Specification Sheet SLM128X-001



High Performance 850-2450 Extended L-band Matrix Modular 64x128 (128x64) Switching Array System SLM128X Fan-OUT & SLM128Xi Fan-IN Types - 4RU

February 2023

General

Today's communication installations demand dependable and high performance equipment at an affordable price. Our SLM128X (SLM128Xi) compact modular matrix unit provides an uncompromising combination of high performance and high reliability switching coupled together for extended L-Band signals in the 850-2540MHz range. Others signal ranges are available including wideband. Cantactd the factory.

Compact (4RU) and high performance, the unit provides a modular cost effective switching capacity for medium installations. All inputs and outputs connectors are located at the rear of the unit. The SLM128X is a distributive non-blocking (Fan-OUT) product that can be ordered in array sizes from 8x8 to 64x128. The SLM128Xi is a combiner version (Fan-IN) in sizes from 8x8 to 128x64.

Standard redundant power supplies with independent AC inputs deliver the ultimate in system reliability for critical applications. The unit can also be configured with dual control CPU capability. An optional Bias-T capability power supply is available (option P). Complete control and status of the unit is available at the built-in web browser, touchscreen display, or via the available RouteWarePRO software package.



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



Applications

- Ground station and infrastructure facilities
- Communication installations
- ENG trucks and vans
- Airborne surveillance systems
- Teleport and last mile installations
- SatCom receiver routing for transmit or receive

Features

- High reliability Gen-5 GaAs switch technology
- BNC or SMA Type signal connectors
- Impedance 50 ohms (75 optional)
- Redundant hot-swap power supplies
- Dual control CPU capability
- Front panel access for critical elements
- Dual independent AC circuits
- Optional Bias-T redundant power supply (option P)
- Available in distributive Fan-OUT or Fan-IN (combiner)
- Ethernet control port (10/100/1000)
- Large 10.1" touchscreen with Option-X enhancements
- Built-in scheduler for automated actions
- SNMP v1/v2C/v3, TCP/IP, SNTP & web browser control
- **Built-in diagnostics**
- Variable (programmable) gain
- International AC power input
- LXI enabled an LabVIEW drivers available







Fan-Out Number Assignment

The following format is used to define a standard Fan-OUT (distributive) switching system:

SLM128X-iioo-xzc

The SLM128X is the base model number for the Fan-OUT version of the system followed by "ii" defining the number of input elements (01 to 08) with 8 ports per element. Next, "oo" defining the number of output elements (01 to 16) with 8 ports per element. The final suffix is defined where "x" is 1 or 2 CPU controllers (single or redundant), "z" is the system impedance (5 for 50 ohms or 7 for 75 ohms) and "c" defines the I/O connectors (A for SMA or C for BNC). Note that 75 ohm is only with BNC and not SMA. Mixed connector configurations or performance requirements will be assigned a special "xxxxx" system suffix number (example: SLM128X-12345).

System Control Software - INCLUDED

The SLM128X come with our RouteWarePRO control software package that will get you up and running. Within minutes, you can install the software and start controlling your switching system remotely.

The user can customize the GUI on the fly, or by editing simple text files. Screen colors, input and output channel designations, panel names and labels can be easily added or changed too, or even the title displayed at the top of the GUI. Examples are provided on the installation media and videos are on our website.

Fan-In Number Assignment

The following format is used to define a standard Fan-IN (combining) switching system:

SLM128Xi-iioo-xzc

The SLM128Xi is the base model number for the Fan-IN combiner version of the system followed by "ii" defining the number of input elements (01 to 16) with 8 ports per element. Next, "oo" defining the number of output elements (01 to 08) with 8 ports per element. The final suffix is defined where "x" is 1 or 2 CPU controllers (single or redundant), "z" is the system impedance (5 for 50 ohms or 7 for 75 ohms) and "c" defines the I/O connectors (A for SMA or C for BNC). Note that 75 ohm is only with BNC and not SMA. Mixed connector configurations or performance requirements will be assigned a special "xxxxx" system suffix number (example: SLM128Xi-12345).



System Specifications (Fan-OUT)

	. ,
Array sizel	Jp to 64x128 (see model definition)
Switching technology	G-5 Solid-state GaAs elements
Type of system	Ion-blocking Fan-OUT, or Fan-IN
Architecture	Aodular
Signal connectorE	BNC or SMA Type (see above)
Signal connector location	Rear panel
I/O Characteristics *	

Frequency range	.850 - 2450MHz
Impedance	.50 ohm standard, 75 optional
Coupling	.AC
Gain	.Unity (nominal)
Programmable gain	.+6dB, -6dB minimum, 0.50dB steps
Flatness	.<+/-3.0dB, +/-0.35dB 40MHz segment
	<+/-2.0dB, 950-2050MHz
Isolation	.>60dB (I/I, O/O, I/O)
Input return loss	.>12dB typ
Output return loss	.>12dB typ
-1dB compression	.>0dBm min
Noise Figure	.<15dB @ max gain typ
Output IP3	.>10dBm typ

* NOTE 1: If special or unique performance or features are required, the base model number is used plus a unique 5-digit suffix.

** NOTE 2: Bias-T power is redundant. User can program set voltage for each input. Up to 4W per input is available.

General Specifications

Power supply sectionsPlug-in redundant hot-swap
Bias-T redundant supply Option "P" suffix (4W power per input) **
Power supply monitoringIncluded
Remote control ports Ethernet 10/100/1000BaseT and Multi-serial
Protocols
LXI certifiedYes
Front panel display
Firmware
Configuration memoryFLASH
Cooling
AC power requirements90-264VAC, 47-63Hz, <500 Watts
Line protectionFuses
Weight
Size
Operating temp0 to +55C
Non-operating temp20 to +85C
Humidity
MTBF>75,000 hours (estimated)
Warranty
CertificationsCE EN61010

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.

