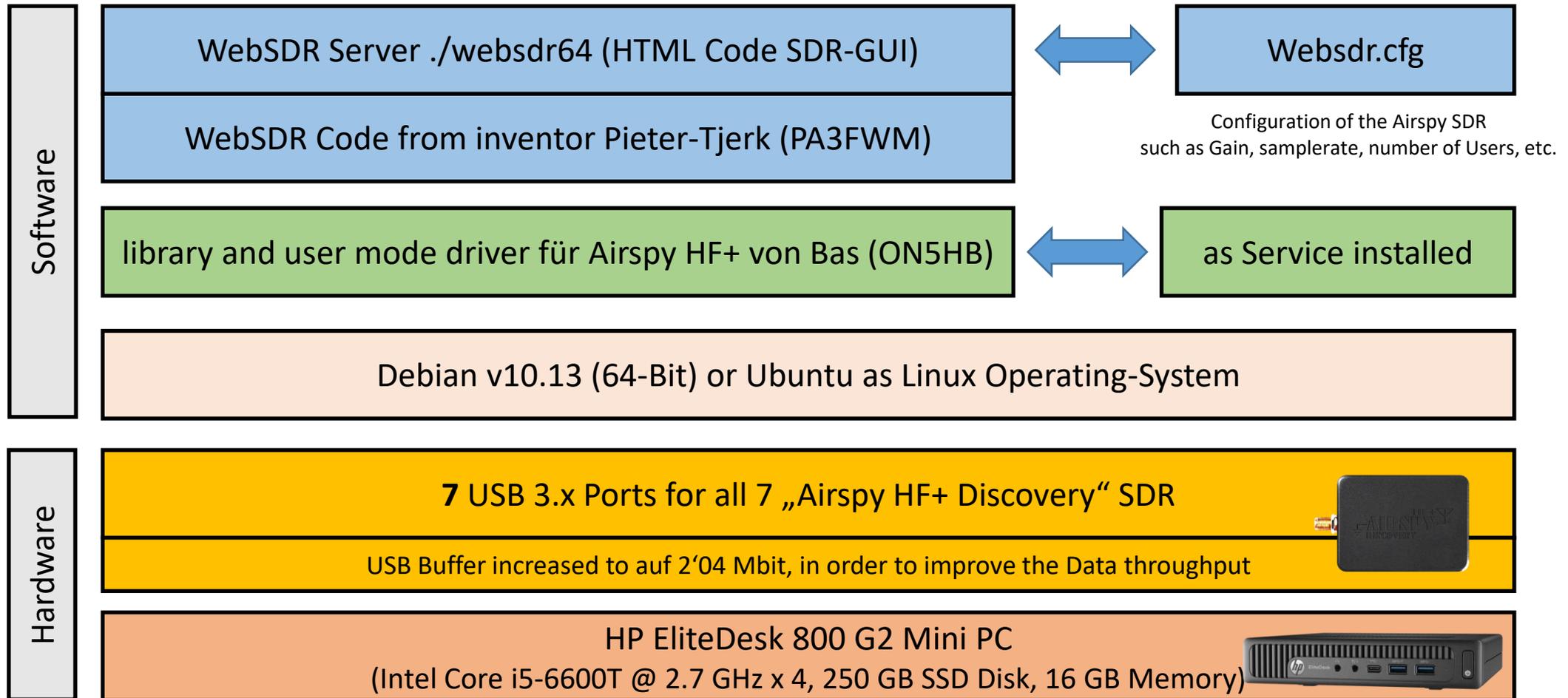
13.8V 300mA

RF IN

13.8V 300mA

RF IN

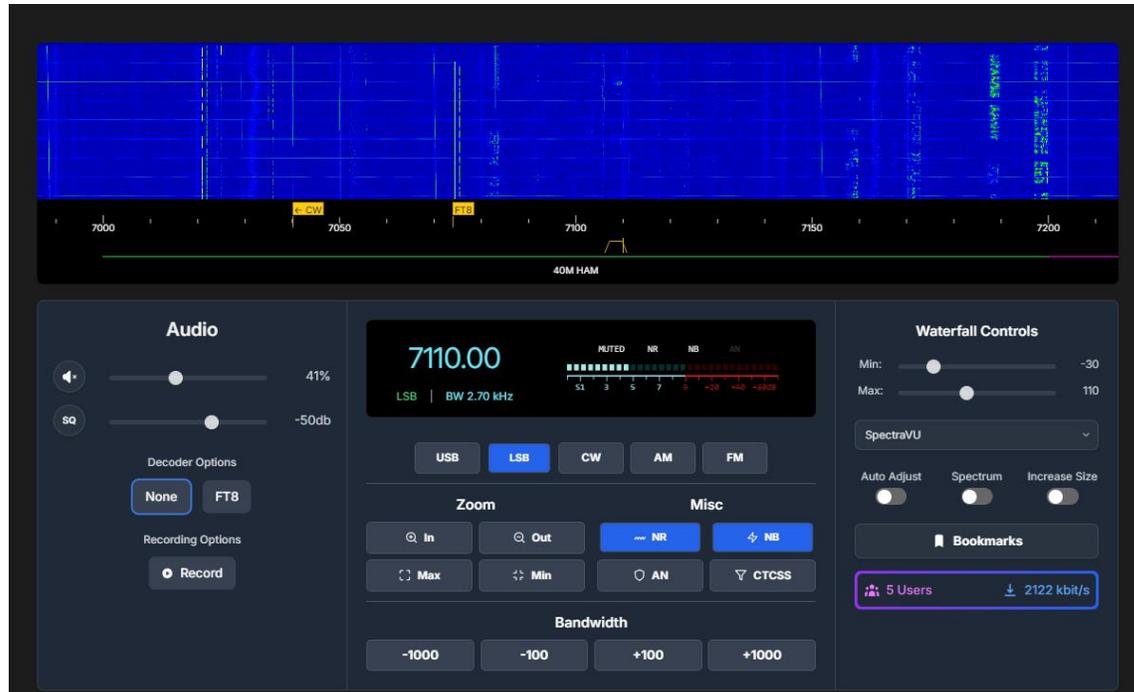
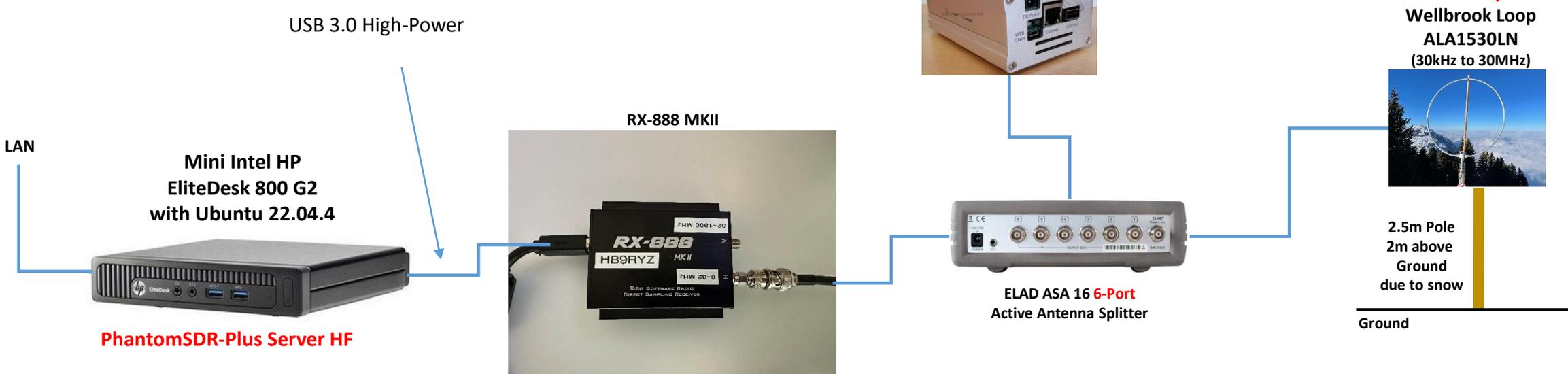
# The WebSDR Hardware- and Software-Layer's



with 35 users at the same time, the CPU load is only **22%**. I set the concurrent user limit to **100**

