The L3 GATEKEEPER™ is another product innovation from L3 Communication Systems-West (CS-West) to improve the performance of critical communication systems. GATEKEEPER™ automatically identifies and suppresses co-channel interference, static tones, dynamic frequency tones and modulated signals encountered in congested RF environments, and maintains the performance of the host system.

Key Features

- Excises a wide variety of interfering waveforms commonly encountered by RF systems worldwide: tones, combs, certain LTE, out-of-band radars, etc.
- Broadly applicable to many hosts that must suppress cooperative and non-cooperative interference: SATCOM and terrestrial/LOS downlinks, full-duplex same-bandwidth data links and other platforms with multiple RF systems operated simultaneously.
- Backwards-compatible with most existing communications waveforms and systems.
- Complements or is an alternative to protected waveforms that reduce throughput.
- 1U 19" rack-mount form factor.
- Web-based GUI operates stand-alone or seamlessly integrated with existing system GUIs.
**Product Description**

L3’s GATEKEEPER™ product family relies on hybrid narrow and wideband techniques that leverage core L3 CS-West competencies and product development in digital signal processing and adaptive communications waveforms.

While the GATEKEEPER™ product family is designed to adapt to many different platforms and applications, the first available GATEKEEPER™ product is a 19” rack, 1U ground assembly with a SNMP PC-based GUI. A front-end classification engine identifies key interferer parameters required for excision. Additionally, the first article assumes cooperative interference, as is the case with full-duplex, same-bandwidth data links and co-site interference. Future offerings in the GATEKEEPER™ product line will include functionality to identify and remove non-cooperative interference, as well.

The GATEKEEPER™ product line offers a new capability to L3’s customers, both in support of existing systems as well as systems not yet developed. It is a powerful tool added to the arsenal of techniques CS-West employs to deliver cutting-edge communications systems and enables the user to reduce system complexity and cost by avoiding capacity-reducing waveforms.