



VID POINTER · SCIMITAR Product Data Sheet

MRSL Real-Time Systems Laboratory (MRSL) offers the **VIVID POINTER (VP) SCIMITAR** system for use in detecting and processing Pulse Doppler signals in real-time for National Intelligence Centers, ISR systems, and self-protection.

VIVID POINTER is the set of algorithms and code which have been developed over a decade of work to autonomously detect, measure, classify, and exploit Pulse Doppler signals. The current configuration **VP SCIMITAR** is a standard 2U rackmount processor and easily interfaced to any host environment. It has been fully integrated into the government processing environment and extensively demonstrated with real signals. The ground version of **VP SCIMITAR** consists of a COTS host DL380 processor with advanced exploitation algorithms implemented in standard signal processing frameworks. This system is

modular and very extensible with ample resources for new capabilities or third party applications.

The **VP SCIMITAR** is designed to accept standard analog or digital RF/IF input data streams and autonomously process them to generate output results in real-time. These outputs are output in standard XML format to files and broadcast for integration/use by any downstream application:

- Raw data measurements spectral descriptor words (SDWs)
- Emitter and Mode identification messages
- Specific Emitter tracking correlation
- Exploitation messages per specific signal type
- High priority event alerts per specific signal type
- Generation of documentation-quality final output reports (text and plots)

This system delivers pre-installed and ready to run with all hardware, software, cabling, and licenses. Also included is the library of signal templates and the basic user's manual.

