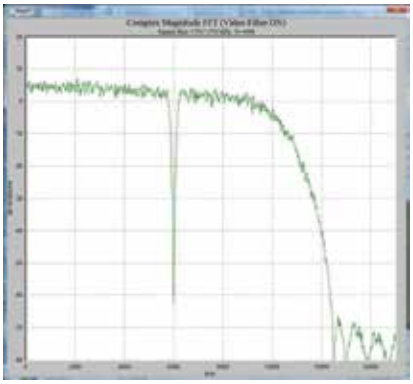
Interference Mitigation Technology

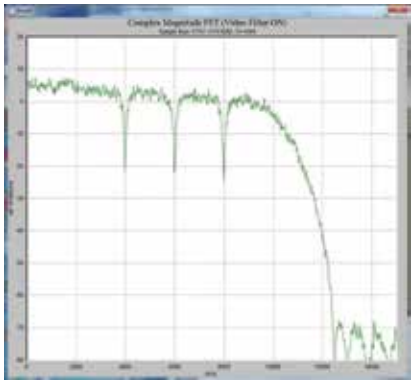
The all-new Cygnus™ interference mitigation technology incorporates the latest digital filtering technology and an integrated Fast Fourier Transforms (FFT) analyzer for real-time spectrum analysis and interference detection. The Cygnus architecture deploys precisely targeted technology in-band filtering measures with minimal impact or disruption to available GNSS constellation signals resulting in higher satellite availability in environments where band interference is present. Cygnus also uses high-resolution Analog to Digital Converters (ADC) for superior anti-jamming performance.

Next-Generation Interference Mitigation

- **Anti-jam and interference mitigation**
- **Built-in digital filtering capabilities and spectrum analysis**
- **Manual or automatic interference mitigation methods**
- **Interference modes**
  - High Interference Mode - for use in challenging environments with suspected or known interference
  - Low Interference Mode - for use in typical environments (normal operating mode)
  - Programmable
  - Designed to enhance analog filters and compensate for wideband RF front-end that does not have IF SAW filters
  - Designed to reject Out-Of-Band (OOB) interference
- **Multiple IIR filters made up of Second Order Sections (SOS)**
  - Programmable
  - Built with Second Order Sections for enhanced stability
- **Multiple Tap FIR filters**
  - Programmable
  - Operation on any two of three wideband channels



65 dB notch deployed by Cygnus to reduce in-band interference.



Three 20 dB notches deployed by Cygnus to maintain optimum performance.