

## SENSOR CUBE

### RAMAN-Cube 1550 nm

C-1520\_Rev.B

#### Product Description

- High Isolation Wavelength splitter for demanding applications in Raman- and Fluorescence Spectroscopy.
- Utilizes a patented micro-optical packaging technology
- Separates Stokes (1650 nm) and Anti-Stokes (1450 nm) into two ports
- Pigtailed with Telecom single mode fiber
- Designed for high reliability based on Telecom Standards (Telcordia)

- Product Description: Raman Filter Cube 1550nm
- Product Code: C-1520
- Fiber Length: -L (choose from table)
- Fiber Type: -F (choose from table)
- Connector type: -XY (choose from table)
- Revision Level: -Rev.B

Example Order Code: **C-1520-1-A33-Rev.B** RAMAN-Cube 1550nm with Corning SMF fiber, 900µm loose tube, 0.5m fiber length, SC/APC connectors on all ports.

(L) Fiber Length	Code
0.5 m	A
1.0 m	B

(F) Fiber Type	Code
Corning SMF-28TM (9, 125,250µm) 900µm loose tube	1
Corning SMF-28TM (9, 125,250µm) 250µm coating	2
Multimode GI (50, 125,250µm) 900µm loose tube	3
Multimode GI (50, 125,250µm) 250µm coating	4
Multimode GI (62.5, 125,250µm) 900µm loose tube	5
Multimode GI (62.5, 125,250µm) 250µm coating	6

(X) Connector code common ports	(Y) Connector code other ports	Code
SC/PC		1
FC/PC		2
SC/APC		3
FC/APC		4
LC/PC		5
MU/PC		6
E2000		7
E2000/HRL		8
ST/PC		9
no connectors		0

#### Revision History

No	Description	Date	Created by
A	Initial release	15.12.03	Dr. Ralf Lohrmann
B	Added connector and fiber options	14.07.14	Christian Zank

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### General Specifications

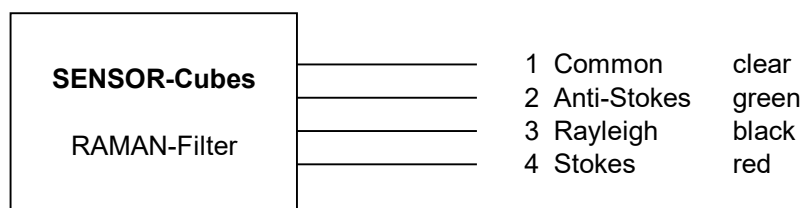
Operating Temperature	-10°C to +70°C	
Storage Temperature	-40°C to +85°C	
Max. optical Power	< 250 mW	CW
Package Dimensions	19 x 15.5 x 9 mm <sup>3</sup>	
Fiber Type	according fiber code	
Fiber Jacket	according fiber code	
Fiber Pigtail Length	according fiber length code	Tolerance ± 50 mm
Optical Connectors	according connector code	

### Optical Performance

Center Wavelength (CWL)	Stokes	1650 nm
	Rayleigh	1551 nm
	Anti-Stokes	1450 nm
Channel Passbands	Stokes Band	1650 ± 30 nm
	Rayleigh Band	1551 ± 6.5 nm
	Anti-Stokes Band	1450 ± 30 nm
Insertion Loss <sup>1</sup>	all ports	< 2.5 dB
Isolation	Rayleigh / Stokes	> 60 dB
	Rayleigh / A-Stokes	> 60 dB
	Stokes / A-Stokes	> 30 dB

<sup>1</sup> Average insertion loss over passband and operating temperature range without optical connectors.

### Port Configuration



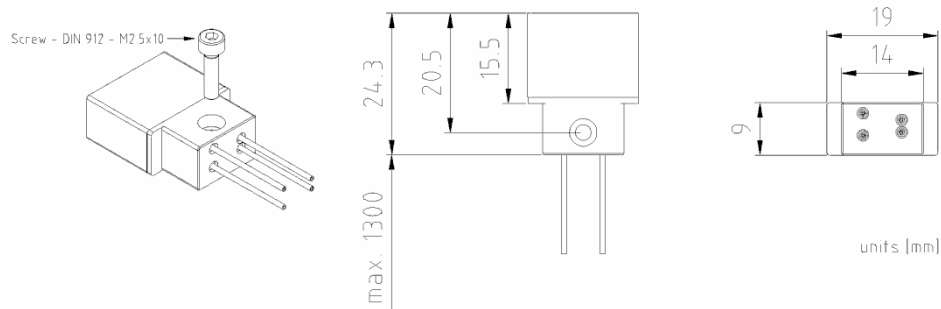
# SENSOR Cubes

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#### Package Dimensions



The drawing above shows the mechanical dimensions of the component.

For the protection of the bare fiber pigtailed the RAMAN-Cube features a 30 mm loose tube boot on each fiber outlet as depicted in figure 1 (fiber code options 2, 4 and 6). The bare fiber pigtailed are color-coded to simplify the port identification.



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