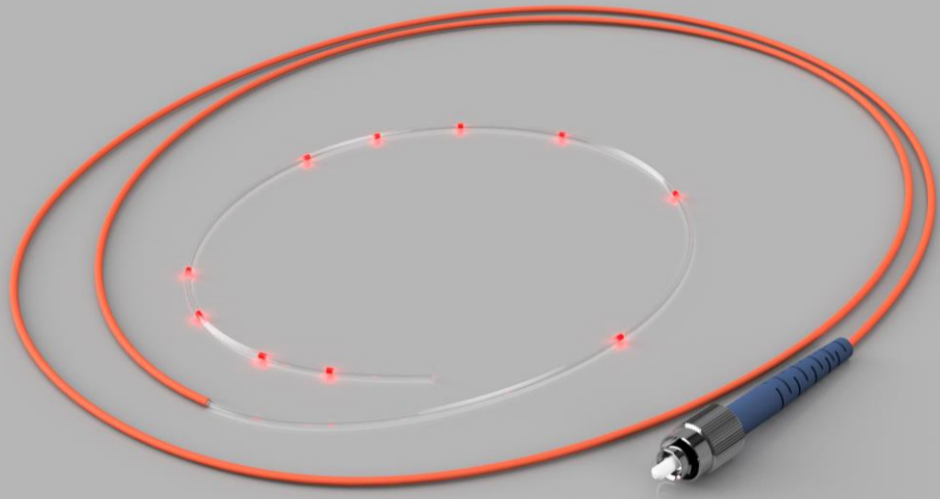


# FBG Sensor Chain

First class quality, multi-functional and highly variable fiber Bragg grating (FBG) sensor chains for distributed profile measurements.



## Key Features

- All possible reflectivities, wavelengths and grating lengths
- Very high wavelength accuracy
- Innovative laser illumination for unprecedented sensor marking precision
- Special FBG designs
- Arbitrary FBG-positions along the fiber
- Stable up to 900°C

## Applications

- Strain measurement
- Temperature measurement
- Force measurement
- Pressure measurement
- Curvature and displacement Detection

## FBG Specifications

FBG reflectivity	0,001 – 99%
Grating length	0,1 – 10mm
Wavelength Range	450 – 2000nm
Full Width at Half Maximum	0,2 – 2nm
Wavelength Precision	<0,15nm
Side-Loop Supression	>15dB
Miscellaneous	chirped, apodized, phase-shifted, on-edge

