

## FS-SANOS-1064-2

Preliminary data sheet of free-space SANOS @  $\lambda = 1064$  nm with two RSAM

**SANOS** – Saturable noise suppressor

### *SANOS applications*

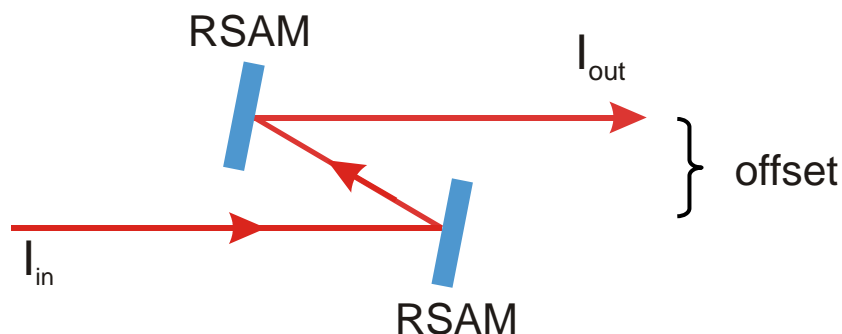
- Suppression of noise (ASE – amplified spontaneous emission) after an optical amplifier
- Suppression of remaining pulses after a pulse picker

### *Main FS-SANOS data*

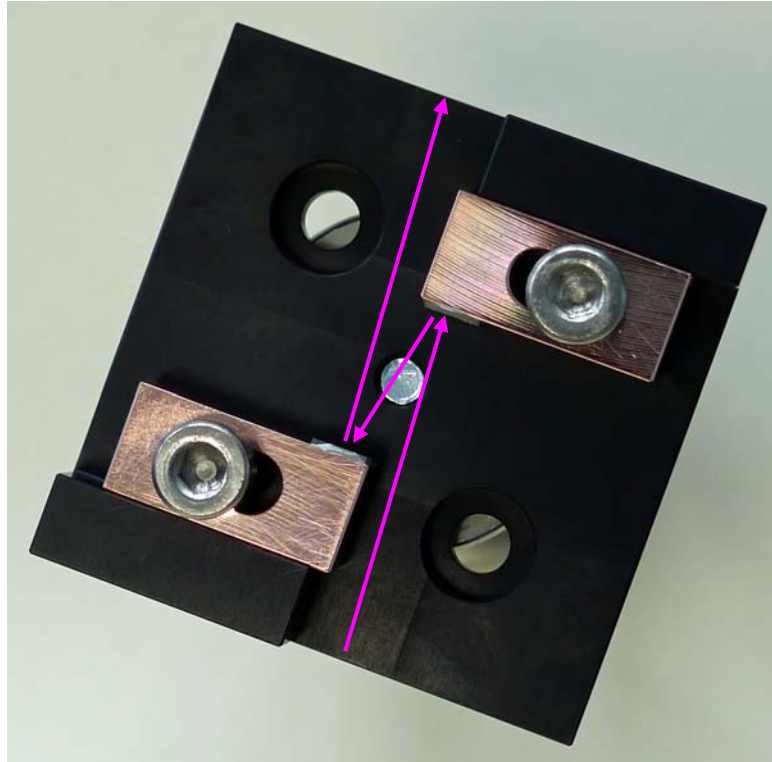
Resonance wavelength	$\lambda = 1064$ nm
Full width at half maximum	FWHM = 17 nm
Noise suppression ratio	> 20 dB
Insertion loss	6 dB
Saturation fluence	$\Phi_{\text{sat}} = 8 \mu\text{J}/\text{cm}^2$ @ noise suppression of 20 dB
Relaxation time constant	$\tau \sim 5$ ps
Parallel beam offset	2 mm
Mirrors	two RSAM, size: 4 mm x 4 mm
Angle of incidence on mirrors	$8^\circ$

### *FS-SANOS-2 description*

A FS-SANOS-2 consists of two resonant saturable absorber mirrors (RSAM). The beam goes true the free-space SANOS without changing of the direction, but with a parallel offset of 2 mm. The RSAM has a strong non-linear reflectance. For a low input signal level the transmittance of the FS-SANOS-2 is lower than 0,1% (99,9 % loss), whereas high intensity pulses are transmitted with a lower loss of 75 %. The input is isolated better than 50 dB. To meet exactly the low-intensity reflectance minimum the input beam inclination can be changed by some degrees.



FS-SANOS-1064-2



## Low intensity spectral reflectance of a FS-SANOS-1053-2

