

# Ultra-Wideband Source UWS-1000

The Santec ultra-wideband light source is based on a novel fiber laser architecture and emits what is known as super-continuum light. The spectrum is essentially continuous, but consists of a continuum of finely spaced wavelength each with laser light characteristics.



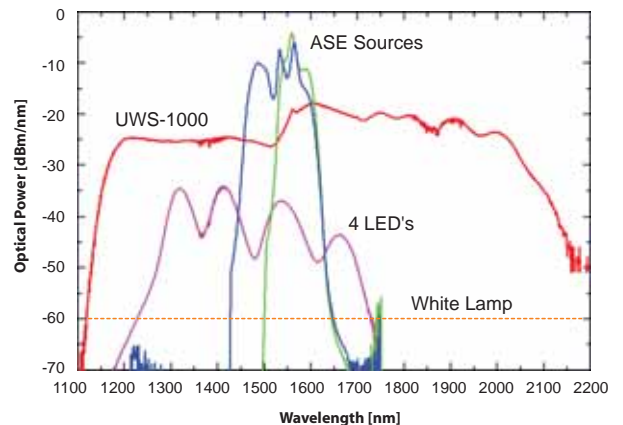
## Features

- ▶ Ultra-wideband output spectrum 1200-2000nm
- ▶ Coherence length <math><4\mu\text{m}</math>
- ▶ Spectral power density >-30dBm/nm over full range
- ▶ Coherent output can be easily focused
- ▶ Excellent spectral stability  $\pm 0.03$  dB ( $\pm 0.7\%$ ) typ.
- ▶ Fully computer-controlled & maintenance free

## Applications

- ▶ Optical Coherent Tomography (OCT) for bio-medical applications
- ▶ Spectral characterization of optical components (including DWDM, CWDM and PON filters)
- ▶ Photonics crystal and holey fiber spectral and band-gap measurements

Optical Spectrum



## Specifications

Category	Parameter	Unit	Min.	Max.	Note.
Spectral Characteristics	Optical Spectrum Range	nm	1200	1700	typically 1200-2000
	Spectral Power Density	dBm/nm	-30	-	-
	Optical Spectral Stability *1	dB	-	$\pm 0.1$	-
	Repetition Rate	MHz	6 $\pm$ 0.5		
Interface	Optical Connector	-	FC		
	Optical Fiber	-	SMF		
Dimensions	Width x Height x Depth	mm	443 x 132 x 400		

\*1 measured at 25 $\pm$ 1 $^{\circ}$ C for a period of 30minutes after a warm-up time of 1 hour.  
Measured using optical spectrum analyser AQ6317B (Sens=High1, RBW=1nm).

\* The UWS-1000 is a result of successful collaborative research with University of Tokyo.

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