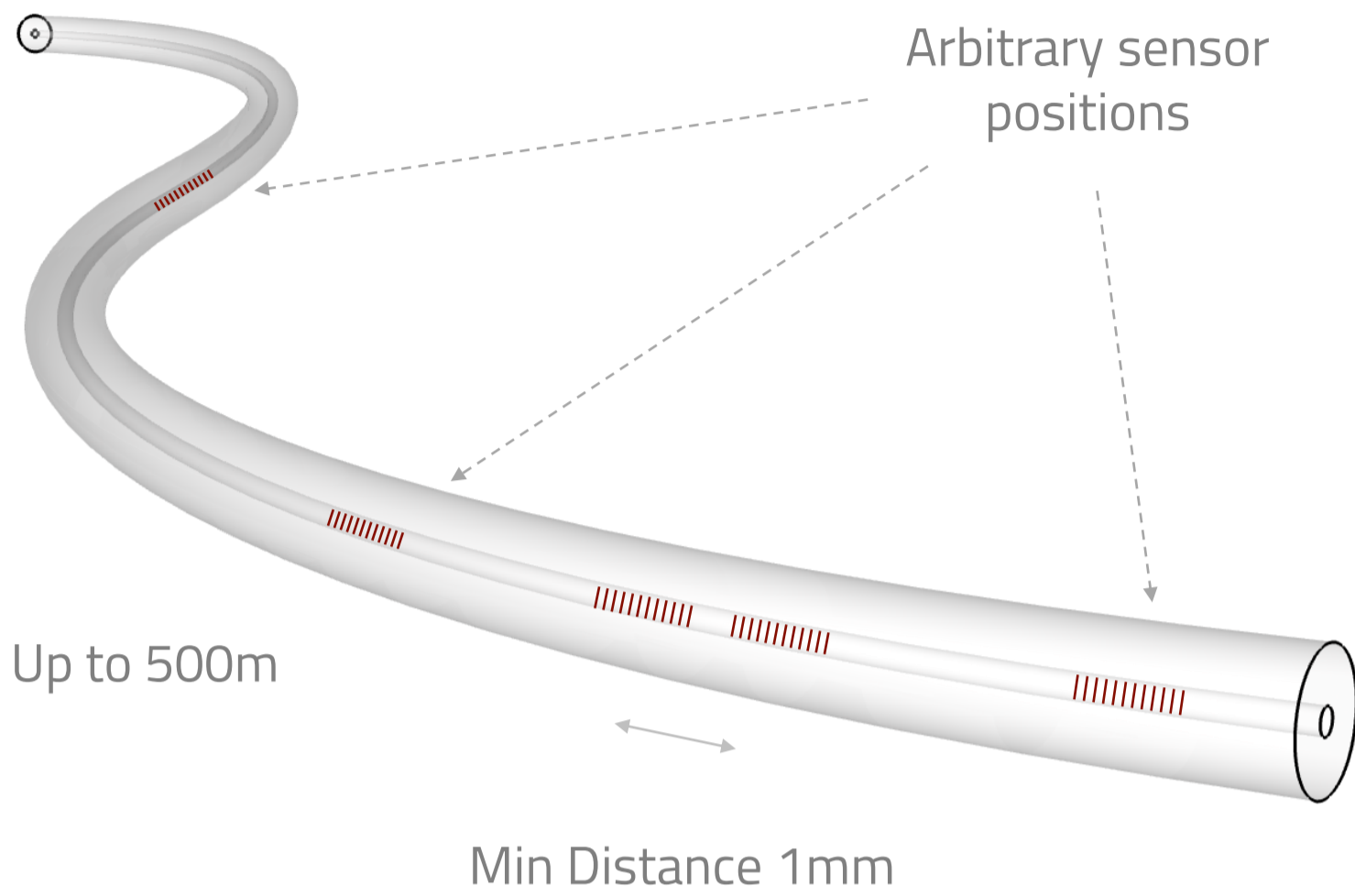
## Fiber Specifications

Fiber types	standard SM, pure silica, bend insensitive, polarization maintaining, double-clad, multicore and more
Coating types	polyimide, acrylate, high-temp-acrylate, carbon polyimide

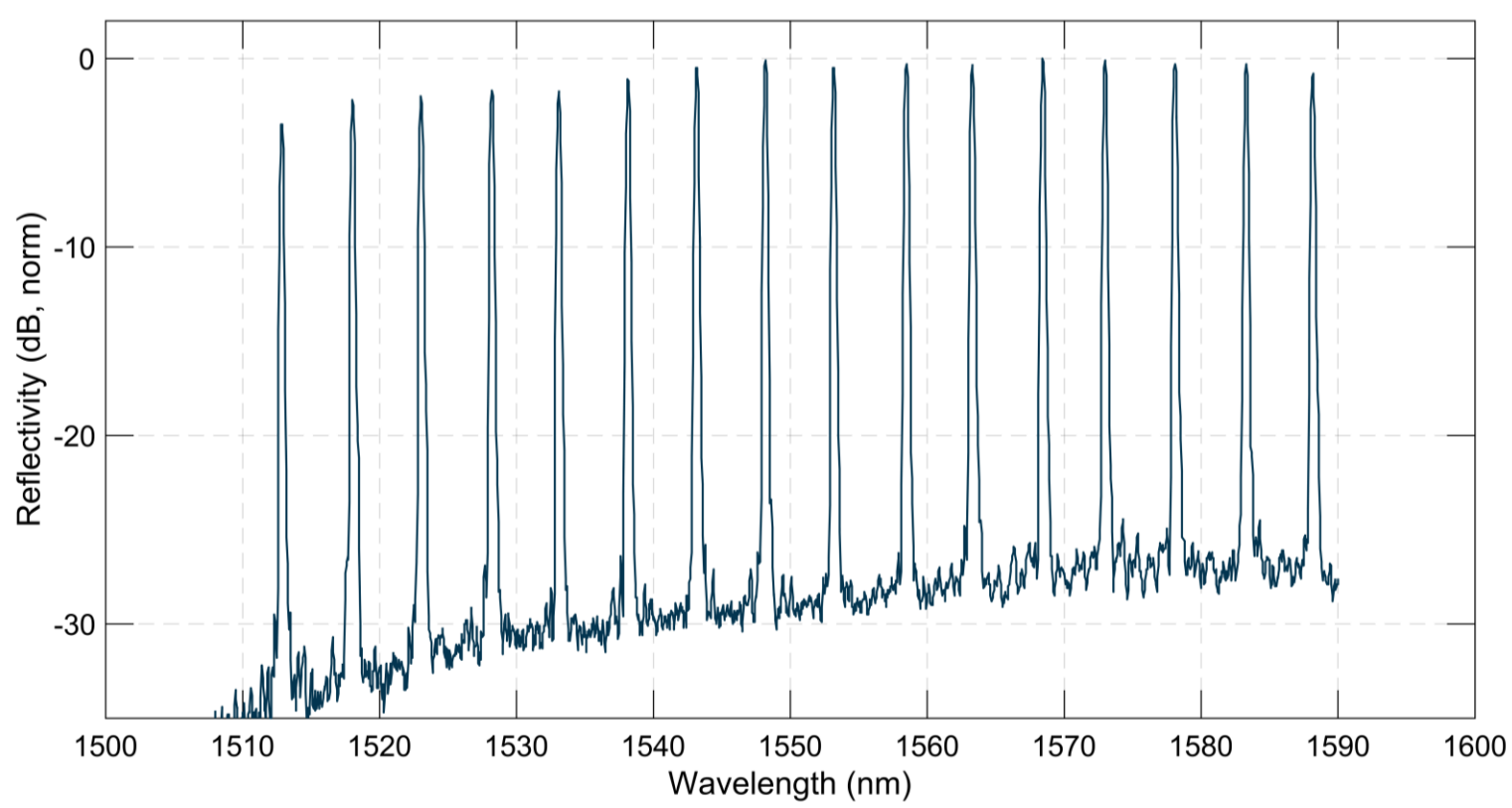
## Array Specifications

Positioning	customizable FBG positions along the fiber from minimal adjacent distances >1mm
Dynamic Range	customizable wavelengths addressing light source spectra and measurement goals

## Customizable FBG Sensor Chain



## Exemplary spectrum of an array with 16 FBGs



## FBG Functionalities

