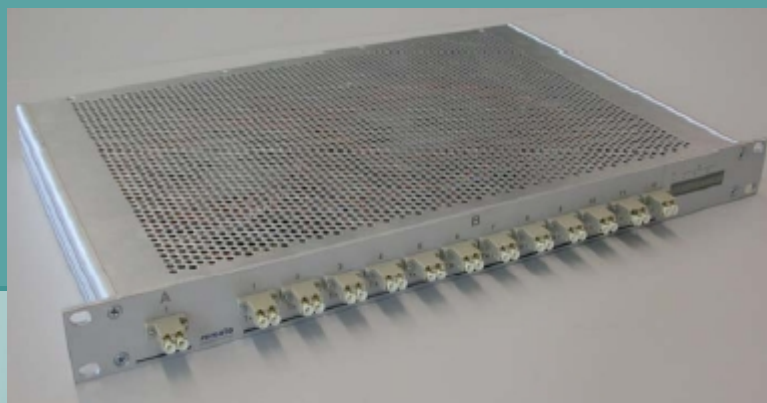


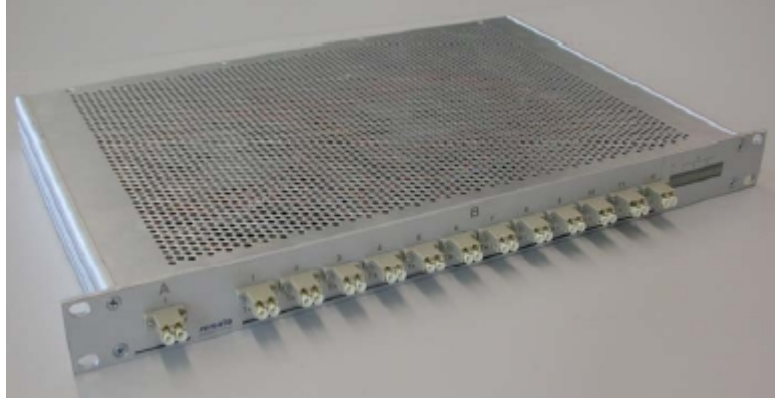
RS Series Remote Controlled Optical Switch



Remote Controlled Optical Switch

FEATURES

- **Reliable**
- **Low insertion loss**
- **Superior repeatability**
- **Single or multimode**
- **CE compliant**



OVERVIEW

The *rs* series are all optical switch solutions for demanding applications in fiber optic instrumentation or communication. The rack mountable instrument can switch up to 4 input fibers to any of up to 48 output fibers, independently of dataformat, wavelength or optical power. The switch supports either single or multimode fibers.

The optical connections are set by a MEMS based switch network, where micromachined silicon mirrors redirect light to the selected ports. The use of MEMS technology offers solid state reliability together with long term stability and robustness for stable operation.

Different interface options are available. With the ethernet interface, the instrument can be controlled from virtually any place in the world over an internet connection.

Remote Controlled Optical Switch

APPLICATIONS

- Fiber Optic Telecom and Datacom
Fiber optic Test and Measurement

DESCRIPTION

The switch instrument is built using Sercalo's Telcordia qualified MEMS technology, which achieves superior reliability and repeatability when compared to traditional mechanical solutions.

The switch is fully bi-directional and transparent to the full wavelength range of the installed fiber.

When several input fibers are required, the switch architecture can be either blocking or non-blocking. In the blocking architecture when one input is set, the other inputs can only be set to a limited number of "free" ports. In the non-blocking architecture there is no such limitation. Any of the input ports can go to any of the free output ports. But the complexity of the non-blocking architecture is much higher.

SPECIFICATIONS

Switch	Unit	Min	Typ	Max
Wavelength Range ¹	nm	1240		1650
Insertion Loss ²	dB		0.7	1.3
Return Loss ³	dB		55	50
Crosstalk	dB	50		
Polarization Dependent Loss	dB		0.1	0.25
Repeatability ⁴	dB			.001
Response Time ⁵	ms		1	
Fiber Pigtail	µm		SMF 28 or MM 62.5/125, 50/125	
Durability	cycles		no wear out	

Remote Controlled Optical Switch

Package	Unit	Min	Typ	Max
Power Supply Voltage	V		48DC or 110-230 AC	
Power Consumption	W		20	
Control interface			Ethernet	
Operation Temperature	°C	0		70
Storage Temperature	°C	-40		85
Size (L x W x H) up to 2x16	mm		484x45x280	
Size (L x W x H) (1x17 to 2x32)	mm		484x90x280	
Size (L x W x H) (1x33 to 2x48)	mm		484x135x280	

1 for multimode 700-1700nm

2 including connectors, up to 1x4, more ports result in higher IL: up to 16 ports: $IL_{max}=2dB$, up to 48ports: $IL_{max}=3dB$

3 value for single mode fiber (SMF) when using angle polished connectors; for MM fiber $RL >35dB$

4 value for constant wavelength, temperature and polarization

5 value for SM, for multimode: 20ms

ORDERING INFORMATION

