Specification Sheet SLX320-001

Scaleable High Performance 850-2450MHz L-Band Matrix
Up to 64x256 (Fan-OUT), 256x64 (Fan-IN) Switching Array
System SLX320 and SLX320i - 13RU

PRELIMINARY - March 2017

General

The SLX320 (Fan-OUT) and SLX320i (Fan-IN) large format SatCom modular L-Band matrix unit provides system professionals with an uncompromising combination of modularity, high performance, and extreme reliability. Modularity is designed in for configurations up to 64x256 (256x64) and standard capability for 950-2150MHz signal routing, or 850-2450 extended bandpass versions. **Other asymmetric configurations are available such as 128x192 (192x128),**

As part of our field proven CAS product offering (Critical Application System), all active modules and assemblies are hot-swap and removable via the lockable hinged front panel. The system also includes redundant hot-swap power supplies and optional redundant hot-swap system controllers (C3 CPU) to deliver decisive up-time as well as the ultimate in system reliability for critical applications.

Compact (13RU) and high performance, the modular design provides a cost effective flexible switching capacity for configurations up to 64x256 (non-blocking Fan-OUT) or 256x64 (combiner Fan-IN). Reduced sized versions (depopulated) are also available to reduce initial system cost. Larger configurations up to 512x512 are available by cascading multiple units with a common control for simple system management.

Complete control and monitoring of the unit is available at both the intuitive touchscreen front panel, or any of the remote interface(s).

Front View - 13RU

Applications

- Communication installations
- Encryption and decryption installations
- Government secure sites
- SatCom modem uplink and downlink
- Airborne surveillance systems
- Teleport and last mile installations
- Ground station and infrastructure facilities
- Receiver routing for transmit or receive

Features

- High reliability GaAs Tri-stage (redundant) technology
- Half the RU of competitors (for similar configuration)
- SMA , BNC or F-Type signal connector types
- Impedance 50 or 75 ohm
- Redundant hot-swap power supplies with PFC
- Single or dual controllers (and control ports)
- Available in Fan-OUT or Fan-IN (combiner) versions
- Ethernet, USB and Serial control ports
- Removable microSD card for secure environments
- SNMP v1/2/3, TCP/IP, SNTP, web browser control
- Built-in continuous diagnostics and monitoring
- Variable (programmable) gain
- Field configurable serial port (RS-232C/422A/485)
- International AC power inputs

Made in the USA

Since 1992
Quality
Innovation
Commitment
ISO 9001:2008
Certified

RouteWarePRO control GUI
INCLUDED (1UL)

SLX320-001

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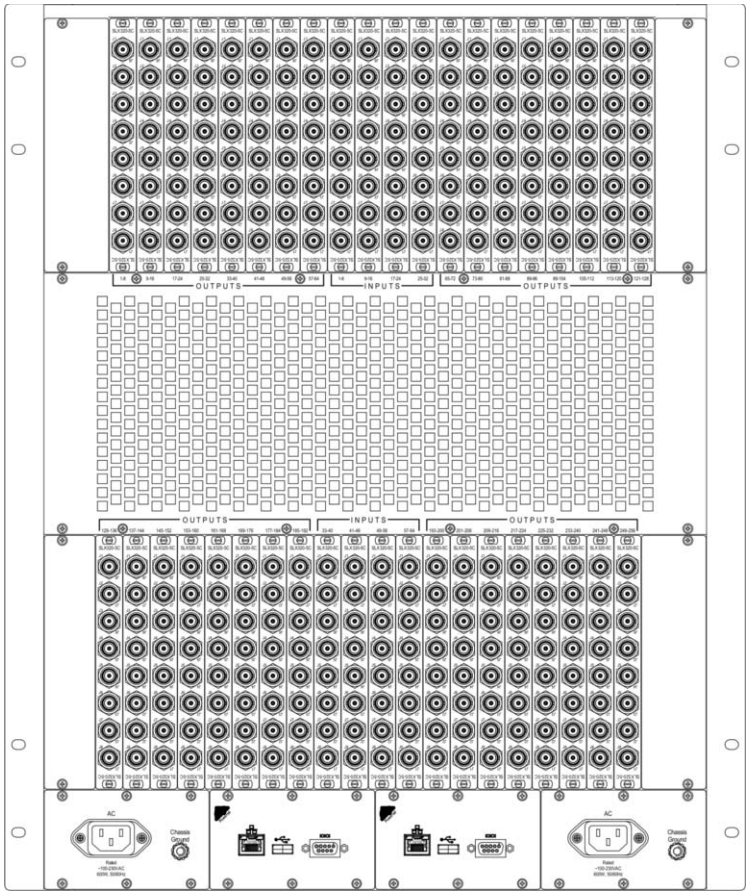
New Technology with Experience