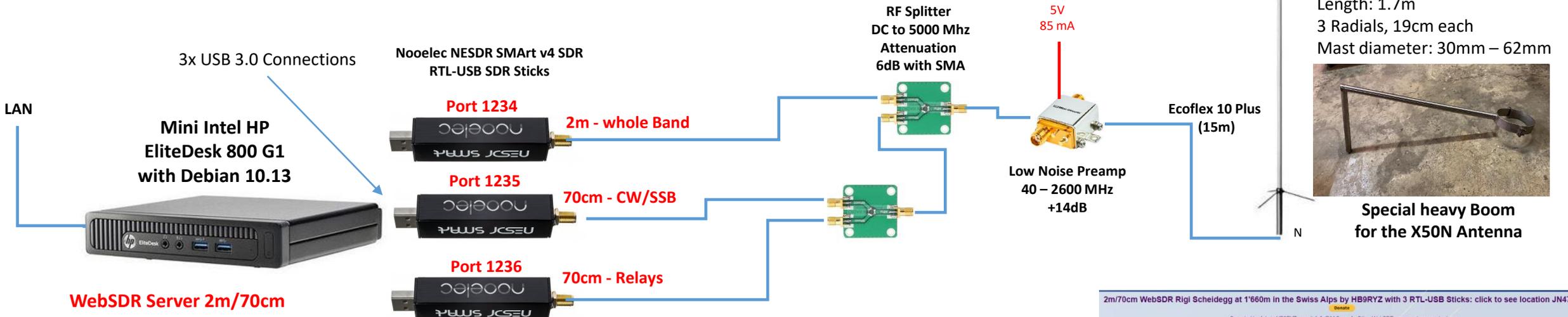
# Remote DX-Station "PhantomSDR-Plus" 0-30 MHz WebSDR

HB9RYZ  
[www.hb9ryz.ch](http://www.hb9ryz.ch)  
15.9.2024



# WebSDR for 2m and 70cm at 1'660m

HB9RYZ  
[www.hb9ryz.ch](http://www.hb9ryz.ch)



**Antenna**  
 Diamond X50N  
 Weight: 0.9kg  
 Length: 1.7m  
 3 Radials, 19cm each  
 Mast diameter: 30mm – 62mm



**Special heavy Boom for the X50N Antenna**

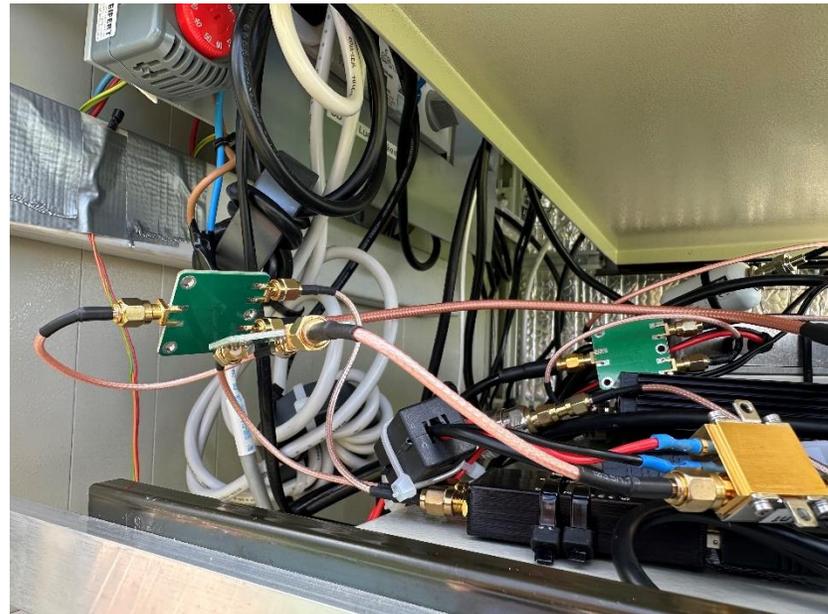
**WebSDR Server 2m/70cm**

**Active Bands:**  
 2m – whole Band  
 70cm – CW/SSB  
 70cm - Relays

The NESDR SMART usb dongle is the new improved version of the famous RTL-SDR USB stick with the RTL2832U chipset and R820T2 and tuner, to receive all frequencies from **24 to 1700MHz**

Improvements of the RTL-SDR NESDR Smart:

- 0.5ppm TCXO for better stability and accuracy
- RF voltage regulator and shielded inductor
- Integrated radiator to cool the usb stick
- Antenna Connector SMA female
- Aluminum housing to protect against harmful interference



2m/70cm WebSDR Rigi Scheidegg at 1'660m in the Swiss Alps by HB9RYZ with 3 RTL-USB Sticks: click to see location JN47GA

Operated by Admin HB9RYZ e-mail: [info@hb9ryz.ch](mailto:info@hb9ryz.ch) Other WebSDR servers at [www.websdr.org](http://www.websdr.org)  
 Strong signals from the HB9RYZ relay show in the vicinity can cause interference.  
 Past 10 seconds: CPUload=25.6%, 4.50 users, audio 204.1 KHz, waterfall 217.8 KHz, Mtp 26.2 KHz

# WebSDR Server HF – 10m,12m,15m,17m,20m,40m, and 80m - Rigi Scheidegg – 1'660m

For the HAM community, our WebSDR server is available free of charge for reception via the Wellbrook Loop ALA1530LN.

