FlexLink R25C Combining Matrix

...designed for perfect signals

BETTER MADE IN GERMANY

Extended L-Band Combining Matrix 64:64

The FlexLink R25C represents an unique, innovative & clever L-Band Combining Matrix, built into a 5RU/19" rack mount chassis with only 500mm depth. It comes as fan-in/combining system enabling to switch/route various inputs to a dedicated output. The 5RU/19" chassis can be assembled with various input/output configurations from 8:8 to 64:64 (symmetrically & unsymmetrically)

The FlexLink R25C Combining Matrix system is a future proof solution coming with widened bandwidth supporting the extended L-Band (850 – 2450MHz) frequency range making it a perfect solution also for KA-Band and HTS applications.

The flexible modular design makes it possible to mix the input and output connectors with various connector types (50Ohm SMA or BNC) giving the operator the flexibility for future expansions.

The FlexLink R25C features variable gain control & slope-equalization and rf-power monitoring as well. Furthermore, it supports status monitoring of all active components and comes with a 1:1 redundant dual power supply (hot-swappable).

Beyond its state-of-the-art and unique mechanical concept, all the functionalities and options the FlexLink R25C also assures superior and stable RF performance at the highest quality level.

FEATURES & BENEFITS

- Space saving 5RU/19" modular rack mount design
- Extended L-Band frequency 850 – 2450MHz
- From 8:8 to up to 64:64 inputs
- Coax inputs & outputs 50/75Ohm SMA(f), F(f) or BNC(f) or optical inputs and outputs (mixed input & output configuration)*
- Variable gain control (@ any input and @ any output)
- Slope-equalization (@ any input and @ any output)
- Threshold alarming (local and remote signaling)
- RF power monitoring, dynamic range (@ any input/output)
- Internal monitoring of all active components
- Switching time is 50 ms
- Signal path backup routing with reverse switch-back

- Hot-swappable controller card and matrix switch boards
- 10.4" front-side touchscreen LC-Display for local configuration
- 1000MBit Ethernet-Interface (WebGUI, SNMPv2c)
- 1:1 redundant dual power supply (hot-swappable)
- 1:1 redundant dual controller card (hot-swappable)*
- Local and remote configuration
- Local configuration via 7/10.4" colored touchscreen LC-Display
- Remote configuration via 1000MBit Ethernet-Interface and RS232 (WebGUI, SNMPv2c)
- Cross point/routing locking for individual users
- Logbook and storage function

*** upon request only*

TECHNICAL SPECIFICATIONS

General Specifications 5RU Chassis

Dimensions:	5RU/19", 400mm deep, 45kg
Switch Matrix Type:	Fan -in/combining
Configuration Variants:	8:8 – 64:64 (increments of 8), symmetrical & unsymmetrical
Power Supply:	85 – 230, 50/60Hz, 1:1 redundant (hot- swappable)
Power Consumption:	<350W (@64:64 configuration)
Frequency Range:	850 – 2450MHz (extended L-Band)
Available I/O Connectors:	50Ohm SMA(f), 50Ohm BNC(f), 75Ohm F(f)*, 75Ohm BNC(f)*
Optical Input Connectors:	SC/APC, 1100…1650nm*
Variable Gain Control:	-10dB to +10dB (1dB steps) all inputs and outputs
Slope Equalization:	0 to 7dB'
RF Power Monitoring:	65dB dynamic range all inputs and outputs
Input Level Control:	Monitoring threshold adjustment/alarming
Local Configuration:	10" Touchscreen LC-Display
Remote Configuration:	RJ45 Ethernet-Interface (WebGUI https, SNMPV3)
Operating Temperature:	0°C to 45°C
Storage Temperature:	-10°C to 65°C
Humidity:	90%, non-condensing

Option

RF Specifications Combining Matrix

Frequency Range:	850 – 2450MHz (extended L-Band)
Frequency Response:	± 2dB typ. ±2,5dB max. (@ Extended L-Band), ± 0,25dB max. (@ 40MHz window)
Noise Figure:	<=20dB
Input/Output Return Loss:	18dB min., 20dB typ.
Isolation:	≥75B typ. (In/In) ≥60dB typ. (In/Out) ≥75dB typ. (Out/Out)
Operational Input Power:	-70dBm to -10dBm nominal, 0dBm max. (Recommended)
RF Input Power:	+6dBm max. (damage level, depends on gain setting)
RF Output Power:	+10dBm max. (damage level, depends on gain setting)
IMA3 @ -10dBm:	<50dBc
P1dB:	+12dBm
SFDR:	< -80dBm

ORDER INFORMATION

Type	Type No.	Short Description
FlexLink R25C-64S5064S50 Combining Matrix	9001438	FlexLink R25C/5 Combining Switch Matrix Configuration 64:64 SMA 50Ohm, main controller, 10" touchscreen, RJ45 1GBit Ethernet Interface (WebGUI, SNMP), 1:1 redundant dual power supply, 5RU/19" rack mount