Data Sheet

M408, M416

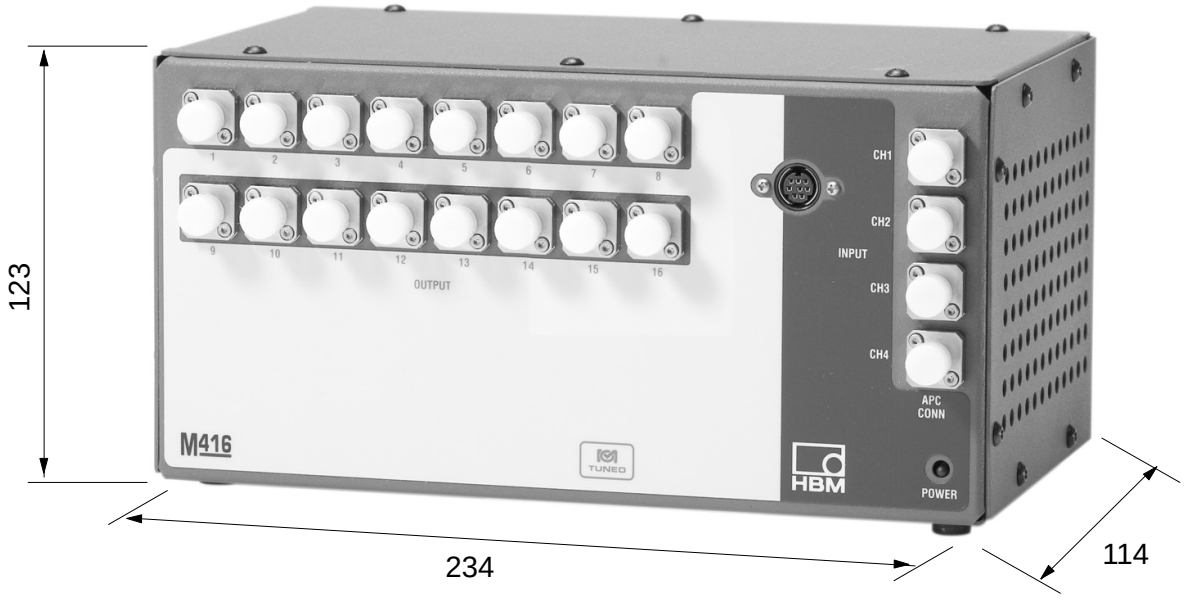
Multiplexer for optical strain gages (SG)

Special features

- **For upgrading four-channel interrogators to 8 or 16 channel operation (except SI410 and DI405)**
- **Real-time data acquisition**
- **Reliable high-speed opto-circuit**
- **Excellent temperature and long-term stability**
- **Optimal integration with matching interrogator**

Dimensions (in mm; 1 mm= 0.03937 inches)

Instrument designation: M408; M416



Specifications

Type		M408	M416
Number of input channels		4	
Number of output channels		8	16
Actual spectrum change[1)]		2 times, through opto−switch	4 times, through opto−switch
Relative sampling rate[2)]		0.5 times	0.25 times
Insertion loss/channel[3)]	dB	typ. < 3.0	typ. < 3.0
Dynamic range	dB	40	30
Sampling rate	1/s	max. 500	max. 250
Optical connector socket		FC/APC	
Ambient conditions			
Nominal temperature range	°C [°F]	0...+50 [+32...+122]	
Ambient humidity range	% rel. h.	0...80, non-condensing	
Storage temperature range	°C [°F]	−20...+70 [−4...+158]	
Storage humidity range	% rel. h.	0...95, non-condensing	
Electrical connection values			
Supply voltage		User-defined interface to the interrogator through 8-pole DIN circular	
Weight, approx.	kg	1.4	

1) Optical switches allow an actual increase of the measurement spectrum available by factor 2 to 4.

2) The optical switches require that the multiplexer acquires data at alternating switch positions. This reduces the interrogator's relative sampling rate by a factor equalling the degree of multiplexing. The sampling rate is maximally reduced by a factor of 2 when using the 8-channel expansion and maximally by a factor of 4 when using the 16-channel expansion module.

3) Insertion loss data apply only for one direction (monomode).

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