

## RF-S (Variable RF Sampler – 200 Watts)

RF Sampler - The model RF-S (Variable RF Sampler) provides a proven, plug-and-play solution for directly sampling the RF envelope from handheld, mobile, or low-power transmitters and amplifiers such as Hermes Lite 2. It delivers a clean, un-rectified, variable non-directional sample at the BNC output, ideal for spectrum analysis, adaptive pre-distortion, oscilloscope RF envelope monitoring (SSB, AM, FM, CW), frequency counting and control, or generating digital pre-distortion feedback signals for compatible SDR systems. When paired with our model RF-D, the RF-S also serves as the post-amplifier reference sampler for Splatter View operation.



Designed for HF use, the RF-S offers passive-flat VSWR performance across a wide frequency range with an extremely low insertion loss of <0.1 dB. VNA performance sweeps are available in the Product Info Sheet PDF.

All CleanRF Systems enclosures are built, assembled, and tested in the USA near the grounds of WWV. Each unit features a rugged baked-on black textured finish, long-barrel SO-239 connectors for easy installation, and is fully warranted against electrical and mechanical defects. Every RF-S includes a 6 ft. RG-58 BNC cable and UHF male-to-male adapter for true plug-and-play operation.

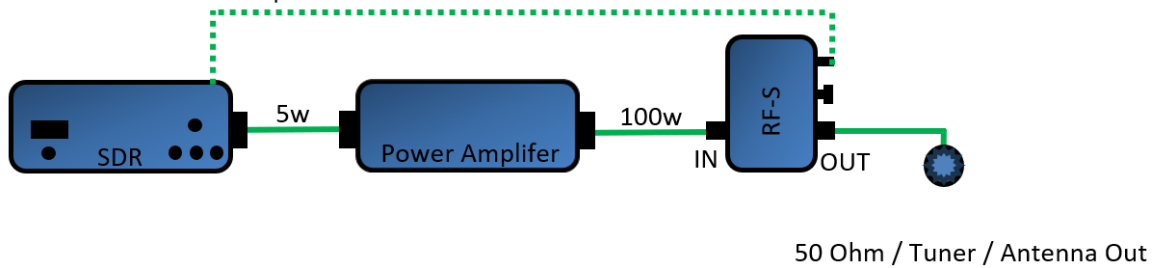
6 Ft. cable and adapter included!

### RF-S Specifications

- Frequency Response: 500 kHz ~ 30 MHz
- Rated Input: 0w ~ 200w PEP
- Sampler Output: -45dBm @ 15MHz
- Connectors In: SO-239
- Connectors Out: SO-239 and BNC
- Controls: Variable RF Output 6dB
- VSWR: < 1:1.1
- Insertion Loss: < 0.1 dB
- Cable and Adapter: 6 Ft. BNC Male-to-BNC Male and UHF Male-to-Male Adapter
- Applications:
  - Oscilloscope Vertical "Y" In (Post-Amplifier Reference Signal)
  - RF Modulation Envelope Monitor
  - Peak Envelope Power Monitor
  - Spectrum Analysis / Adaptive Pre-Distortion / Pure Signal ®
- Dimensions: W 2 1/8" x L 3 1/4" x H 1 5/8"



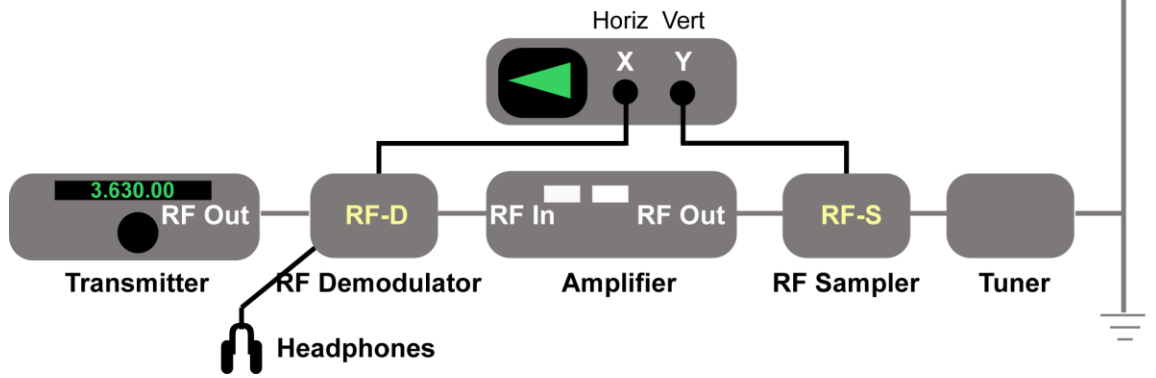
Conceptual illustration shown for adaptive pre-distortion feedback to Pin HL2 RF3 input of Hermes Lite 2



Splatter View Block Diagram

### Scope / RF Demodulator / RF Sampler Wiring Chain

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Trapezoidal Linear RF Pattern Provided by CleanRF Systems Splatter View.

Note sides of Trapezoid are straight with distinct angles.

Bandwidth determined by exciter's audio, not distortions from RF amplifier.

- Low I.M.D. -

