thinkRF Spectraware - Spectrum Viewer v1.3.0

Release Notes

Aug 1, 2025

1 Introduction

This document describes the release information of thinkRF Spectraware software, version 1.3.0. The software comes in 2 distribution versions:

- Standalone (on-premises) distribution:
  - RTSA users:
    - Windows: Spectraware_1.3.0_RTSA_Standalone_x64.exe
    - Linux: spectraware-1.3.0-rtsa-standalone.deb – *available upon request*
  - SXM users:
    - Windows: Spectraware_1.3.0_SXM_Standalone_x64.exe
    - Linux: spectraware-1.3.0-sxm-standalone.deb – *available upon request*
- Web version distribution – no longer supported.

Important Note: As of this release, "S1000" and "Spectrum Analyser" names have been dropped. The software is now known as "Spectraware – Spectrum Viewer".

Refer to the '*Spectraware User Guide*' document for installation instructions and full usage details, especially the "Getting Started" section. This document is also accessible through the web GUI's Help menu.

This version supports all thinkRF's RTSA:

- RTSA receivers
  - R55x0/R57x0 products with 408/418/427 models.
  - R6000 Ethernet option.
- SXM Nodes with a valid, accessible IP.

2 New Features

1. Support thinkRF's SXM IoT Node.
2. New Zoom Viewer for Spectrum and Time domain plots to preview the whole configured span while the main plots zoomed into a particular segment.
3. New Span Controller bar for fast and convenient way to configure the frequency settings.
4. Persistent chart with Decay time control, along with colour and performance improvement.
5. One time / Continuous "Auto Scale" option to adjust the Reference Level and Scale / Div values.
6. Added Data Packing (bit depth) control, which allows for faster streaming. Required firmware v1.7.x for R55x0 products and 1.2.x for R57x0.
7. A "Manual Max Y Power" option for the Spectrum plot, which decoupled the y-axis from the Reference Level, allowing users the ability to adjust the Y axis by not changing any Amplitude values.
8. Cancel button for the 'Connect Device' dialog so that users can access the main panel, such as to see the User Guide.

3 Enhancements

The following other change(s) were made:

1. Aligned Spectrogram horizontal zooming with the persistence chart.
2. Changed the toggle cursor's default to be in the center of the chart UI (both vertical and horizontal) when enabled.
3. Displayed MTU information in the Device Info panel.

4. Improved spectrum streaming, including ‘Waiting for Data Error’ case.
5. Improved Fixed peak mode.
6. Removed redundant information displayed under the Persistent plot, allowing more room for the plot display.

4 Fixed Defects

The following issue(s) are fixed:

1. Fixed issues relating to markers:
   a. marker not sending peak request after config is loading from local config file.
   b. an edge case issue of Peak finding at the start of the spectrum.
   c. issue with retrieving peak value at small RBW values.
   d. marker disappeared under VBW – Cosine Window option
2. Fixed RBW not accurately displayed when using playback.
3. Fixed Sweep speed value when turning on Time Domain display.

5 Known Issues and Limitations

The following are the known limitations or other issues present in these versions.

1. When connecting to a remote device over VPN, users might experience some performance issue. In a near future release, MTU control with Spectraware for managing the network packet size will be provided.
2. When running Spectraware Windows installer, a trusted software warning will be issued. Proceeds with the installation. The installer will be certified in the future release.
3. R55xx/R57xx - Between 30MHz and 50MHz centre frequencies, it is not possible to stream a full 40MHz IFBW as IQ data (time domain). This issue is due to a known issue from Spectraware’s underlaying libtrf API.
4. As RTSA devices do not support multiple users simultaneously, simultaneous multiple instances of the Spectraware application are not supported. The last user’s accessing the device will have the control and data capture. The previous Spectraware instance will go into an error state.

Contact Us

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For all customers who hold a valid end-user license, ThinkRF provides technical assistance 9 AM to 5 PM Eastern Time, Monday to Friday. Contact us at https://support.thinkrf.com/ or by calling **+1.613.369.5104**.