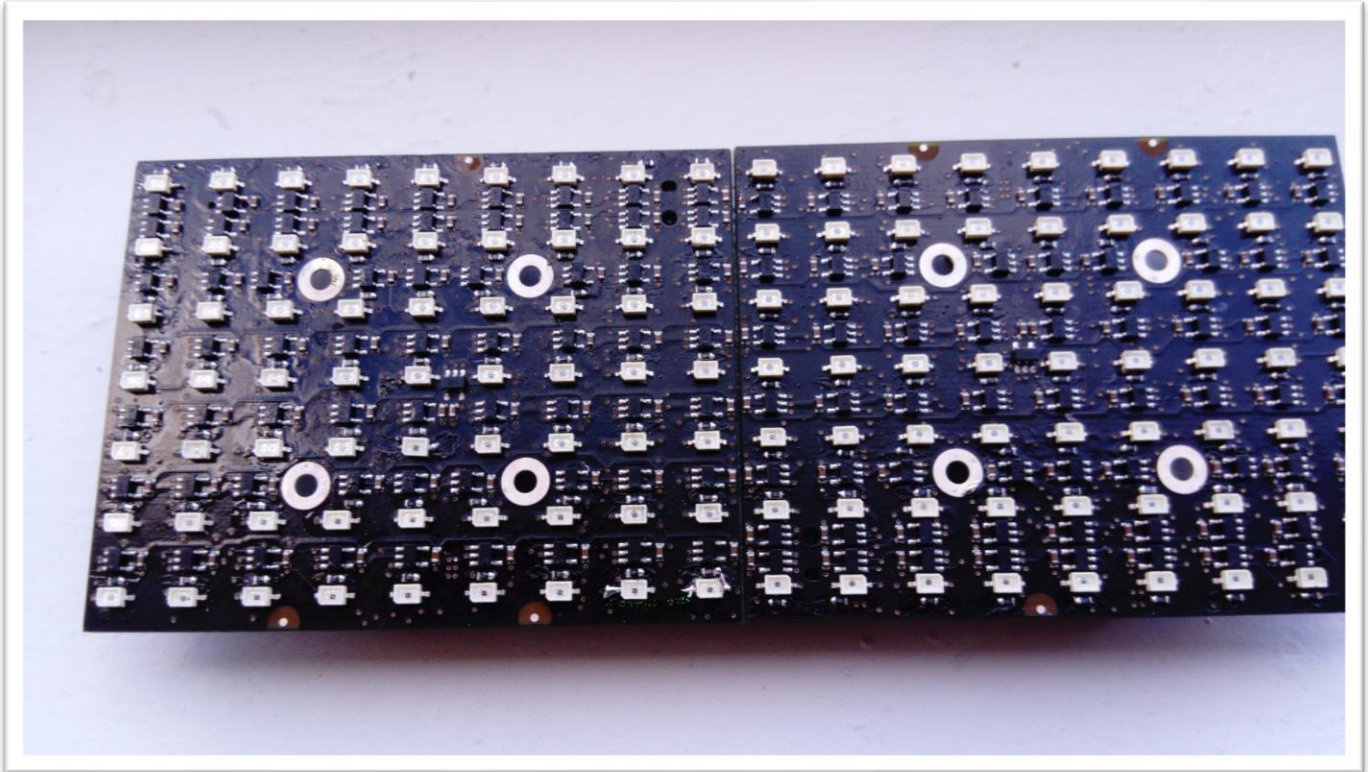


# PHOTOARRAY

Photodiodes array board

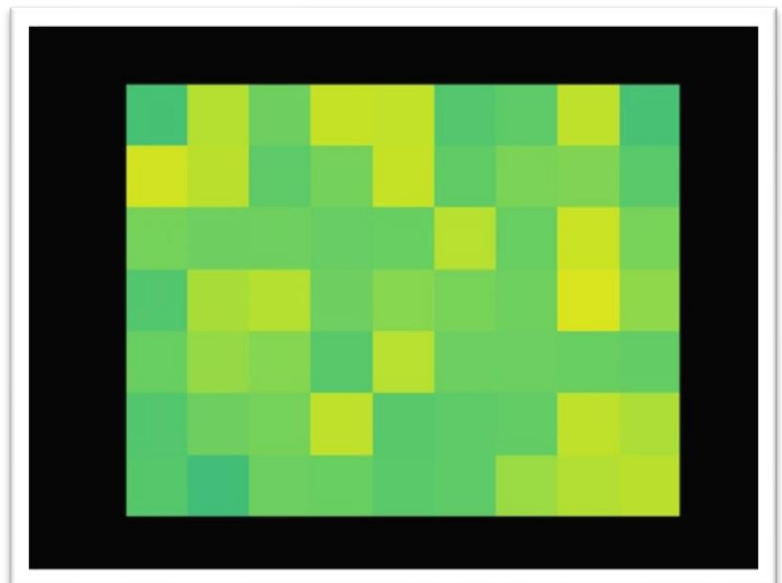
PhotoArray is an array of photodiodes placed at a fixed pitch to measure the incident light on them.

In addition to the array of photodiodes, it also contains the electronic necessary to measure the current through them and a microcontroller capable of digitizing such currents and transmit them, via serial communication, to an external processor.



## Applications

- Light calibration
- Industrial illumination
- Optical instruments
- Research & Development



Graphical representation of incident light on PhotoArray

## Features

<b>Photodiodes array</b>	<ul style="list-style-type: none"><li>• 63 photodiodes</li><li>• Matrix 9x7</li><li>• Pitch 9mm</li></ul>
<b>Photo diodes</b>	<ul style="list-style-type: none"><li>• Everlight PD93-21C / TR8</li></ul>
<b>ADC</b>	<ul style="list-style-type: none"><li>• 12 bits ADC resolution.</li><li>• 12Mhz internal clock</li></ul>
<b>Communication</b>	<ul style="list-style-type: none"><li>• RS-485</li><li>• Up to 16 boards on the same bus</li><li>• Resistor for RS485 bus termination configurable with microswitch</li></ul>
<b>Temperature</b>	<ul style="list-style-type: none"><li>• Internal temperature sensor <math>\pm 0.5^{\circ}\text{C}</math></li></ul>
<b>Id configuration</b>	<ul style="list-style-type: none"><li>• 4 microswitch for ID configuration of the board</li></ul>
<b>Power</b>	<ul style="list-style-type: none"><li>• 9-12V DC input range</li><li>• I<sub>max</sub>: 500mA</li></ul>
<b>Microprocessor</b>	<ul style="list-style-type: none"><li>• P50C5 LP family of microprocessor by Cypress. Based on ARM Cortex-M3 core</li></ul>
<b>Dimensions</b>	<ul style="list-style-type: none"><li>• 80x62mm. 4 holes for fixing M2.5</li></ul>
<b>Available documentation</b>	<ul style="list-style-type: none"><li>• User Guide</li><li>• Functional &amp; Characteristics description</li><li>• Protocol communication</li><li>• Schematics</li><li>• Tina simulator file</li></ul>

## Special requirements, other questions

If you need special requirements please let us know, we can help you. We can adapt this system to your requirements regarding photodiode and array needed.

Contact us for further information.

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