

## SCN-46 S-line Scan 416

### Basic characteristic

- ▲ **S-line Scan 416** is interrogator with 16 optical channels consisting of S-line Scan 400 module and S-line Switch 1x16 module.
- ▲ **S-line Scan 416** is extendable with S-line Splitter or Computer modules.
- ▲ **S-line Scan 416** is provided with Sentinel 2.0 measurement software.
- ▲ **S-line Scan 416** can be simply re-configured into S-line Scan 404 or S-line Scan 436 by replacing the 1x16 switch with 1x4 or 1x36 switch modules.



### Performance properties

Number of channels		16
Scanning frequency <sup>1)</sup>		0.5Hz (32 seconds through all 16 channels)
Wavelength range		40nm (1528-1568nm)
Operational Temperature range		-5°C to +50°C
Storage Temperature range		-10°C to +60°C
Dynamic range <sup>2)</sup>		15dB
Power budget <sup>3)</sup>		15dB
Accuracy	@ 25°C // @ FOTR <sup>4)</sup>	TBT // ±20pm
Repeatability (Precision)	@ 25°C // @ FOTR <sup>4)</sup>	8pm // 15pm
Resolution		1pm
Laser Class	IEC 60825-1	1

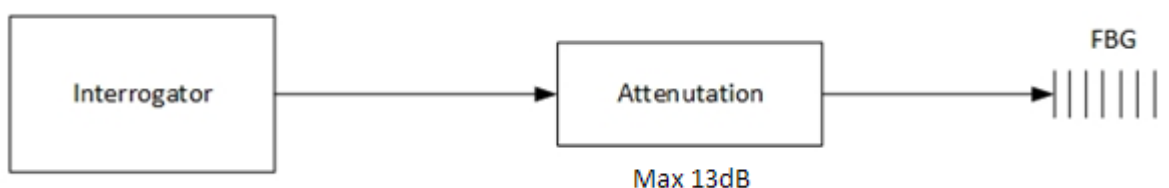
<sup>1)</sup> Slower data logging is available through down sampling.

<sup>2)</sup> Maximum attenuation that can be inserted in the optical line between the interrogator and the measured FBG, or series of FBG's on a same power level (see [Figure 1](#))

<sup>3)</sup> Maximum attenuation that can be inserted between the FBG's with the highest and lowest power level in one channel (see [Figure 2](#))

<sup>4)</sup> FOTR = Fully Operational Temperature Range (-5°C to +50°C).

All parameters tested with FBG's FWHM 200pm and 40% Reflectivity.



**Figure 1: Max. allowed attenuation within optical line (bidirectional)**

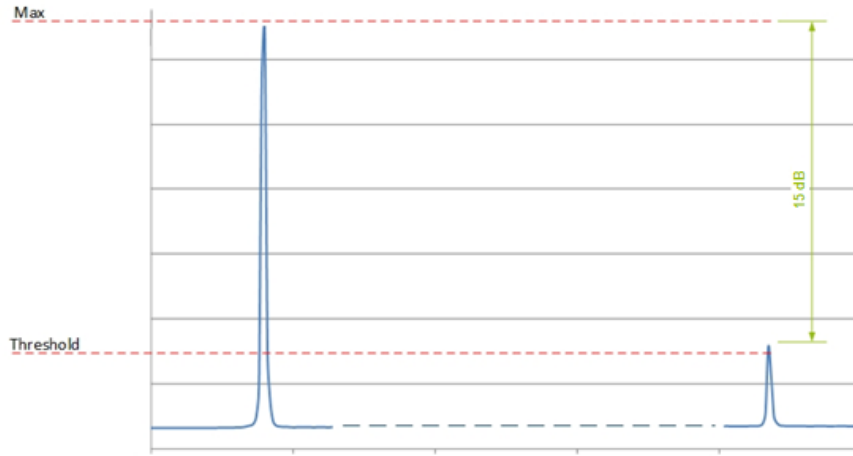


Figure 2: Power budget

**Physical properties**

Dimensions (without cable)	300x200x84mm
Weight (without cable)	4,27kg
Connector type	FC/APC
Power consumption	6W (9-18V) (universal adapter included)
Interface	USB, ModBus RTU

