

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.

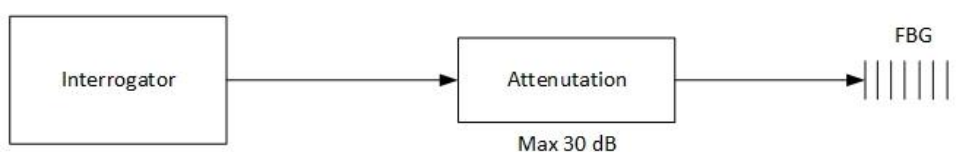


Figure 1: Max. allowed attenuation within optical line (bidirectional)

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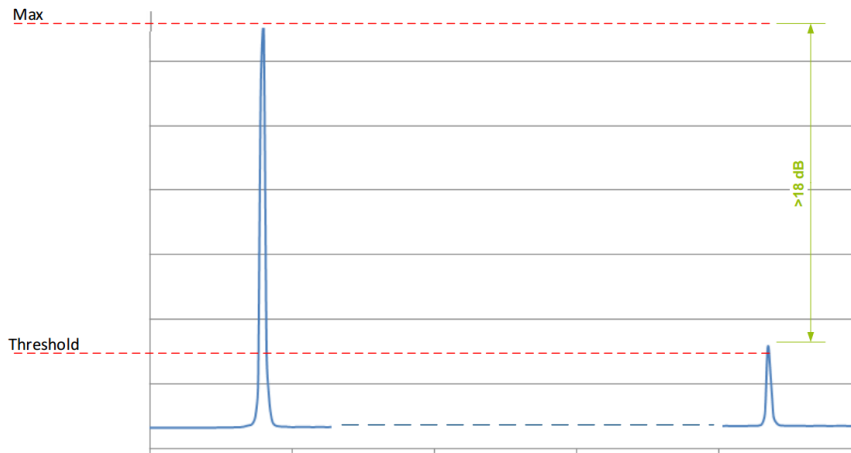


Figure 2: Power budget

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

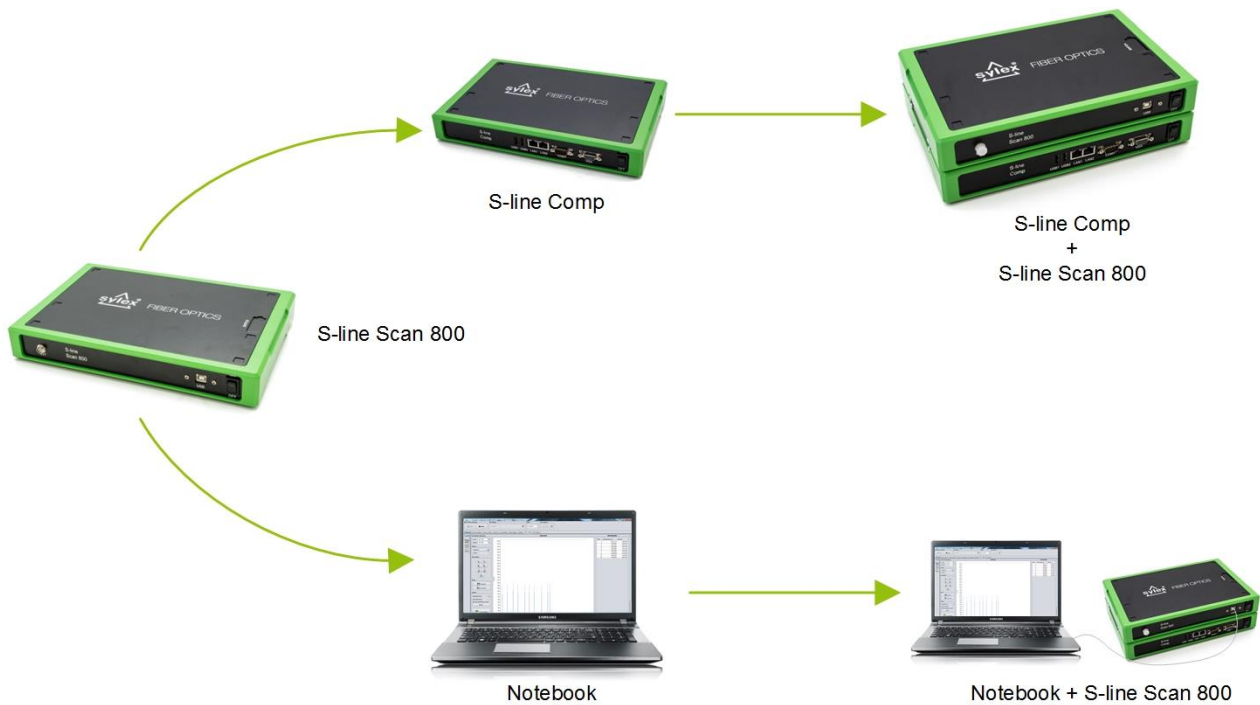
Accessories (included):

- ▲ 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