Brochure

# **VIAVI**

## **OneViewer Post-Analysis Application**

For OneAdvisor 800 Wireless and CellAdvisor 5G

OneViewer is a post-analysis application that allows users to view, edit, and analyze test results saved in the OneAdvisor 800 Wireless or CellAdvisor 5G.



#### **RF Interference Post-Analysis**

Interference can be defined simply as the presence of signals that impacts radio communications either in the downlink (DL) or the uplink (UL) path, producing network impairments. The interfering radio activity can have an internal origin when produced by the network itself, or an external origin when produced by other transmission systems nearby. Cell phones are more prone to interference impairments since their transmission power (UL) is much lower than the base station (DL). This means that any interfering signal in the uplink (UL), even if it transmits at a low power level, can cause retransmissions, or loss of capacity and service. This leads to service problems, which lead to dissatisfied customers and a higher customer churn.

There are three main types of UL interference:

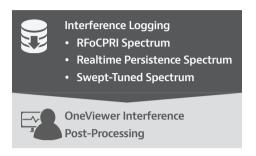
- Passive intermodulation (PIM) usually on the feedline, antenna or nearby metal elements
- Interference in time division duplex signals (LTE and 5G) due to radio synchronization and timing issues
- Interference from external sources, which are increasingly appearing in the radio access network

#### **Key Benefits**

- Spectrum re-player
- Spectrum limit mask with auto event generation of limit violations
- Spectrum analysis with multi-marker settings and trace management
- Conversion to spectrogram view
- Conversion to persistent spectrum view
- Conversion to 3D canvas view
- Conversion to RSSI view
- Report generation (PDF)
- Spectrum trace data can be exported (CSV)

Interference signals can have different characteristics, but in general can be categorized in three main groups:

| Interference Profile  | Tracking Mode |
|---|---------------|
| Narrow-band interference, intermittent or constant, present the same frequency    | RSSI          |
| Narrow-band interference, intermittent or constant, shifting frequency            | Peak Power    |
| Broad-band interference, intermittent or constant, presented at a given frequency | Channel Power |

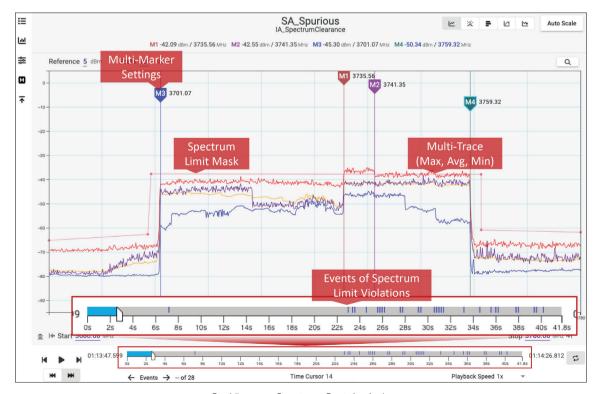


Any of these types of interfering signals require time to analyze to properly assess its profile.

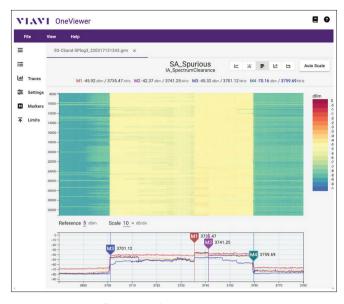
In some cases the interfering signals are intermittent requiring the ability to log the UL interference for some period of time and perform an interference post-analysis.

OneViewer is the solution to post-analysis interference logs and perform the following analysis:

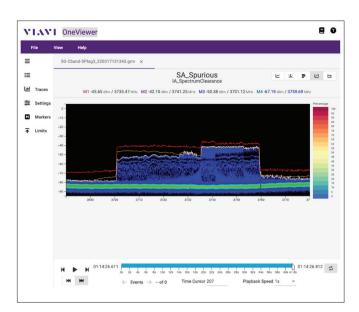
- Playback with loop on/off and variable playback speed up to 8x
- Configurable spectrum limits that automatically create events where the interference signals exceed the spectrum limit
- Multiple configurable markers: up to 10 markers (reference and delta markers) to identify the exact frequency and power level of the interfering signal
- Data can be exported into comma-separated-value (CSV) format



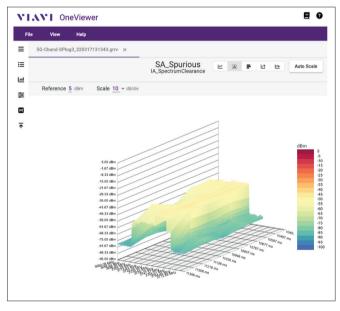
OneViewer – Spectrum Post-Analysis



OneViewer Spectrogram View



OneViewer Persistent Spectrum View



OneViewer 3D Canvas View



OneViewer RSSI View

### **Ordering Information**

| OneAdvisor 800 Wireless |   |
|-------------------------|---|
| ONA-SP-PAA              | Post-Analysis Application Option for OneAdvisor 800 |
| CellAdvisor 5G          |   |
| CA5000-S007             | Post-Analysis Application Option for CellAdvisor 5G |



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To reach the VIAVI office nearest you, visit viavisolutions.com/contact

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