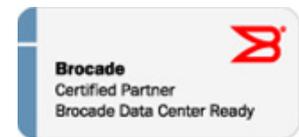


Datasheet

MSP 1000

2-Channel Transponder module 16G

 Made
 in
 Germany



General

The 2-channel transponder module 16G of the MICROSENS MSP1000 platform can be used in practically any application with data rates from 125 MBit/s to 16 GBit/s. This transponder module is then also suitable for the transmission of 40G (over 4x10G) in double use. The module works as a double transponder protocol transparent up to a data rate of 16G and covers all data rates available within this range.

By using pluggable SFP transceivers, any wavelength (850 nm, 1310 nm, 1550 nm, CWDM or DWDM) can be used to optimally adapt to the respective network topology (point-to-point, ring, star).

By using powerful transceivers with CDR function, distances of more than 80 km can be bridged.

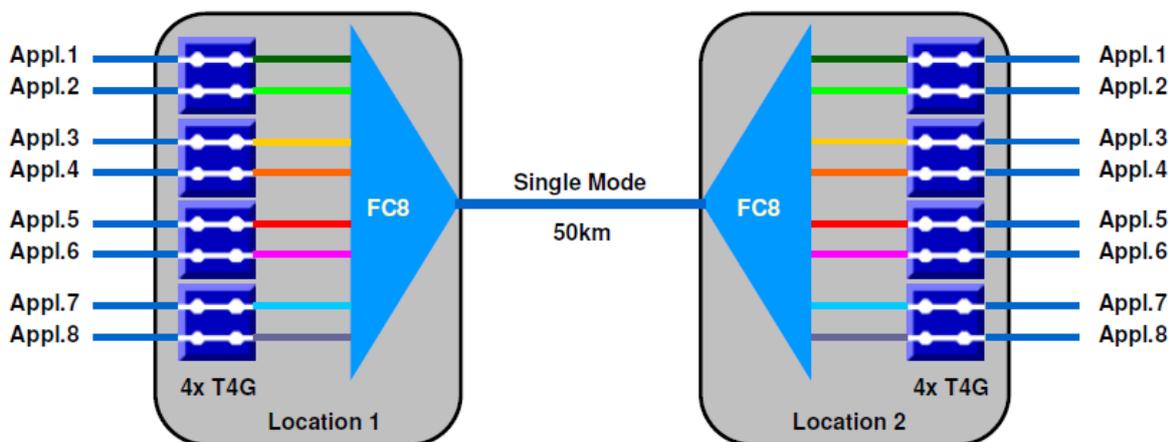
- CWDM / DWDM double Transponder
- Protocol transparent for all data rates up to 16G
- Four SFP interfaces with full level monitoring
- 125 MBit/s - 14.025 GBit/s
- 40 G transmission via 4x 10G feasible
- 850 nm / 1310 nm / CWDM / DWDM
- Point-to-point, ring, star
- "Brocade Data Center Ready" Certification
- High packing density thanks to eurocard format

Technical Details

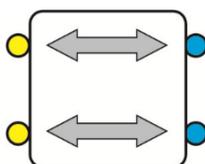
Type	2-Channel Transpondercard 16G		
Typ. Application	Ethernet (100/1000/10GBase-X), Fiber Channel (1/2/4/8/10/16G), FICON, SDH (STM-1/-4/-16/-64), ESCON, Coupling Link, Sysplex Timer		
Connections	4x SFP+-Slots DDM (wavelength, optical level, SFP type, error detection)		
Data Rates	Transparent		
Data Security	Soft reset or software download does not interrupt the data transmission. It is not possible to intercept the data via the management system		
Dimensions	Space requirement 1 Slot in MSP1000-Chassis		
LED-Displays	<i>per Port</i>	red: Error Green: Signal detected	
	ERROR	SD	Operating mode
	Off	Off	Port switched off / not used
	On	Off	opt. input signal missing
	Off	On	Normal operation, signal detected
	On	On	signal available, error detected PLL unlocked, data rate incorrectly set
	Blink	Off	SFP missing or faulty
Test functions	Independent loop test of all interfaces, optical level, clock synchronization, lamp test		
Operating temp.	0..+40 °C		
Storage temp.	-40..+85 °C		
Humidity	5% up to 80 % non-condensing		
Certifications	CE Conform CDRH 21 CFR 1040 FCC Part 15 Laser Class 1M Product „Brocade Data Center ready“		

Example of application

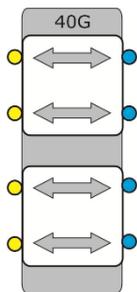
xWDM-Transponder:



Dualconverter:



40G-Transmission (4x 10G via 4 Channels):



Order Information*

Description	Art.-No.
MSP1000 2-Channel Transpondermodule 16G 100MBit/s - 16GBit/s Multirate, 40G-fähig, 4x SFP+-Slots	MS425608M

Alternativ Transpondermodules MSP1000

Description	Art.-No.
MSP1000 2-Channel Crossbar Transpondermodule 2.7G 100MBit/s - 2.7GBit/s Multirate 3R, 4x SFP-Slots	MS425601M
MSP1000 2-Kanal Transpondermodule 4G 100MBit/s - 4.25GBit/s Multirate 3R, 4x SFP-Slots	MS425602M

Accessoires MSP1000 (Selection)

Description	Art.-No.
MSP1000 Enterprise 4U Chassis (further versions see data sheet „Chassis“)	
MSP1000 Enterprise 4U Chassis AC 19" 2 Slots for 2x 230 VAC-power supply prep., 11 Modulslots, incl. Backplane, incl. 3-fold Fan-Module	MS425500M
MSP1000 1U Chassis	
MSP1000 1U Chassis DC 19" 3 Modulslots, incl. Backplane, incl. Fan-Module	MS425504M-48-V2
MSP1000 Power Supply	
MSP1000 Enterprise AC Power supply module Input: 90..264 VAC, 50..60 Hz, max. 250 W	MS425510
MSP1000 Enterprise DC Power supply module Input: 36..75 VDC, max. 250 W	MS425511
MSP1000 Power Supply 54V/1,2A 65W prim. Euro-8 Cable	MS700701

* For more information on the MSP1000 portfolio, please refer to our document [„Technical Description MICROSENS MSP1000 Optical Platform.pdf“](#).

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