

General

Eliminating and automating manual patch bays and cords, the System S2561F is a single-ended high-density switch array specifically designed for routing both digital and analog signals. It can handle a wide range of signals such as IRIG-B, PCM, TTL, clock & data, 70MHz IF-video, or other similar signals between DC-125MHz.

Fully populated, this 5RU unit delivers 256 inputs and 256 outputs where a given input can be connected to one, many or all 256 outputs (full Fan-OUT non-blocking). The S2561FX is the same, but includes our **Option X** front panel display (10.1") providing additional front panel visuals and features.

The system is field configurable from a 32x32, which is then expandable to a full 256x256 within the same chassis. To further expand, multiple units can be connected together for 512x512, or even sizes up to as large as 1024x1024.

The unit comes standard with redundant hot-swap power supplies, and is available with either single or dual (redundant) hot-swap C3 controllers installed. The C3 controller features 10/100 Ethernet (LXI certified), USB 2.0 and multi-serial (RS-232C/422A/485) control ports. System control & monitoring (and programming updates) is simple via the built-in web browser, or from our software package RouteWarePRO.

The optional I/O connector adapter panels allow the system to be multi-purpose for clock/data, TTL, PCM, E1, or any combination of digital or analog signals depending upon the type of panel selected. Signals can be logically grouped together as clock and data with BNC's, or for PCM type signals. The panels also allow the user to remotely locate the I/O from the actual switching chassis. This allows a new higher level of flexibility for the system integrator.

Applications

- Telemetry data TTL or PCM (clock and data streams)
- Audio, Data or Video routing
- E1 audio switching (30 channel optional card)
- Clock & data routing/distribution
- Mobile telemetry and surveillance shelters
- Production studios, data recorders
- Analog NTSC or PAL video routing

Features

- High reliability solid-state switch elements
- Redundant signal paths (Tri-Stage)
- Flexible configuration: 32x32 up to 256x256, or larger
- Capable of digital and analog switching
- DC to 125MHz bandpass
- Ultra-high density, over 65,500 crosspoint in 5RU
- Hot-swap module technology
- Menu driven color touchscreen display (4.3" & 10.1")
- Available with either single or dual CPUs
- 10/100 Ethernet, USB and Serial control ports
- TCP/IP, SNMP, SNMP v1/v2, IPv4 & IPv6 & web browser
- Removable microSD card for secure environments
- Rugged 5RU high aluminum/steel chassis
- International AC power range
- Self-monitoring hot-swap plug-in supplies with PFC
- Integrated rack mount design (19 inch)
- Chassis slide mounting hardware (slides not included)
- Certified CE EN61010 (LVD)
- Compatible with RouteWarePRO control software



Advanced C3 Controller
Single or Dual



Download our Monitor & Control software **RouteWarePRO** for a FREE 30-day trial today!



System S2561FX
(shown with 10.1" display)

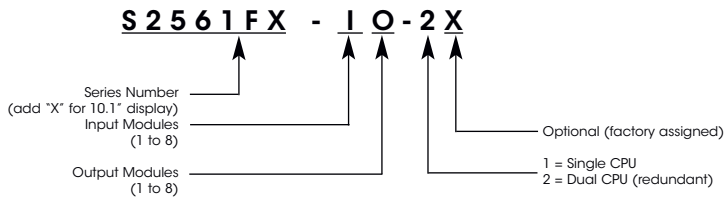


System S2561F
(shown with 4.3" display)



Series AP32 Adapter Panels
Units available for various configurations with interconnect cables included

Model Number Assignment



Hot-swap power supplies are standard

Adapter Panel Assemblies

(sold separately, see individual data sheets)

Passive input panel assembly

- For 256x256: AP32BI-S76 (includes two cables and two termination plugs)
- For 512x512: AP32BI-E-S76 (includes four cables)
- For 1024x1024: AP32BI-4E-S76 (includes eight cables) - different unit from shown.

NOTE: Must be used with matching output panel assembly. Provides 75 ohm BNC's to the user. Specify system S2561F(X)-xx-2.

Active output panel assembly

- For 256x256: AP32BO-S76 (includes two cables and two termination plugs)
- For 512x512: AP32BO-E-S76 (includes four cables)
- For 1024x1024: AP32BO-4E-S76 (includes eight cables) - different unit from shown.

NOTE: Must be used with matching input panel assembly. Provides 75 ohm BNC's to the user. Specify system S2561F(X)-xx-2.



System S2561F Specifications

- Minimum array size32 input, 32 output
- Maximum array size256 input, 256 output
- Expansion increment32 ports per module
- Design capacity1024 inputs, 1024 outputs **
- Switching elementsSolid-state
- Type of systemNon-blocking with full Fan-Out
- ArchitectureTri-Stage redundant, uni-directional

** Systems comprised of multiple units are individually controlled unless special Master/Slave controller is purchased.

Input Characteristics

- Signal connector62 position DSUB
- CouplingDC
- Impedance50 ohm (75 ohm optional)
- Input typeSingle-ended

Output Characteristics

- Signal connector62 position DSUB
- CouplingDC
- Impedance50 ohm (75 ohm optional)
- Output typeSingle-ended

Signal Characteristics (without adapter panels)

- Frequency responseDC-125MHz (50 ohm version)
- Nominal signal level±1.5VDC
- Maximum input level±10.0VDC (no damage)
- Crosstalk isolation>60dB @ 4MHz

Signal Characteristics with 75 ohm Adapter Panels (shown above)

- Frequency responseDC-100MHz minimum (75 ohm system)
- Input VSWR<1.3:1
- Nominal signal level±5.0VDC
- Maximum input level±20.0VDC (no damage)
- Crosstalk isolation>60dB @ 4MHz
>40dB @ 50MHz
>30dB @ 100MHz

General Specifications

- Module technologyHot-Swappable
- Power supply sectionRedundant hot-swap standard
- Controller CPUSingle or Dual (redundant)
- Remote interface10/100 Ethernet, USB & Serial (232/422/485)
- Local controlColor touchscreen (4.3" or 10.1")
- Configuration routingAutoRoute or manual
- Configuration memoryFlash
- CoolingForced cooling with RPM monitoring
- AC power requirements90-264VAC, 47-440Hz, 400Watts
- Power cordsDual inputs (USA 15A)
- Weight50lbs
- Size8.75H x 22.00D x 19.00W (5RU)
- Operating temp0 to +50C
- Non-operating temp-20 to +85C
- Humidity0 to 95% (NC @ +25C)
- MTBF>15,000 hours (per MIL-HDBK-217F N1, ground benign @ +25C) estimated

Universal Switching's policy is one of continuous development, and consequently the company reserves the right to vary from the descriptions and specifications shown in this publication.