Link: <http://185.199.176.46:8091>



The screenshot shows the WebSDR interface for Rigi Scheidegg. At the top, it displays the station name and location: "WebSDR Rigi Scheidegg at 1'660m in the Swiss Alps by HB9RYZ with 7 Airspys: click to see location JN47GA". Below this is a login field and a "Click for more information" link. The interface includes a "Bands" menu (All Bands, One Band, NO), "Allow Keyboard" checkbox, "Waterfall" options (Java, HTML5), "Sound" options (Java, HTML5), and a "Background Picture ON/OFF" toggle. The main display is a waterfall plot showing frequency activity from 2000 to 2800 kHz. The current frequency is 14199.00 kHz. The control panel at the bottom includes a "Band" selector (80m, 40m, 20m, 17m, 15m, 12m, 10m), "Filters" (2.70 kHz @ -6dB, 3.16 kHz @ -6dB), "Frequency Tuning & Mode" (CW, LSB, USB, AM, FM), "Waterfall Settings" (Max out, Zoom, Band, Zoom, Max in), "Memories" (Recall, Erase, Store), "Tube & DSP & Audio" controls (Magic Eye, Brightness, Contrast, Mute, Squelch, Autotune, Notch-2, DSP Noise Reduction, Volume, Manual Gain, Hi-Boost), and "Audio recording" (start). A status bar at the bottom indicates "This WebSDR is currently being used by 16 user(s) simultaneously" and a "compact view" toggle.

# KiwiSDR HF 0 – 30 MHz

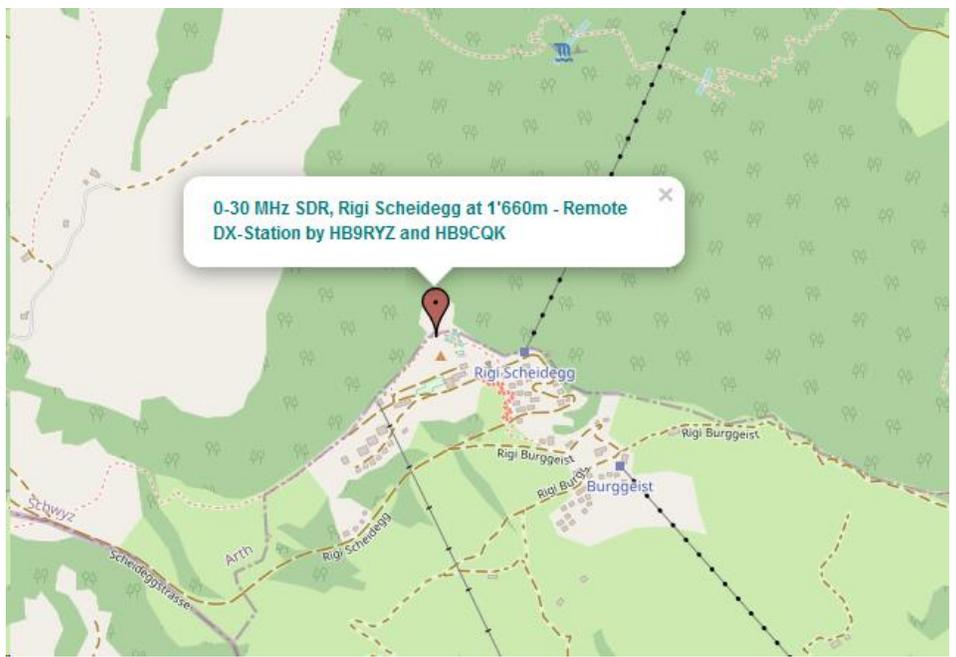
Direct Access: <http://185.199.176.46:8073>

KiwiSDR Map: <http://kiwisdr.com/public>



 **0-30 MHz SDR, RIGI SCHEIDEGG AT 1'660M - REMOTE DX-STATION BY HB9RYZ AND HB9CQK**  
<http://185.199.176.46:8073>  
KiwiSDR v1.436  DRM (0 / 4 users) 

KiwiSDR Map: <http://rx.linkfanel.net>



 **KiwiSDR at Rigi Scheidegg 1'660m operated by HB9RYZ and HB9CQK**  
Rigi Scheidegg | Grid [JN47GA](#), ASL 1660m, [map], SNR 22:11 dB  
[@bluebison.net](#) Antenna: INFO: Wellbrook Loop ALA1530NL "black lines" in the spectrum occur when we send with our F

