

# Two Channel Record & Play

Capture and reproduce two RF channels anywhere in the 9kHz – 6GHz frequency band simultaneously and synchronously.

Start testing the moment it's in your lab.

Spectrum Defender is designed to deliver a turnkey out-of-the-box experience. With an easy-to-use Graphical User Interface, you'll be up and running in 10 minutes. Programming and customization is always possible, but never required.

## KEY RF FEATURES

- + 9kHz – 6GHz tuning range (record and play)
- + Zero-IF downconversion architecture
- + Built-in LNA (record)
- + 320MHz max instantaneous bandwidth (max IBW)  
*For center frequencies > 1.3GHz*
- + All channels share common timebase and start trigger alignment
- + Controls external Spectra Lab RF pre-select filters

## SIGNAL STORAGE

- + 24TB signal storage (ultra-high-speed online SSD array)
- + Recording file format compatible with common analysis tools. Full file format documentation included.
- + High-speed data offload/backup/archive possible:  
10GigE/40GigE/Nearline RAID/LTFS tape (see options)

## CONTROL INTERFACES

- + Local GUI via Keyboard, Video, Mouse (KVM)
- + Remote GUI via Microsoft RDP protocol (RDP)
- + Programmatic control via TCP/IP sockets interface
- + Programmatic control via LabVIEW API

## UPGRADE OPTIONS

- + Extend online storage (extend record/play duration)
- + Extend frequency range to 18GHz
- + Upgrade to 1GHz Instantaneous Bandwidth (IBW)
- + Add RF pre-select filters at customer specified frequencies
- + Add 3<sup>rd</sup> or 4<sup>th</sup> rec/play channel (can be added any time in future)
- + Additional triggers as specified by customer (IRIG time, network packet, etc)
- + Data offload/backup targets (Nearline RAID / sneakernet / LTFS)
- + Real-time signal processing in FPGA co-processors
- + New feature development via "Feature Bank" contract
- + Support packages, including in-person support at test ranges



*Capture and duplicate real-world RF environments with high fidelity, multi-channel RF record/playback.*

*A complete workflow solution for RF Record/Review/Playback in mission-critical military and aerospace applications.*



Actual system appearance may vary.