

FEATURES/BENEFITS

- **FCC CALEA compliant for facilities-based broadband access providers (ISPs) and VoIP providers**
Based on ATIS T1.IAS and T1.678v2 industry standards, provides full compliance and safe harbor.
- **Fast: Performs deep packet inspection at wire speeds**
Host processor, with multiple packet inspection accelerators (PIXLs), supports multiple 1Gbps interfaces.
- **Self-Contained: Less expensive to purchase and less expensive to maintain**
Incorporates probe, mediation, and administration functions in a single package. No expensive monthly service fees.
- **Drop in/Turnkey Solution**
Can be installed and configured in minutes using browser-based setup screens. Completely passive installation via Ethernet taps. No third-party involved, so service provider maintains full control and privacy.
- **Flexible, & Extensible to serve other service provider surveillance needs**
Open Surveillance Module™ architecture enables use for other surveillance applications, such as detecting network abuse or unusual traffic

High Performance Compliant Solution for Broadband and VoIP CALEA. The IP Fabrics DeepSweep™ for CALEA is the first self-contained network surveillance system with Broadband and VoIP CALEA compliance. Ideal for small and medium-sized ISP and VoIP networks, a single DeepSweep system functions as the complete CALEA compliance solution, providing the probe, mediation/delivery, and administration functions, which are commonly implemented as separate devices. Furthermore, DeepSweep offers users compliance and safe harbor by fully implementing T1.IAS and T1.678 v2 industry standards.

DeepSweep has the capability to fully inspect every network packet, so it doesn't need to rely on switches, routers or other probes for filtering and intercept. Additionally, the DeepSweep can assimilate and format the intercepted data and deliver it in the standardized manners to the law enforcement agency (LEA) collection devices. Lastly, the DeepSweep user-interface is a set of intuitive and secure browser pages that are accessible locally or from a network-attached remote system.

DeepSweep for CALEA comes in two basic models. The first is for Broadband Internet Access and Services CALEA compliance. It adheres to T1.IAS and includes many key features, such as the ability to specify subject IDs as MAC addresses, IPv4/IPv6 addresses or subnets, DHCP option 82 addresses, subject ids via text string, pen-register, trap-and-trace, and full content intercepts, and fully configurable collection device addresses.

The second DeepSweep model is for VoIP CALEA compliance. It adheres to T1.678 and includes key features such as the

DeepSweep™ for CALEA CALEA-Compliant Surveillance System



IP Fabrics' DeepSweep for CALEA is the industry's first self-contained solution for Broadband and VoIP CALEA compliance.

ability to specify subject IDs by host, address, or tel:phone, pen-register, trap-and-trace, full content intercepts, and fully configurable collection device addresses.

Both CALEA models support multiple concurrent cases, each with potentially multiple subjects and each dynamically updatable.

High Performance, Scalable Architecture

IP Fabrics' Surveillance Module™ architecture and underlying patent-pending multi-core virtualization technology give DeepSweep many unique advantages over basic "PC-based" surveillance systems or hard-wired ASIC-based systems.

DeepSweep's internal host processors and multi-core packet inspection accelerators allow it to monitor multiple 1Gbps Ethernet links at true wire-speed with full layer 2-7 inspection capabilities.

The modular system architecture enables DeepSweep to be used as a stand-alone network surveillance system or in conjunction with other security/surveillance systems (e.g., as a pre-filter), and even supports hosting user-applications on the system processor. The architecture is also highly scalable, allowing multiple DeepSweeps to be configured in parallel or pipelined, as well as for remote systems to share learned information (e.g., dynamic IP address assignment, VoIP call establishment information).

DeepSweep™-1 for CALEA Data Sheet

PRODUCT SPECIFICATIONS

DeepSweep for Broadband CALEA:

- Fully supports T1.IAS, including Annex C and SHA-1 message digest
- Flexible subject ID format: MAC address, IPv4/IPv6 address, subnet, DHCP option 82, subject name/text string including UTF-8 and other encodings
- Flexible collection system address format for Cml and CmC messages: IP address, port, TCP/UDP
- Ability to select/limit user identification protocols, including RADIUS, IPCP, CHAP, DHCP, and PPOE

DeepSweep for VoIP CALEA:

- Fully supports T1.678v2 (DSR) for SIP-based VoIP
- Flexible subject ID format: name@host, name@IPv4/IPv6 address, phone@host, host, tel:phone
- Flexible collection system address format for CII and CC messages: IP address, port, TCP/UDP

Additional Surveillance Modules:

