

## SCN-84D S-line Scan 804D

### Basic characteristic

- ▲ **S-line Scan 804D** is an interrogator with 4 optical channels consisting of S-line Scan 800 module and S-line Switch 1x4D module.
- ▲ **S-line Scan 804D** is extendable with S-line Splitter or Computer modules.
- ▲ **S-line Scan 804D** is provided with SentinelD measurement software.
- ▲ **S-line Scan 804D's** depolarized light source greatly reduces unwanted polarization effects.
- ▲ **S-line Scan 804D** can be also simply re-configured into S-line Scan 816 or S-line Scan 836 by replacing the 1x4D switch with 1x16 or 1x36 switch modules.



### Performance properties

Number of channels		4
Scanning frequency <sup>1)</sup>		up to 900 Hz / channel
Wavelength range		80nm (1510-1590nm)
Operational Temperature range		-5°C to +50°C
Storage Temperature range		-10°C to +60°C
Dynamic range <sup>2)</sup>		30dB
Power budget <sup>3)</sup>		18dB
Accuracy	@ 25°C // @ FOTR <sup>4)</sup>	TBT // ±13pm
Repeatability (Precision)	@ 25°C // @ FOTR <sup>4)</sup>	6pm // 12pm
Resolution		1pm
Laser Class	IEC 60825-1	1

<sup>1)</sup> The data acquisition speed is possibly be adjusted within the SentinelD settings and lower the maximum sampling rate. It is as well possible to restrict the channel count and then increase the sampling rate to about 900Hz for the remaining channels. For one active channel, the sampling rate is 5kHz.

<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 the 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.

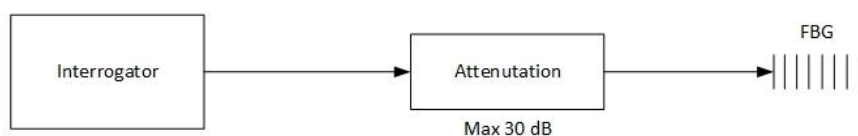


Figure 1: Max. allowed attenuation within optical line (bidirectional)

SCN-84D S-line Scan 804D

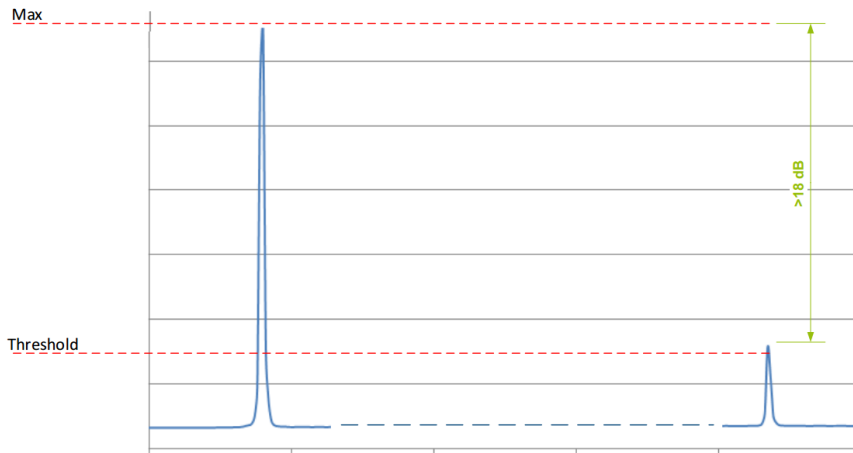


Figure 2: Power budget

**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

The interrogator is manufactured according to ISO 9001:2008 and ISO 14001:2004

**Accessories (included):**

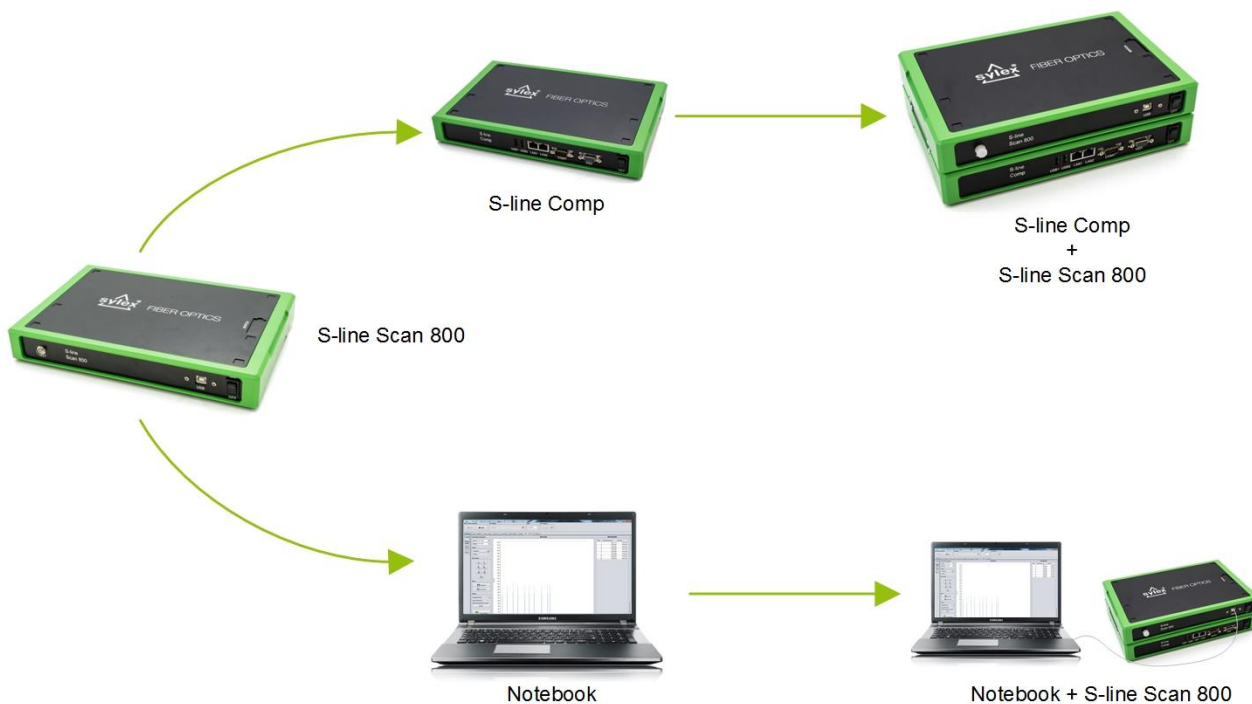
- ▲ Sentinel D – automated data acquisition and evaluation software
- ▲ Standard extension patchcord (SPA-02)
- ▲ Power adapter, 90-264V input range, 12V/2A output, with EU-UK-US compatible sockets

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

- ▲ S-line Comp (SPC-02)
- ▲ S-line Splitters – 1x2 (SPL-02), 1x4 (SPL-04), 4x16 (SPL-16)
- ▲ Transportation case

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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