



FlexLink R25C Combining Matrix

...designed for perfect signals



Extended L-Band Combining Matrix 64:64 & 128:16

The FlexLink R25C represents a 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).



FEATURES & BENEFITS

- ▶ Space saving 5RU/19" modular rack mount design
- ▶ Extended L-Band frequency 850 – 2450MHz
- ▶ 8:8 to up to 64:64,
- ▶ Coax inputs & outputs 50Ohm SMA(f), or BNC(f)
- ▶ Fiber Optical Outputs and Inputs
- ▶ Variable gain control any input and any output)
- ▶ Threshold alarming (local and remote signaling)
- ▶ RF power monitoring any input/output
- ▶ Internal monitoring of all active components

- ▶ Hot-swappable controller card and matrix switch boards
- ▶ 10.4" front-side touchscreen LC-Display for local configuration
- ▶ 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
- ▶ 1Gbit Ethernet-Interface (WebGUI, https, SNMPv3)
- ▶ Cross point/routing locking for individual users
- ▶ Logbook and storage function

* upon request only



TECHNICAL SPECIFICATIONS

General Specifications 5RU Chassis

Dimensions:	5RU/19", 500mm deep, 45kg
Switch Matrix Type:	Fan -in/combining
Configuration Variants:	8:8 – 64:64 (increments of 8), symmetrical & unsymmetrical 128:8 and 126:16 (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:	≥75dB 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
FlexLink Combining Matrix R25C-Main Chassis	9001460	FlexLink R25C/5 Combining Switch Matrix Chassis Main controller, 10" touchscreen, RJ45 1Gbit Ethernet Interface (WebGUI, SNMP), 1:1 redundant dual power supply, 5RU/19" rack mount
FlexLink R25 ISB0808C Input 8:8 Combiner Board	9001294	Input Combiner Switch Board, 8 x RF Input, extended L-Band 850 - 2450MHz, 50Ohm SMA
FlexLink R25 ISB0808CE Input 8:8 Combiner Expansion Board	9001331	Input Combiner Switch Board, 8 x RF Input, extended L-Band 850 - 2450MHz, 50Ohm SMA for System expansion
FlexLink R25 OCB1601C Output 16:1 Combiner Board	9001295	Output Combining Switch Board, 16 x RF Input to 1 output, extended L-Band 850 - 2450MHz, 50Ohm SMA
FlexLink Combining Matrix R25 OSB0808C Output 8_8 Combiner Board 50S	9001458	R25 Combiner Matrix Output Board 8 Outputs Coax SMA 50Ohm
FlexLink Combining Matrix R25 OSB0808C Output 8_8 Combiner Board FO	9001259	R25 Combiner Matrix Output Board 8 Outputs Fiber Singlemode +3dBm