Specification Sheet SWM16X-001

High Performance 20-3000 Wideband Matrix
Modular Sizes 4x16 to 16x16 Switching Array
System SWM16X(i) Fan-OUT (Fan-IN) Types - 4RU

February 2019

General

Today's communication installations demand dependable and high performance equipment at an affordable price. Our SWM16X (SWM16Xi) compact modular matrix unit provides an uncompromising combination of high performance and high reliability switching coupled together for wideband 20-3000MHz performance.

Compact (4RU) and high performance, the unit provides a cost effective switching capacity for smaller installations. All inputs and outputs are located at the rear of the unit. The SWM16X is a distributive non-blocking (Fan-OUT) product that can be ordered in array sizes from 4x16 to 16x16. The SWM16Xi is a combiner version (Fan-IN) in sizes from 16x4 to 16x16.

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.

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
- N-Type signal connectors
- Impedance 50 ohms
- Redundant hot-swap power supplies
- Dual control CPU capability
- 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)
- Large 10.1" touchscreen with Option-X enhancements
- Built-in scheduler for automated actions
- SNMP v1/v2/v3, TCP/IP, SNTP and web browser control
- Built-in diagnostics
- Variable (programmable) gain
- International AC power input
- LabVIEW drivers available

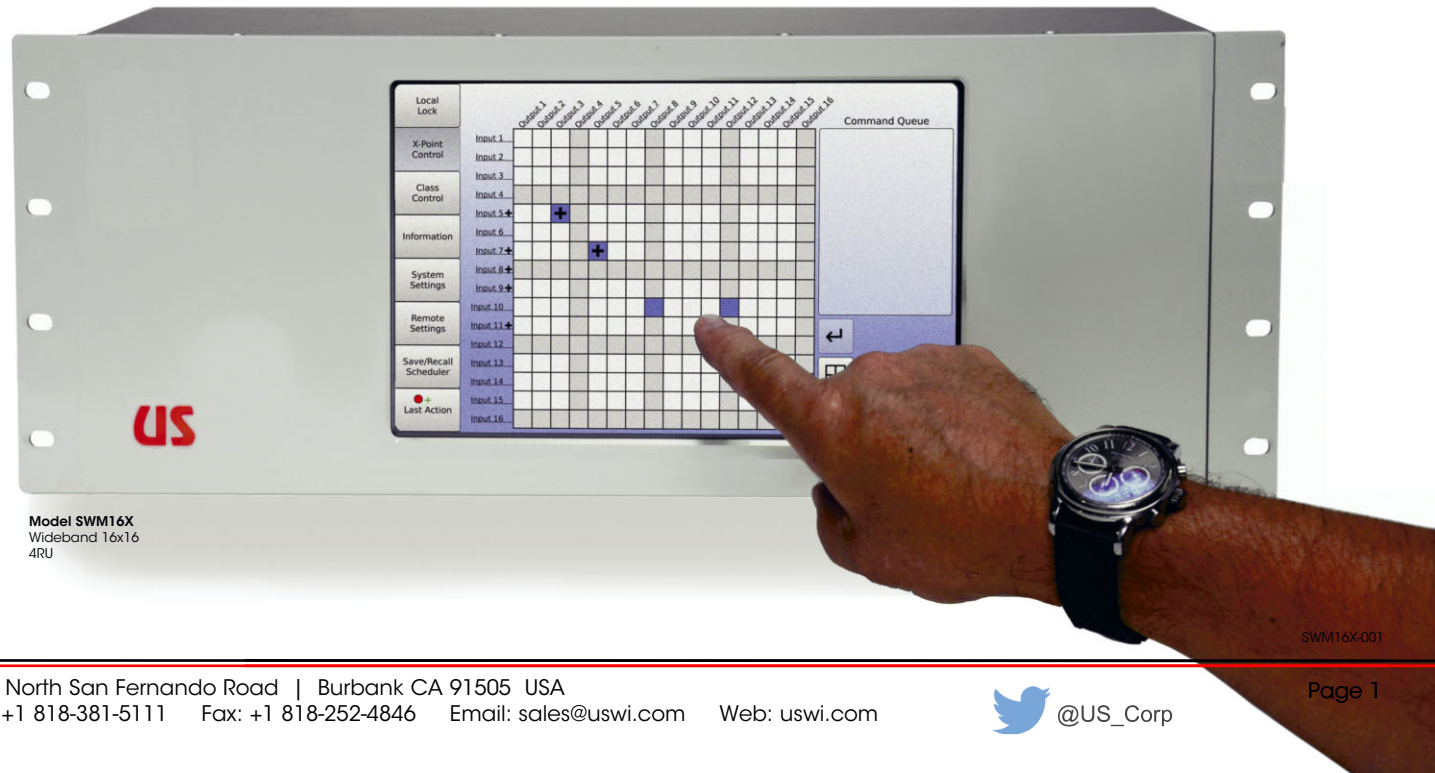
ROUTEWARE PRO 5.0

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

SNMP Powered LXI IPv6

Made in the USA

Reliability Resiliency



Model SWM16X
Wideband 16x16
4RU

SWM16X-001

Fan-Out Number Assignment

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

SWM16X-ii16x5c

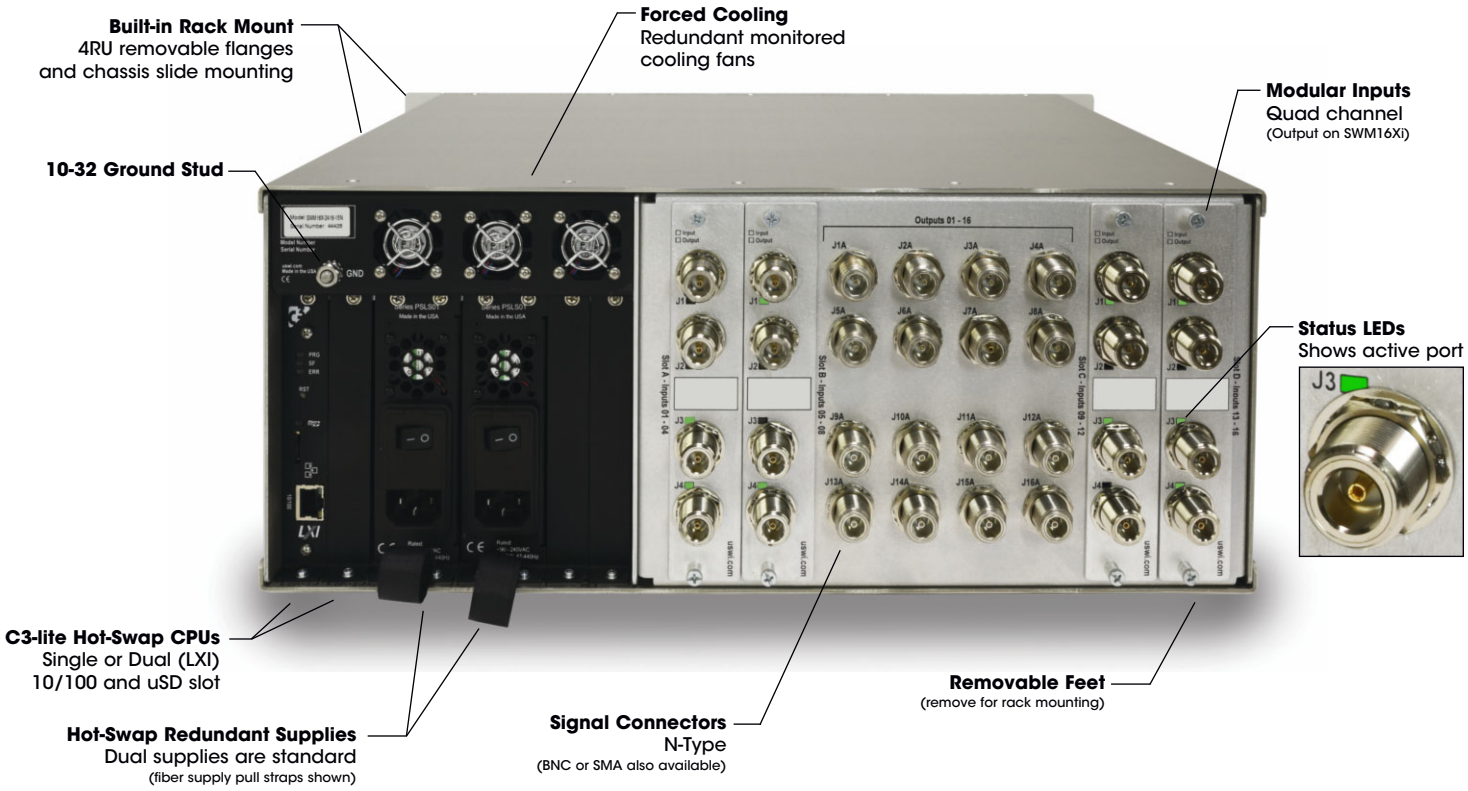
The SWM16X is the base model number for the Fan-OUT version of the system followed by "ii" defining the number of inputs (04, 08, 12 or 16) followed by 16 (the number of outputs). The final suffix is defined where "x" is 1 or 2 CPU controllers (single or redundant), "5" is the system impedance (5 for 50 ohms) and "c" defines the I/O connectors (N is standard, A for SMA or C for BNC).

