MILITARY & DEFENSE

IXI TECHNOLOGY

Shipboard Peripheral Replacement System (SPRS™)

SPRS

A high-performance, low-cost replacement for legacy navy peripheral equipment

SPRS replaces legacy navy peripheral equipment that is difficult and expensive to maintain. It combines the advantages of modern off-the-shelf technology with a robust mechanical design that allows it to meet the environmental specifications required for naval shipboard applications. With an intuitive graphical user interface, SPRS operates like the peripheral device being replaced so no program changes are required on the host computer. SPRS adds powerful capabilities not possible with the original equipment such as networking, remote control, and greatly increased storage capacity. It is configured with military connectors that mate with existing cables to further simplify the transition and save costs. Conversion of existing media to SPRS is done using either standard Navy utility programs or with IXI Tech's tape conversion utility (included). Once converted, SPRS completely eliminates dependence on unsupportable hardware and obsolescent tape and disk media.

Device Replacement- A complete listing of legacy devices that can be replaced appears on page 2. Each device program is independent and can operate concurrently with any combination of identical or different devices. In many cases, SPRS can replace a legacy device for no more than the cost of its annual maintenance. And when replacing multiple devices with a single SPRS, the savings multiply.

Disk Drives - Disk packs and Removable Interchangeable Media Modules (RIMMs) are mapped to local or networked disk drives. Multiple packs or RIMMs can be stored on a single SPRS disk and are easily mounted by simply selecting from a pop-up list.

Magnetic Tapes - SPRS replaces tape transports by mapping local or networked disk drives to magnetic tape unit numbers. All tape commands are supported such as read, write, rewind, write tape mark, space file, etc. The number of tapes that can be stored is limited only by available disk space. Tapes are mounted by selecting from a pop-up list.

Operator I/O Consoles - Keyboard and display text may be concurrently printed and recorded to a text file, making it easy to cut and paste into messages, reports, and manuals. Operator keystrokes can also be stored in macro files and replayed, saving time and eliminating errors for complex, lengthy or repetitive keyboard inputs. Macros can also be used to automate execution of tests or system startup. To replay a macro, the operator simply selects from a pop-up list.

Printers - Printed text is displayed in a scrollable window. It may also be concurrently routed to a physical printer or recorded to text file.

Additional SPRS Features
A gigabit Ethernet port allows SPRS to communicate with net-work resources such as servers, other SPRS units, or Storage Area Networks (SANs). It can also be remotely controlled over the network making it possible to centralize the control of multiple load devices and I/O consoles. With SPRS configured as a server, multiple clients can run independent terminal sessions, controlling devices running on the SPRS server.

Mass Storage Capabilities
SPRS can be configured with up to 7 mass storage devices, depending on configuration. Its versatile design accommodates 2.5", 3.5", or 5.25" drives, with up to six of those devices behind the front access door using fixed or removable media. Mass storage options include hard drives, solid state drives (SSD), and CD/DVD drives. A special compartment exists for mounting drives that are not qualified for shock or vibration, ensuring that they are mechanically isolated from the rest of the mission critical enclosure. Front and rear panel USB ports allow for external connection of virtually any USB device.

SPRS Replaces the Following Legacy Equipment:

- OJ-172 Data Exchange Auxiliary Console (DEAC)
- USH-19 Magnetic Tape Subsystem (MTS)
- RD-358 Magnetic Tape Subsystem (MTS)
- USH-26 Cartridge Magnetic Tape Unit (CMTU)
- UYH-2 Disk Memory Set (DMS)
- BYH-1 Submarine Random Access Storage Set (SUBRASS)
- UYH-3 Magnetic Disk Set (Basic and FMFS) (Canadian MU-5028 & UYH-504)
- UYH-16 Magnetic Disk Set (FMFS)
- OL-267 Data Terminal Group (DTG) (Canadian TD-1332)
- OA-7984 I/O Console (MK 77, UNIVAC 1532)
- USQ-69 Data Terminal Set (DTS) (Canadian U2049)
- LP2470 NTDS Line Printer
- UGC-136 Teleprinter (Canadian UGC-504)
- TT-624 Teleprinter
- LP1015 NTDS Line Printer

SPRS Rugged- Shown With Separate Keyboard Drawer Option

SPRS - Rear View

TECHNICAL SPECIFICATIONS

Basic Specifications

12.1" color TFT flat panel display
82-key keyboard and trackball
One (1) hard drive (removable)
One (1) CD/DVD-RW Blu-Ray drive
Choice of any two (2) MIL-STD-1397C NTDS channels
- Parallel Type A, B, C and H
- Serial Type D
- Serial Type E
Gigabit Ethernet LAN
Front and rear panel USB ports
19" Rugged Rack-mount slides
Options
- 1 to 8 NTDS Channels
- 1 to 4 Hard drives (STD or Solid State)
- 2 CD/DVD Blu-Ray

Environmental Specifications*

Operating Temperature: 0° to 55°C
Storage Temperature: -23 to 70°C
Vibration: MIL-STD-167A, Type 1
Shock: MIL-S-901D, Grade A
Altitude: MIL-STD-810F
DC Magnetic Field: DOD-STD-1399
EMI: MIL-STD-461F
Sea State: DOD-STD-1399
Airborne Noise: MIL-STD-740-1
Structure-borne Noise: MIL-STD-740-2
Power: MIL-STD-1399C
Ship Motion & Attitude: MIL-STD-810F and DOD-STD-1399, Section 301A
Drip: MIL-STD-810F Method 506.4 Procedure III (45 degrees)
Humidity: MIL-STD-810F
(95%, non-condensing)

*Designed to meet, subject to parts availability, configuration, and formal qualification

Physical Specifications

Standard 19" rack-mount enclosure
- With attached fold down keyboard tray option: 12.25" H x 19" W x 21" D (Lab Use)
- With detached 19" rack-mount retractable keyboard drawer option:
System enclosure: 12.25" H x 19" W x 21" D
Keyboard drawer: 1.75" H x 19" W x 12.25" D
Air-cooled, front intake, rear exhaust
Weight: 65 to 75 lbs., depending on configuration
(Rugged Version)

Additional Options available with SPRS:
Mass storage options (fixed and removable hard drives, solid state drives (SSD), CD/DVD, MIL-STD-1397C NTDS channels
- Up to 8 channels of any type (NTDS Types A,B,C,D,E,H)
- NTDS connector options: M81511 (85-pin), M28840 (92-pin) or D38999 (79-pin), standard navy shipboard Type D (coaxial BNC) or Type E (triaxial BNC) BJ89