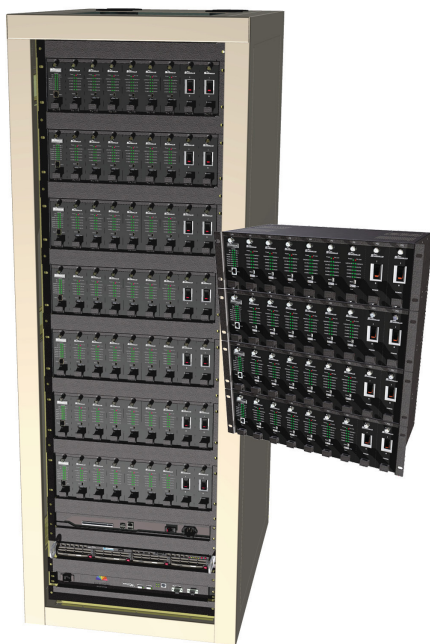# Data Distribution System (DDS)

Sunhillo's Data Distribution System (DDS). The world of communications can be a challenging arena when there are multiple, dissimilar data sources that need to be controlled, monitored and routed. Sunhillo's DDS Platform meets that challenge head-on providing a fully scalable, chassis-based data distribution system complete with protocol conversion. The DDS Platform draws together Sunhillo's rich line of surveillance communication products and experience into one unified system. Coupled with the DDS Domain Controller (DDC), the distribution, control and monitoring responsibility of multiple, disparate data sources are centralized into one easy-to-use system. Our system provides communication

engineers with scalable building blocks capable of transferring data in any combination - Serial-to-Serial, Serial-to-LAN, LAN-to-Serial or LAN-to-LAN. The intelligent endpoint technology distributes the communication and protocol conversion overhead, thus allowing the system to scale with the changing needs of the data center without sacrificing performance or functionality.

High Performance Architecture
Built from deployment-proven surveillance data communication technology, DDS distributes the detail of a connection to the system into a collection of "endpoints" managed by the DDC. Utilizing all rack mountable components, there are two primary categories of

endpoints that provide the bulk of the system functionality: IP Endpoints and Serial Endpoints. Each endpoint has the capacity to do a protocol conversion or retransmit the data from the source.

Supported message protocols include SGF, ECGP, ASTERIX (cat1/2, cat34/48), ASR-9, CD-2, ARSR-4, TPS-70, FPS-117 and MAR.

Data Distribution System (DDS)

High Performance Architecture

IP Endpoints build upon Sunhillo's Surveillance Gateway Processor (SGP) technology. Through the SGP technology, the platform provides six, or more, physical Ethernet ports through which LAN based data may flow. Consumers of LAN-based data may source data from another LAN data flow, or from Serial Endpoints. Serial Endpoints can be added in four port increments as provided by Sunhillo's flagship product, Longport PCM. The Longport PCM is an intelligent endpoint for serial communication lines. It can be hot-swapped in-line without disturbing other dataflows or requiring any manual configuration. While the PCM provides a minimum port density of four discrete DB25 ports, the corresponding chassis accommodates up to six PCM cards for a total of 24 ports per Longport chassis. The PCM supports synchronous, asynchronous, HDLC/SDLC and Bi-sync interconnectivity. The DDS Domain Controller (DDC) is the aggregate of Sunhillo communication experience and manages the operation of the endpoints as a supervisory layer on top of the SGP.

With dual power supplies and a RAID disk controller, the DDC is designed to deliver reliability in a compact 2U package. However, reliability is also a scalable aspect of the DDS Platform which optionally supports full redundancy to the PCM level.