



Fig. 1. BIOSIGNALSPLUX LIGHT (LUX) SENSOR (STANDARD VERSION).

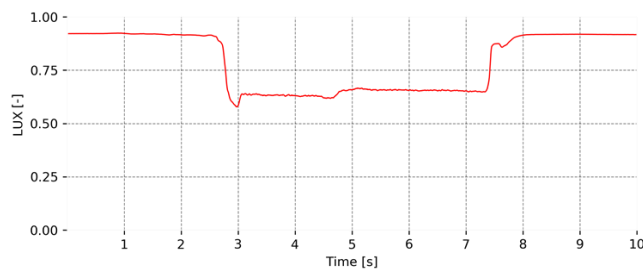


Fig. 2. Typical raw LUX data (acquired with biosignalsplux).

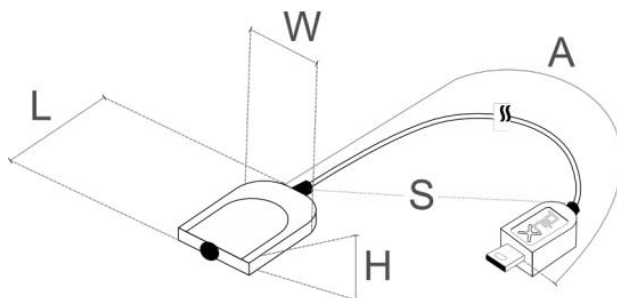


Fig. 3. LIGHT (LUX) SENSOR DIMENSIONS

PHYSICAL DIMENSIONS (customizable)

W x L x H: 1.6cm x 2.2cm x 0.5cm

A: 105cm±0.5cm S: 0.3cm±0.1cm

Available Sleeve Colors: White, Black, Blue, Green, Red, Yellow, Grey, and Brown

SPECIFICATIONS

- > **Range:** 400-700 nm
- [550 nm | peak spectral wavelength]
- > **Consumption:** ~0.05 mA

FEATURES

- > Easy-to-use
- > Pre-conditioned analog output
- > High signal-to-noise ratio
- > Small form-factor
- > Raw data output

DESCRIPTION

A common need when working with biosignals is the synchronization of the recorded data with external sources (e.g. a computer screen for visual evoked potentials). If applied to the computer screen, our LUX sensor can be used to detect chromatic changes in the stimuli, hence providing a synchronization source. The LUX sensor can also be useful for optical synchronization with third-party devices (provided that the third-party device can trigger an LED), in applications where it is important to have electrical decoupling between devices.

TRANSFER FUNCTION

Range: [0,1]

$$LUX(-) = \left(\frac{ADC}{2^n} \right)$$

with: $LUX(-)$ LUX normalized value
 ADC Digital sensor sample
 n Sampling resolution in bit

$$LUX(\%) = LUX(-) \times 100\%$$

Please see also the sensor's [User Manual](#) and [Technical Notes](#) for more information about this sensor incl. application notes, available publications, safety & maintenance instructions.



PLUX – Wireless Biosignals, S.A.
 Av. 5 de Outubro, n. 70 – 2
 1050-059 Lisbon, Portugal
 plux@plux.info
<http://biosignalsplux.com/>

This information is provided "as is," and we make no express or implied warranties whatsoever with respect to functionality, operability, use, fitness for a particular purpose, or infringement of rights. We expressly disclaim any liability whatsoever for any direct, indirect, consequential, incidental or special damages, including, without limitation, lost revenues, lost profits, losses resulting from business interruption or loss of data, regardless of the form of action or legal theory under which the liability may be asserted, even if advised of the possibility of such damages.