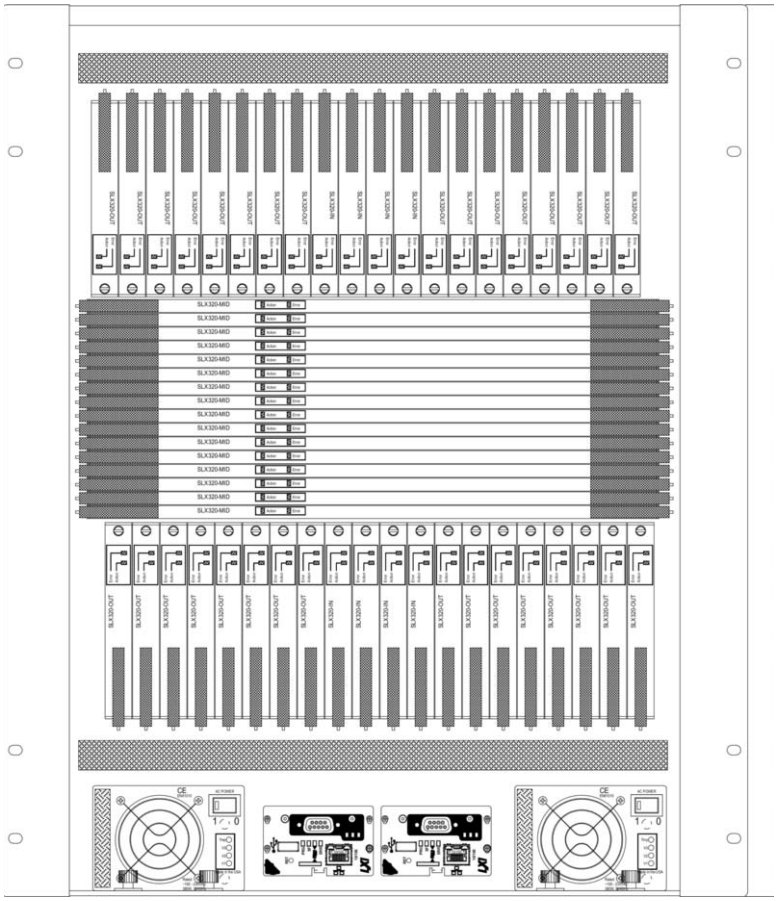
Our SLX320 is designed with the latest components for higher performance, and lower power consumption. Shown below is the modular rear surface where a mix of I/O connector types can be used (SMA, BNC or F). Behind the hinged front panel is where all active modules (switch modules, power supplies, fan assemblies, and CPU's) can be hot-swapped.

A less than populated unit can simply be expanded in the field by adding new modules. Inputs or outputs can be added in 8-channel increments (independently). USC has been designing large format Tri-Stage switching systems for over 20 years (since 1993). Our closest competition is over twice the size for a similar configuration.

Rear View - (fully populated 64x256)



Inside View - (fully populated 64x256)



System SLX320(i) Specifications

SLX320 array size . . . . . .Up to 64x256 or 128x192 fan-out array
SLX320i array size . . . . . .Up to 256x64 or 192x128 fan-in array
Switching technology . . . . . .Solid-state GaAs elements
Type of system . . . . . .Non-blocking (fan-out) or Combiner (fan-in)
Architecture . . . . . .Modular Asymmetric Tri-Stage (redundant)
Signal connector location . . .Rear panel

I/O Characteristics (SLX320)

Frequency range . . . . . .950 - 2150MHz (850-2450MHz extended)
Impedance . . . . . .50 ohm (75 optional)
Coupling . . . . . .AC
Gain . . . . . .Unity (nominal)
Programmable gain . . . . . .+20dB to -8dB in 0.5dB steps
Flatness . . . . . .<+/-1.5dB, <+/-0.5dB @ 40MHz seg
Isolation . . . . . .>65dB (I/I, O/O, I/O)
Input return loss . . . . . .>14dB typ
Output return loss . . . . . .>14dB typ
-1dB compression . . . . . .+3dBm min
Noise Figure . . . . . .<20dB @ 0dB gain (nominal)
Output IP3 . . . . . .>+10dBm
Signal connector . . . . . .BNC, SMA or F-Type available

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

General Specifications

Switching speed . . . . . .<10mS (command to action)
Power supply section . . . . . .Hot-Swap redundant supplies
Serial control port . . . . . .Serial (RS-232C, 422A or 485 multi-drop)
Ethernet port . . . . . .10/100BaseT, SNMP v1/2/3, TCP/IP, SNTP
Serial port connector . . . . . .DE-9S (D-Type female)
USB Port . . . . . .2.0 **
Redundant controllers . . . . . .Optional (hot swap)
All active assemblies . . . . . .Hot swap via hinged lockable front panel
Front panel display . . . . . .Touchscreen 10.1"
Configuration memory . . . . . .FLASH, and removable microSD
Cooling . . . . . .Fan assisted (hot swap via front)
AC power requirements . . . . .90-264VAC, 47-440Hz, <700 Watts
Line protection . . . . . .Resettable circuit protectors (front)
Weight . . . . . .<110 lbs
Size . . . . . .22.75H x 22.50D x 19.00W (13RU), 3/16"pnl
Operating temp . . . . . .0 to +50C
Non-operating temp . . . . . .-20 to +85C
Humidity . . . . . .0 to 95% (NC @ +25C)
MTBF . . . . . .>15,000 hours (estimated)
Software GUI . . . . . .RouteWarePRO included (1UL)
Warranty . . . . . .2 years standard, 5 years optional
Certifications . . . . . .CE EN61010

** NOTE 1: GPIB is also available using our GPIB-USB adapter.
NOTE 2: If special or unique performance or features are required, the base model number is used plus a unique 5-digit suffix.

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