- Packet traffic: individual L3-7 packet analysis at the network/protocol level
- Packet flow: L3-7 flow-based analysis at the network/protocol level
- Sub IP: L2/2+ analysis (e.g. Ethernet, PPPoE, MPLS)
- Unusual traffic: malformed packets, improper fragments, protocol anomalies
- Netflow/IPFIX: analysis of Netflow records from routers/other networking equipment
- sFlow: analysis of sFlow records from switches
- DNS: protocol-specific analysis of DNS lookups (e.g., specific users or database of DNS names, etc)
- User ID: protocol-specific analysis of user login, authentication, and IP assignment.
- SIP Intercept: protocol-specific analysis of SIP messages
- RTP Intercept: protocol-specific analysis of RTP (VoIP) packets and flows
- Email: protocol-specific analysis of common email protocols (e.g. SMTP) and email content

Performance and Capacities:

- Dual 3.6Ghz Xeon host processor with 2 or 4 packet inspection accelerators
- Up to 1000 GB disk space
- Up to 1,000,000 flows, 5000 signatures, 8Gbps wire-speed surveillance

I/O:

- 2, 4, or 8 10/100/1000 identity free Ethernet surveillance interfaces
- Flexible interfaces on surveillance ports via pluggable SFPs
- 2 Gb Ethernet system ports

Power:

- Hot-swappable, redundant, auto-sensing 100-240 VAC

Physical/Mechanical:

- Rack mountable, 2U appliance
- Height: 3.45 inches
- Width: 17.14 inches
- Depth: 20 inches
- Weight: 33lbs

Environmental (preliminary):

- Operating temp: 10 c to 35 c
- Non-operating temp: -40 c to 70 c
- Non-operating humidity: 95% non-condensing

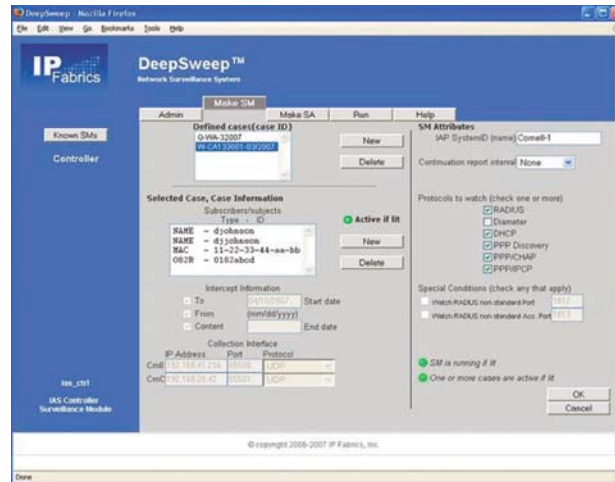
Safety (preliminary):

- UL 1950, CSA 950, IEC 950, TUV/GS EN60950

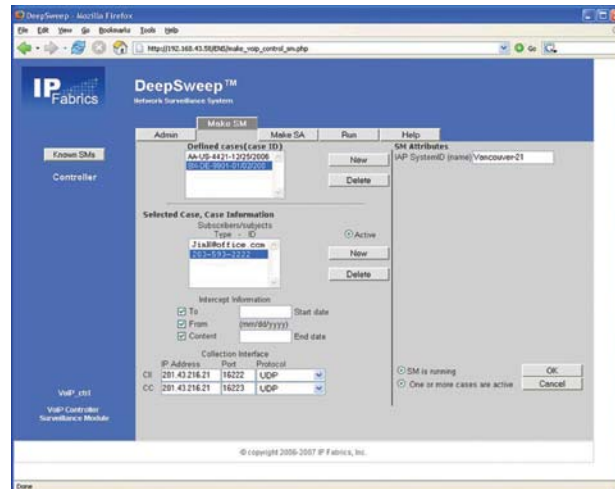
Emissions (preliminary):

- FCC Class A certified, CISPR 22 Class A tested, EN55022 Class A tested, VCCI Class A ITE tested, AS/NZS 3548 Class A tested

POWERFUL BROWSER-BASED INTERFACE



DeepSweep Broadband CALEA configuration



DeepSweep VoIP CALEA configuration



Quick and Easy to Install and Configure

DeepSweep is typically installed in a completely passive tap configuration with visibility to both control (e.g., DHCP, RADIUS/DIAMETER login, SIP call establishment) and user data (e.g., internet traffic, VoIP RTP). Based on IP Fabrics' innovative Surveillance Module™ architecture, the DeepSweep units are easily configured via a series of intuitive browser pages geared towards a network operator executing an intercept court order.

ORDERING INFORMATION

For more information, including pricing, availability, and ordering, please contact IP Fabrics by email at info@ipfabrics.com or at the phone numbers at right.

IP Fabrics is an Affiliate Member with the Intel® Communications Alliance, a community of communications and embedded developers and solution providers committed to the development of modular, standards-based solutions on Intel technologies. For more information, please visit www.intel.com/go/ica.



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