Wideband Recording **RF Sensors**



teamSENTINELmicro

Ultra-compact, man-portable and network-ready ultrawide recording V/U/SHF radio frequency sensor.

TeamSENTINELmicro™ sensors are optimized for their small size, easy transportability and extended recording capacity. TeamSENTINELmicro bridges the recording capacity vs size gap between the teamSENTINELnano™ and teamSENTINELmini™ for VHF, UHF and SHF mission requirements.

TeamSENTINELmicro requires no specialized training as it operates on the same software as the rest of the teamSENTINEL® product line. At least one teamSOIGNE® client is required. System set up takes less than 10 minutes.

Highly compact V/U/SHF sensor for man-packable mission requirements

Collect and store up to 16 hours of wideband RF energy for retroactive signal processing and analysis

Verify, supplement and improve automated collection by capturing all energy transmissions within the wideband stare

Base system is tunable from 20 to 3,000 MHz with the option to tune up to 6,000 MHz

Recorded stare bandwidth 22.5 MHz and support for teamVIEW™ with other teamSENTINEL VHF/UHF/SHF sensors



Three sensor teamVIEW depicted with two of the three SENTINELs hearing the same transmitter. Teams can be formed heterogeneously from all SENTINEL family product types (teamSENTINEL, teamSENTINELmini $^{\text{TM}}$, teamSENTINELmicro $^{\text{TM}}$ and teamSENTINELnano $^{\text{TM}}$).

- Collect and record 25 MSPS of V/UHF wideband spectrum while simultaneously performing signal mining and analysis from one or more teamSOIGNE workstations.
- Interactively mine the entire recorded power spectrum (22.5 MHz x 8-hours), by panning and zooming in on signals of interest
- Use the $\mathsf{EspyGLASS^{\scriptscriptstyle\mathsf{TM}}}$ to examine in detail the external characteristics of signals of interest.
- Listen to energy signals of interest (SOIs) directly in TSSpectrum or in TSAnalyzer.
- Extract SOIs as DDRs (digital drop recording) for detailed analysis in TSAnalyzer.
- Manipulate DDRs by listening to, visualizing, demodulating, measuring, and converting to a variety of industry-standard file types.
- Easily and rapidly search, view and access SOI metadata results and DDR cuts from a webbased browser interface.

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| Recorded Sample Rate | 25 MSPS |
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| Usable Stare Bandwidth | 22.5 MHz |
| Minimum Sensor Spectrum Delay (SSD) | ~8 hours |
| Typical Sensor Delay (Rotating, RAID 5)1 | ~14 hours |
| Maximum Sensor Delay (Rotating, RAID 0) | ~16 hours |
| DDR Narrowband Extract Storage | ~100 GB |
| Max DDR Extract Duration | Hours |
| Max DDR Extraction Sample Rate | 25 MSPS |
| Typical SFDR (single tone) | ~70 dB |
| Supports additional teamSOIGNE clients | Yes |
| Supports TeamVIEW with other SENTINELs | Yes |
| Base Frequency Tuning Coverage (MHz) | 20 – 3,000 |
| Optional Frequency Tuning Coverage (MHz) | 20 - 6,000 |





One case holds the Sensor (Client packaged separately)

PACKAGING SPECIFICATIONS

Sensor Dimensions ~ 7"H x 11.25"W x 14.25"D

Weight, including case: ~40 lbs (18.14 kg)

In-line wheels

Two padlock hasps

Watertight case

Set up in 10 minutes or less

Antenna sold separately

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¹ RAID 5 - Single drive failure without data loss. Hot swap HD replacement.

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The Espy Corporation