

The New Generation of RCS Signal Processing Software

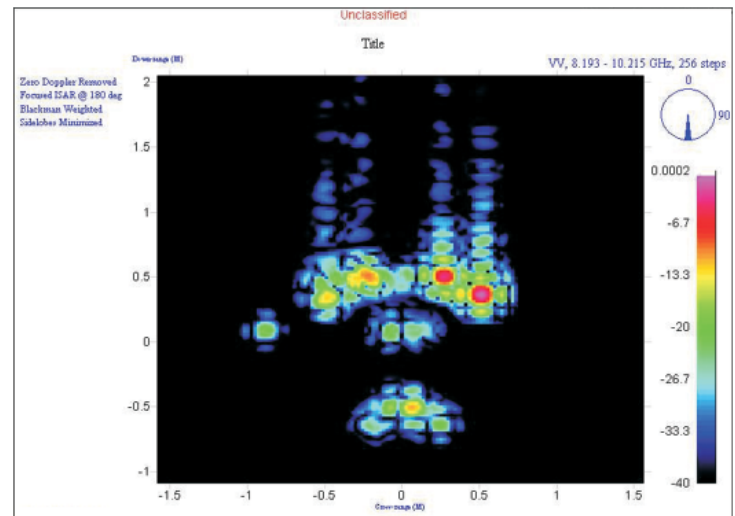
KNOWBELL Evo™ is evolved from the most-advanced RCS signal-processing software available. For over 20 years KNOWBELL has been widely recognized in government and industry as scientifically-accurate and highly-reliable. KNOWBELL Evo™ is the standard by which all others are measured.

- New, more-intuitive user interface
- Process data on dynamic targets
- Motion compensation
- High-resolution images
- Image edit and reconstruction
- Near-field to far-field conversion
- Enhanced batch processing
- Customizable user interface and plots
- Supports all major radar formats
- JPEG “movie” viewer/maker
- Graphical plot-customization tools
- Unsurpassed support

KNOWBELL supports data analysis for indoor and outdoor RCS ranges, as well as flight-line and in-factory quality-assurance measurements. KNOWBELL is independent of data format, supporting over a dozen leading instrumentation radars. New formats can easily be added as needed. KNOWBELL operates on the Windows operating system and features a programmable user interface, user-configurable plots and a powerful scripting language.

Ease of Use

KNOWBELL uses tabs that group related parameters by process. Like the pages of a book, you can quickly choose the tab you need. The tab structure extends to the images, allowing you to quickly choose a polar plot, a global plot, a 2-D image, an RCS plot, or a custom data view.

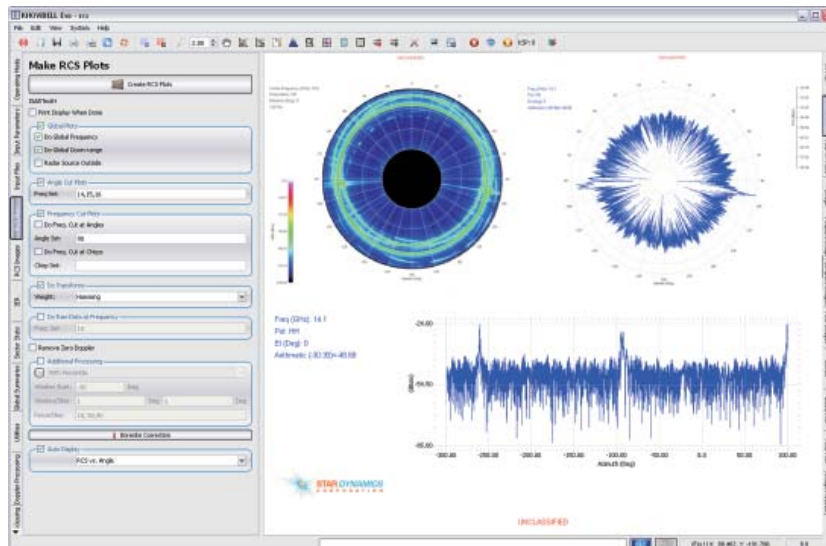


Basic RCS Processing

KNOWBELL includes RCS-versus-angle, frequency, down-range, and cross-range. It supports signal averaging, sliding-window averaging, angle offsets and mirroring, background subtraction, pattern subtraction, calibration, and cumulative and marginal distributions. Also included are power averages, RCS averages, and rank (percentile) filters. Unlimited sector-average statistics can be applied. Out-of-the-box plot options include RCS, amplitude, phase, real-channel, log (frequency) in rectilinear line, polar-line, color-image, and color-global formats. A graphical tool builds custom plots as well.

Diagnostic Imaging

KNOWBELL is an industry leader in diagnostic imaging. KNOWBELL's 2-D imaging employs an ultra-low distortion focusing filter that achieves diffraction-limited resolution with distortion products approximately 20-dB below the noise floor of even the best available radar. KNOWBELL maintains spatial registration to within one pixel throughout the largest image windows, and near-field corrections are available.



KNOWBELL SPECIFICATIONS

Data Formats

| | | | |
|--------------------------|--|-------------------|----------------------------|
| Industry-Standard Inputs | STAR Dynamics BlueMax, élan, Lintek Microwave Vision Orbit F/R 959 v7 to v14 SPC MkIII, MkIV, MkV, MkVe Plus many other custom formats | Standard Outputs: | SDF, ADF, TAG, ASCII & JPG |
|--------------------------|--|-------------------|----------------------------|

Analysis Tools

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|-----------|--|-------------|--|
| Plotting: | Global Down-range Global Frequency Single-frequency Angle Cuts Wide-band Frequency Cut at Single Angle Raw Data from Single Waveform | Statistics: | Median Averages – dB, Power, Coherent Power Peak Minimum Percentiles |
|-----------|--|-------------|--|

User Tools

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|---------------|---|--------------|---|
| Improvements: | Descriptive Tab Labels Intuitive Grouping of Controls Mutually-exclusive Operations Highlighted Sizeable User Tabs & Plot Area Sector Statistics Editor Data Calculator Multiple Tag-editor Windows Switch Clients without Exiting Application Expanded Drawing Tools Expanded Measurement Tools GUI for Creating Custom Plot Layouts | Flexibility: | Logarithmic Axis Scaling Plot Characteristics on Single Dialog 1-D Sector Indicators on X/Y & Polar Plots Interactive Zoom & Move Tools Configurable Scientific Notation WYSIWYG Printouts Unlimited Color Palette Multiple-image Plot Synchronization User-selectable Angle-range Display 3-axis Overlay Rotation |
|---------------|---|--------------|---|

Computer

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| Hardware Minimum: | Most any current-technology personal computer | Operating System: | Windows 2000, XPpro, Vista, Server 2003, Server 2008 |
| Recommended: | 2-GHz Processor 4 GB RAM | Operating System: | Windows XPpro or newer |

