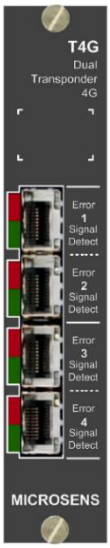
# Datasheet
MSP 1000
2-Channel Transponder module 4.25G

Made in Germany

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## General

The 2-channel transponder module 4.25G of the MICROSENS MSP1000 platform can be used in practically any application with data rates from 125 MBit/s to 4.25 GBit/s. The module works as a double transponder up to a data rate of 4.25G and thus covers Tri-Rate Fiber Channel (1/2/4G), especially for SAN applications.
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, distances of more than 100 km can be bridged.

- CWDM / DWDM double transponder
- Ideal for SAN applications (1/2/4G)
- Four SFP interfaces with full level monitoring
- 125 MBit/s - 4.25 GBit/s with 3R function, multiple cascading
- 850 nm / 1310 nm / CWDM / DWDM
- Point-to-point, ring, star
- High packing density thanks to eurocard format

## Technical Details

**Type**
2-Channel Transpondercard 4.25G

**Typ. Applications**
Ethernet (100/1000Base-X), Fiber Channel (1/2/4G), FICON, SDH (STM-1/-4/-16), ESCON, Coupling Link, Sysplex Timer

**Connections**
4x SFP-Slots
DDM (Wavelength, optical levels, SFP type, error detection)

**Data rates**
Transparent
(125 MBit/s, 155 MBit/s, 200 MBit/s, 622 MBit/s, 1062 MBit/s, 1250 MBit/s, 2125 MBit/s, 2488 MBit/s, 2500 MBit/s, 4250 MBit/s)

**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**
*per Port* red: Error
Green: signal detected

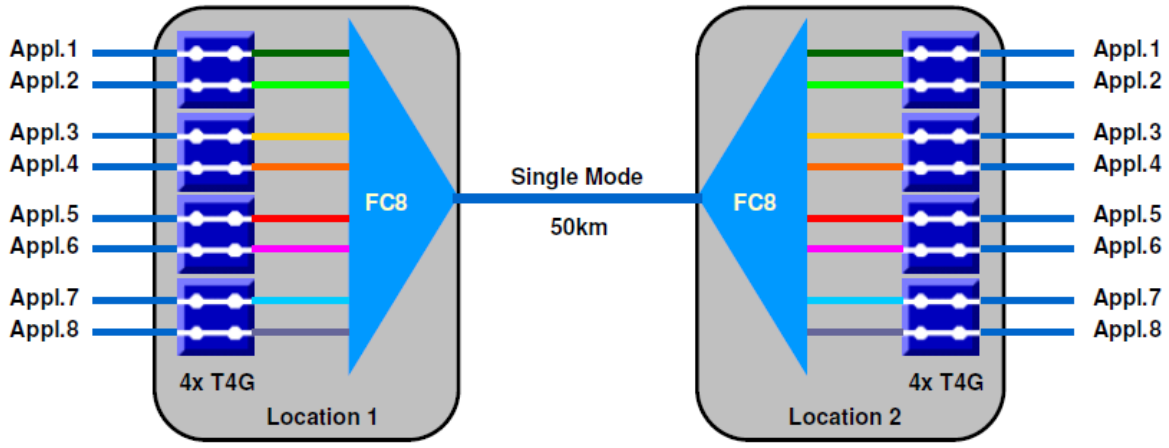
| **ERROR** | **SD** | **Betriebszustand** |
|---|---|---|
| Off | Off | Port switched off / not used |
| **On** | Off | opt. input signal missing |
| Off | **On** | Normal operation, signal detected |
| **On** | **On** | signal available, error detected PLL unlocked, data rate incorrectly set |
| **Blink** | 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



## Order Information

| Description | Art.-No. |
|---|---|
| MSP1000 2-Channel Transpondermodule 4G<br>100MBit/s - 4.25GBit/s Multirate 3R, 4x SFP-Slots | **MS425602M** |

## Alternativ Transpondermodules MSP1000

| Description | Art.-No. |
|---|---|
| MSP1000 2-Channel Crossbar Transpondermodule 2.7G<br>100MBit/s - 2.7GBit/s Multirate 3R, 4x SFP-Slots | **MS425601M** |
| MSP1000 2-Channel Transpondermodule 16G<br>100MBit/s - 16GBit/s Multirate, 40G-fähig, 4x SFP+-Slots | **MS425608M** |

## Accessoires MSP1000 (Selection)

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

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