

SCN-86 S-line Scan 816

Basic characteristic

- ▲ **S-line Scan 816** is interrogator with 16 optical channels consisting of S-line Scan 800 module and S-line Switch 1x16 module.
- ▲ **S-line Scan 816** is extendable with S-line Splitter or Computer modules.
- ▲ **S-line Scan 816** is provided with Sentinel 2.0 measurement software.
- ▲ **S-line Scan 816's** depolarized light source greatly reduces unwanted polarization effects.
- ▲ **S-line Scan 816** can be also simply re-configured into S-line Scan 804 or S-line Scan 836 by replacing the 1x16 switch with 1x4 switch modules or 1x36 switch modules.



Performance properties

Number of channels		16
Scanning frequency ¹⁾		1 Hz
Wavelength range		80nm (1510-1590nm)
Operational Temperature range		-5°C to +50°C
Storage Temperature range		-10°C to +60°C
Dynamic range ²⁾		30dB
Power budget ³⁾		18dB
Accuracy	@ 25°C // @ FOTR ⁴⁾	TBT // ±13pm
Repeatability (Precision)	@ 25°C // @ FOTR ⁴⁾	6pm // 12pm
Resolution		1pm
Laser Class	IEC 60825-1	1

1) Slower data logging is available through down sampling.

2) 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](#)).

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

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

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

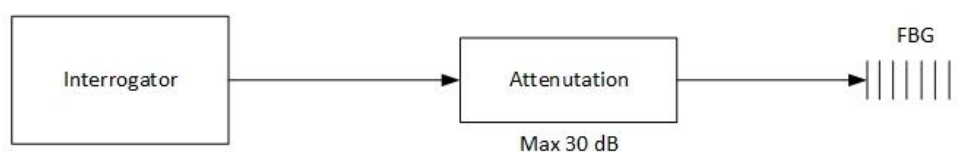


Figure 1: Max. allowed attenuation within optical line (bidirectional)

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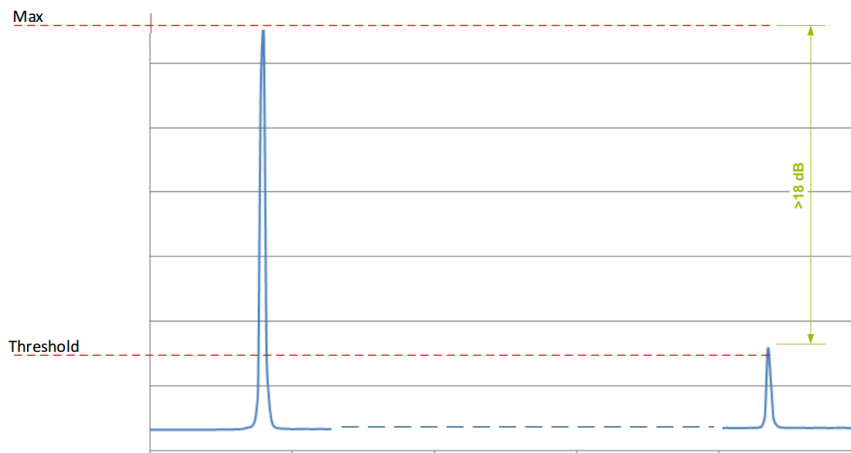


Figure 2: Power budget

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

Packaging

Standard - Cardboard box with dimensions: 364x351x140mm (see [Figure 3](#))

Optional - Ruggedized transportation case with dimensions: 502x401x188mm (see [Figure 4](#))

Quality statement

All interrogators are 100% tested at SYLEX

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

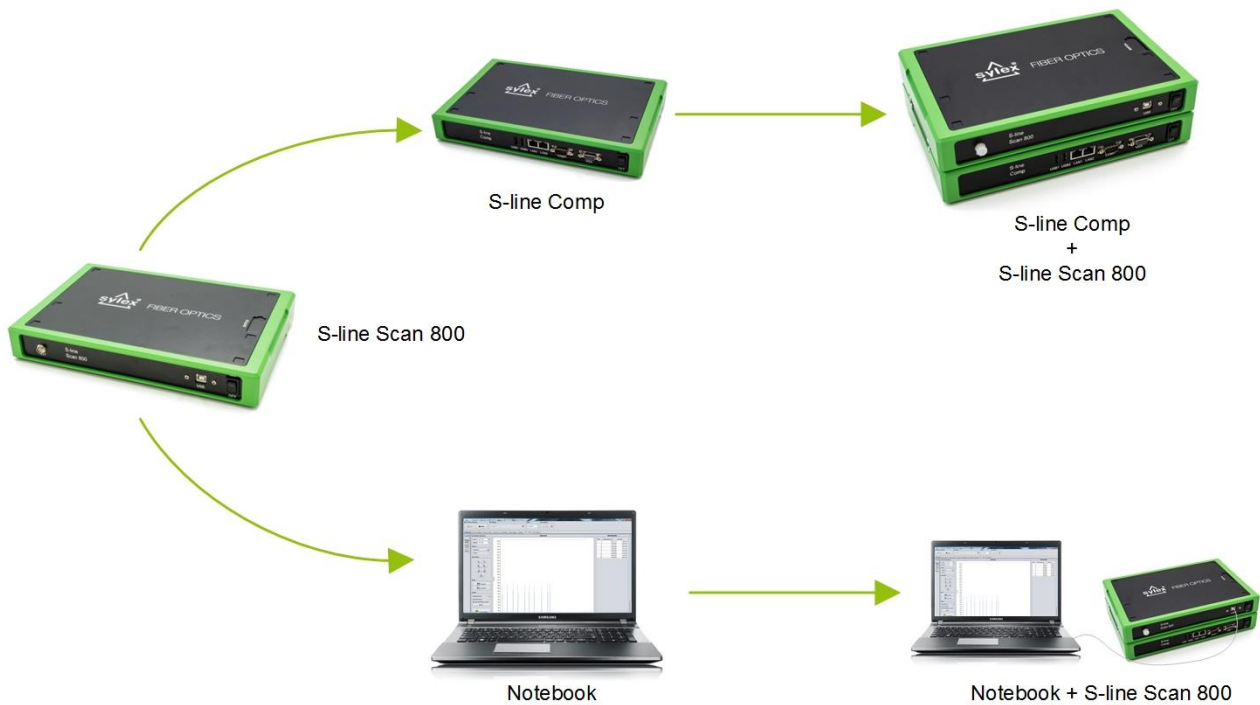
Accessories (included):

- ▲ 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 (SWx-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

* Specifications are subject to change without notice