

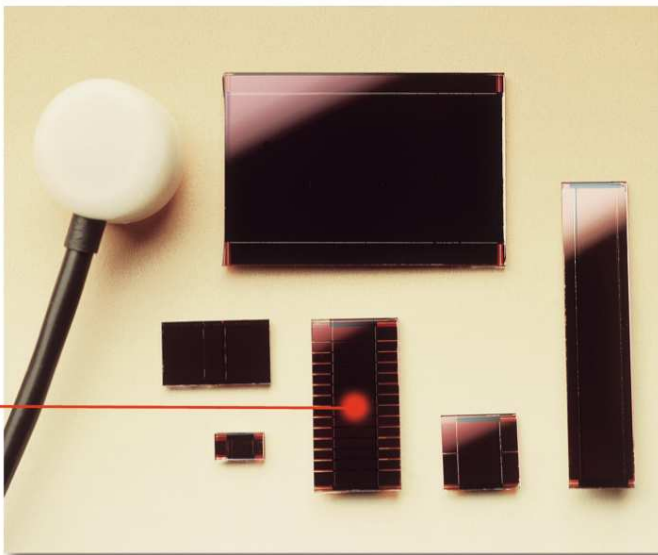
# Light detection cells

Photodiodes for visible light detection

Stabilized amorphous silicon material

Wide linearity range in PAR\* and lux

Single sensor or multi-sensors



- **Spectral range** : 350 – 750 nm
- **Typical sensitivity** : 0.2A/W
- **Open circuit voltage** : 0.5 à 0.8 V
- **Short circuit current** : 80nA/cm<sup>2</sup>.lux
- **Linearity range** : 0.1 to 100 000 lux
- **Dimensions** : 6 to 288 mm
- **Thickness** : 0.55, 1 ou 2 mm
- **Multi-sensors** with separate active areas
- **Protection** by epoxy coating

- Technical details next page -

## Examples : visible light detection



Twilight detectors



Luxmeter for agronomy and meteo



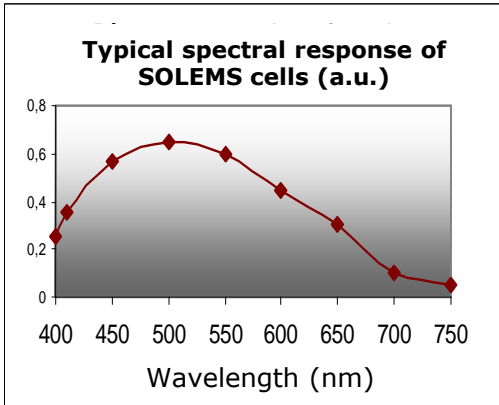
Automotive measurements (headlights control)



PAR sensors \*

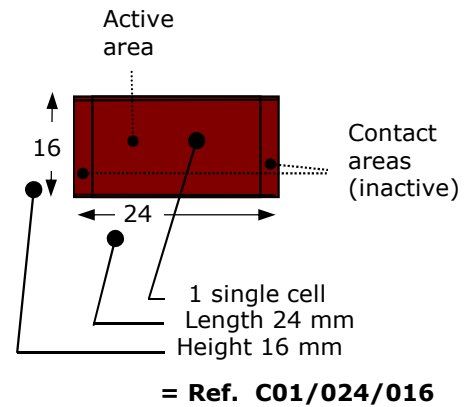
\* PAR = Photosynthetically Active Radiation – see SOLEMS datasheet : « PAR & lux sensors »

[www.solems.com](http://www.solems.com)



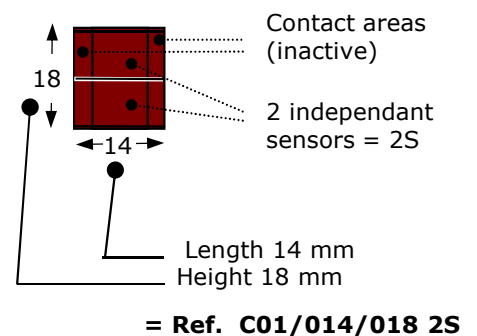
## Single sensors : one detection area (examples)

Product ref.	Ext. dimensions (Length x Height)	Active area (Length x Height)
<b>C01/007/007</b>	7 x 7 mm	4 x 5 mm
<b>C01/012/012</b>	12 x 12 mm	4 x 10 mm
<b>C01/014/014</b>	14 x 14 mm	6 x 11 mm
<b>C01/014/057</b>	14 x 57 mm	5 x 55 mm
<b>C01/024/016</b>	24 x 16 mm	17 x 14 mm
<b>C01/030/046</b>	30 x 46 mm	24 x 43 mm
<b>C01/036/052</b>	36 x 52 mm	28 x 50 mm
<b>C01/040/022</b>	40 x 22 mm	28 x 21 mm
<b>C01/012/288</b>	12 x 288 mm	4 x 285 mm
...		



## Multi-sensors : several independant active areas (examples)

Product ref.	Ext. dimensions (Length x Height)	Nb of sensors / Active area per sensor (Length x Height)
<b>C01/014/014 2S</b>	14 x 14 mm	2 / 8 x 5.5 mm
<b>C01/014/018 2S</b>	14 x 18 mm	2 / 8 x 7.5 mm
<b>C01/014/057 2S</b>	14 x 57 mm	2 / 8 x 27 mm
<b>C01/016/032 12S</b>	16 x 32 mm	12 / 10 x 2 mm
<b>C01/012/072 30S</b>	12 x 72 mm	30 / 4 x 2 mm
...		



**You wish a different detection cell ?  
Send your requirements & drawings.**

More on « **Application memo : Measurement of lux** » on <http://www.solems.com/Specific-photocells>

[www.solems.com](http://www.solems.com)