Fan-In Number Assignment

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

SWM16Xi-16oox5c

The SWM16Xi is the base model number for the Fan-IN version of the system followed by 16 (the number of outputs), then "oo" defining the number of outputs (04, 08, 12 or 16). The final suffix is defined where "x" is 1 or 2 CPU controllers (single or redundant), "5" is the system impedance (5 for 50 ohms) and "c" defines the I/O connectors (N is standard, A for SMA or C for BNC).



System Specifications

Array size . . . . . .Up to 16x16 (see model definition)
Switching technology . . . . . .Solid-state GaAs elements
Type of system . . . . . .Non-blocking Fan-OUT, or Fan-IN
Architecture . . . . . .Modular
Signal connector . . . . . .N-Type (standard)
Signal connector location . . .Rear panel

I/O Characteristics *
Frequency range . . . . . .20 - 3000MHz (SWM16X)
20 - 6000MHz (SGM16X)
Impedance . . . . . .50 ohm
Coupling . . . . . .AC
Gain . . . . . .Unity (nominal)
Programmable gain . . . . . .+3dB, -3dB minimum
Flatness . . . . . .<+/-3.0dB, +/-0.35dB 40MHz segment
Isolation . . . . . .>60dB (I/I, O/O, I/O): SWM16
>45dB (I/I, O/O, I/O): SGM16
Input return loss . . . . . .>10dB typ
Output return loss . . . . . .>10dB typ
-1dB compression . . . . . .>0dBm min
Noise Figure . . . . . .<7dB @ max gain typ
Output IP3 . . . . . .>10dBm typ

General Specifications
Power supply section . . . . . .Plug-in redundant hot-swap
Bias-T redundant supply . . . . .Option "P" suffix (4W power per input) **
Power supply monitoring . . . .Included
Ethernet port . . . . . .10/100BaseT, SNMP v2 and TCP/IP
LXI certified . . . . . .Yes
Status LED's . . . . . .Inputs have LED indicators
Front panel display . . . . . .10.1" touchscreen LCD
Firmware . . . . . .Upgradeable via Ethernet
Configuration memory . . . . . .FLASH
Cooling . . . . . .Fan assisted (monitored)
AC power requirements . . . . .90-264VAC, 47-440Hz, <100 Watts
Line protection . . . . . .Fuses
Weight . . . . . .<30 lbs
Size . . . . . .6.97H x 16.50D x 19.00W (4RU)
Operating temp . . . . . .0 to +50C
Non-operating temp . . . . . .-20 to +85C
Humidity . . . . . .0 to 95% (NC @ +25C)
MTBF . . . . . .>135,000 hours (estimated)
Warranty . . . . . .2 years
Certifications . . . . . .CE EN61010

* 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.

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.

7671 North San Fernando Road | Burbank CA 91505 USA
Phn: +1 818-381-5111 Fax: +1 818-252-4846 Email: sales@uswi.com Web: uswi.com
Universal Switching Corporation