FlexLink K73SA Switch Matrix

L-Band Switch Matrix 8:8 to 128:16

The FlexLink K73SA-12816 a represents professional Switch Matrix system, built into a 6RU/19" rack mount chassis with only 500mm depth, supporting L-Band (950 – 2150MHz) and Extended L-Band (850 – 2450MHz) making it a perfect solution also for KU/KA-Band and HTS applications.

The system can be assembled with various input/output configurations from 8:8 to max. 128:16 simply by adding additional input/output switchboards (increments of 8). It performs as a distributive switch/routing platform allowing to switch/route any selected input to any or all outputs.

The FlexLink K73SA-12816 was especially developed to be used in measurement & monitoring system infrastructures supporting a fast switching time of 25ms, depending on the synchronizing of the measurement system.

This Switch Matrix system offers flexibility, beneficial features and superior RF performance at the highest quality level. All matrix input switch-boards are hot-swappable and besides the 8 or 16 outputs the unit also has 16 calibration loop through ports for Spectrum-Analyzer and Measurement System Calibration, supporting a frequency range down to 50MHz.

Additionally, the FlexLink K73SA-12816 supports status monitoring of all active components and comes with 1:1 redundant dual power supply (hot-swappable). Optionally the system can be equipped with variable gain control (@ any output).

The FlexLink K73SA-12816 matrix system can be configured and monitored locally via its front-side 8” colored touchscreen. Remote configuration can be done via an Ethernet-Interface (WebGUI/ SNMP) and UDP protocol for fast switching via Port 8000 to 8016.

RF-Design´s local and remote configuration platform for the FlexLink K73SA-12816 allows the configuration of all relevant matrix settings including routing/switching settings, variable gain control (Option) and more. The configuration software also supports user administration management and user rights assignment, logbook function, storage functions and monitoring for each individual switch-board, power supplies and ventilators.

The FlexLink K73SA-12816 is a perfect system for signal monitoring applications but also ideal for flexible signal assignment in RF distribution infrastructures at Teleports, Satellite Earth Stations as well as Broadcast and CATV/IPTV headend operations.

FEATURES & BENEFITS

- Space saving 6RU/19" modular rack mount design
- Supporting L-Band 950 – 2150MHz and Extended L-Band 850 – 2450MHz
- Fast switching down to 25ms (adjustable)
- Hot-swappable input switch-boards
- Coax inputs & outputs 50 SMA(f)

- 8:8 to max. 128:16 I/O´s
- Easy scalable at the inputs via adding input switch-boards (increments of 8)
- Variable gain control @ any output (Option)**
- 16 calibration loops through ports rear-side, 50MHz
- 8" front-side touchscreen LC-Display for local configuration
- 100MBit Ethernet-Interface for remote configuration (WebGUI, SNMPv2c, ASCII via UDP 8000-8016)
- 1:1 redundant dual power supply (hot-swappable)
- Perfect for monitoring and signal management applications

SOFTWARE & CONFIGURATION FEATURES

- Supports local and remote configuration for all relevant settings and adjustments
- Local configuration via 8" colored touchscreen LC-Display
- Remote Control via 100MBit Ethernet-Interface (WebGUI, SNMPv2c, UDP protocol Port 8000-8016)
- RS232 Interface on request
- User administration with user rights management (only WebGUI)
- Monitoring functions for active components, unit-status, switch-boards status, power supply status

TECHNICAL SPECIFICATIONS

General Specifications

Dimensions:	6RU/19”, 400mm deep
Power Supply:	85 – 230V, 50/60Hz, 1:1 redundant (hot-swappable)
Power Consumption:	<200W (@128:16 configuration)
Frequency Range:	950 – 2150MHz (L-Band) / 850 – 2450MHz (Extended L-Band)
Switch Matrix Type:	Fan-out/distributive
I/O Configuration Variants:	8:8 – 128:16 I/O´s (increments of 8)
Switching Elements:	Solid-state switches
Switching Time:	Adjustable 25ms to 100ms
Available I/O Connectors:	50Ohm SMA(f)
Variable Gain Control:*	-3dB to +3dB (1dB steps), @ each output*
Calibration Ports:	16 calibration loops through ports; 50Ohm SMA(f), 50MHz
Local Configuration:	8“ colored touchscreen LC-Display
Remote Configuration:	RJ45 Ethernet-Interface (WebGUI, SNMPv2c)
Management UDP:	Port 8000 to 8016 via UDP Protocol
Serial Interface:	RS232**
RoHS:	Compliant

Option / **upon request only

RF Specifications

Frequency Range:	950 – 2150MHz and 850 – 2450MHz
Frequency Response:	± 1,5dB L-Band; ±2,5dB extended L-Band
Noise Figure:	<15dB typ.
Insertion Loss:	0dB – ±1,0dB max.
Input / Output Return Loss:	12dB min., 14dB typ. @ L-Band*
Isolation:	≥50dB @ L-Band*
RF Input Power:	+10dBm max. (damage level)
RF Output Power:	+10dBm max. (damage level)
Cal. Loop Through Loss:	-3dB, frequency response ± 1,5dB
IMA3 @ -10dBm:	< 50dBc
P1dB:	+6dBm

**** Specifications for Extended L-Band available upon request***

Environmental Specifications	
Location:	Indoor use only
Operating Temperature:	0°C to 45°C
Storage Temperature:	-10°C to 65°C
Humidity:	90%, non-condensing

OPTIONS

Type	Short Description
Option 105A	Variable gain control -6dB to +6dB (1dB steps), @ each output 0°C to 45°C

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