



PRODUCT LEAFLET

TECHNICAL SPECS

APPLICATION NOTE

## SmartLED – the compact, powerful light source for a wide range of industrial and research applications

### Applications

The SmartLED is particularly suited for all applications where a compact and portable yet robust light source is essential:

- Industrial applications such as the installation and setting up of machinery and assembly lines.
- Research applications like bio-mechanical research where a nearIR light source is needed to avoid disturbance of the living objects like insects.

### Why the SmartLED?

- Compact yet powerful LED light head with minimal power consumption
- Can be used with a variety of operation modes to suit the particular application
- Produces practically no heat despite the powerful light output
- Simple and easy to position for a good illumination

### Unique features

High efficiency LED's are now replacing more and more the traditional light sources like tungsten / halogen lights without having their disadvantages.

SmartLED is available with a range of LED colors to suit your application by emitting light with a spectral color different from the main object to create images rich in contrast.

The SmartLED can be wired in various ways to offer the most suitable operation mode

- continuous light, full output
- continuous light, variable light output (via a 0-10V control voltage)
- strobe mode (triggering on negative or positive edge)

Built-in driver circuitry - no need for external 'control units'



Two SmartLED mounted to a High Speed Camera for practically shadow-free illumination



Bottling station, illuminated with a single SmartLED

Your local AOS partner:

Specifications are subject to change without prior notice – v10.2009



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## Versions

The SmartLED is available in various versions:

- **SmartLED standard:** providing 80% of its light to a diameter of 0.2m (from 1m distance)
- **SmartLED wide:** providing 80% of its light to a diameter of 0.45m (from 1m distance)
- **LED color:** see the chart below for available colors
- **Housing:** standard housing or IP68 (316 stainless steel)

## Accessories

Every SmartLED comes complete with an 'accessory kit', which includes:

- SmartLED light head (with built-in controller)
- 24VDC Power supply and cable
- Bracket with 1/4" thread (standard tripod thread)

## Light spectrums

The SmartLED is available with LED's of a wide range of colors-

	Red (625nm)		White
	Cyan (505nm)		Green (530nm)
	Blue (470nm)		UV (365 / 395nm)
	IR (850 / 940nm)		

## Technical key specifications

<b>Electrical input</b>	24VDC (+/- 10%)
<b>Power consumption</b>	10W (max)
<b>Intensity</b>	via 0-10V control voltage
<b>Dimmable</b>	manually adjustable by built-in potentiometer
<b>Operating mode</b>	Continuous or strobe mode
<b>Strobe mode</b>	Pulse width controls the strobe pulse
<b>Connector type</b>	M12 Quick Disconnect
<b>Size</b>	88 x 90 x 34 mm, 900 gr

Complete technical specifications of our products are available as a separate document ('technical specs') from your AOS partner, or as a download from our webpage [www.aostechnologies.com/downloads](http://www.aostechnologies.com/downloads)