**Packaging**

Cardboard box with dimensions: 364x351x140mm (see Figure 3)

Optional - Ruggedized transportation case with dimensions: 555x428x211mm (see Figure 4)

**Quality statement**

All interrogators are 100% tested at SYLEX

Interrogator is manufactured according to ISO 9001:2008 and ISO 14001:2004

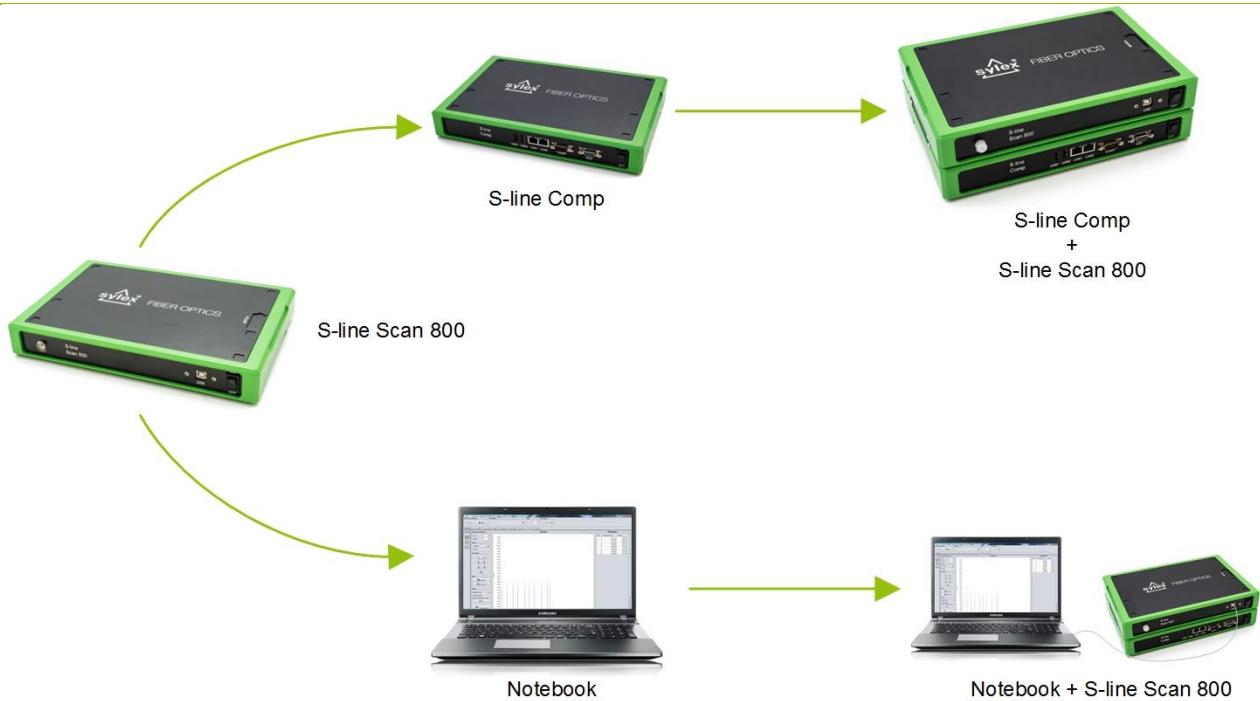
**Accessories (included):**

- ▲ Sentinel 2.0 – automated data acquisition and evaluation software
- ▲ Standard extension patchcord (SPA-02)
- ▲ Power adapter, 90-264V input range, 12V/2A output, with EU-UK-US compatible sockets

**Recommended accessories within S-line family:**

- ▲ S-line Switches – 1x4 (SWS-04), 1x36 (SWS-36)
- ▲ S-line Comp (SPC-02)
- ▲ S-line Splitters – 1x2 (SPL-02), 1x4 (SPL-04), 4x16 (SPL-16)
- ▲ S-line View 1.0 – web-based data management software for collection, analysis, validation and visualization of measured data
- ▲ Transportation case

**Communication options example**



**Packaging options**



Figure 3: Cardboard box as standard packaging



Figure 4: Waterproof, crash proof and dust proof transportation case as optional packaging

For more information contact our sales team at [sales@sylex.sk](mailto:sales@sylex.sk)

\* Specifications are subject to change without notice