



# Medical & Surgical Lighting Pty Ltd

SERIES 1 & 3 MEDICAL EXAMINATION LIGHTS



# INTRODUCTION



**Medical & Surgical Lighting Pty Ltd (MSL)** is an Australian company specialising in the design and manufacture of medical examination lights.

Unlike general task lights, the MSL product range is purpose designed to satisfy the special lighting demands of the health care industry. Working tasks range from general examinations to minor surgery.



Hospitals & Clinics



Doctors Surgeries



Veterinary Surgeries

## **MSL product and capability overview:**

**Ceiling Mount, Wall Mount and Mobile Trolley models**, make up the versatile product range. All comply with the relevant Australian & New Zealand medical examination lighting standards.

**Energy efficient LED light sources.**

**Electronic switching with four stage dimming.**

**Installation cost savings**, each examination light is supplied as a number of pre-assembled components.

**Easy to clean**, from the outset of the product design this was a most important consideration. The use of round, flat and smooth surfaces, have been maximised. In addition, the all metal construction with powder-coated and anodised finishes provides durability and resistance to cleaning agents.

**The counter-balanced arm movement** provides several key design and build quality features. The light is effortless to position and remains drift-free after manoeuvring. Extended reach for full patient coverage, requiring minimal or no maintenance.

**A reputable 5 year warranty supports MSL products.**

**If spare parts are required they are cost-effective and readily available.**

**MSL is accepted as a leading product brand in Australia and New Zealand**, with numerous installations in hospitals, clinics, doctors' surgeries and animal clinics. If references are required, contacts of end-users can be provided.

**For additional points**, please refer to what we term as the 'check list' (see the MSL web site).

**Installation instructions, mounting templates and technical data sheets** on all MSL models are available for download.

Please visit [www.mslighting.com.au](http://www.mslighting.com.au)

## DESIGNED AND MANUFACTURED IN AUSTRALIA

Manufacturing in Australia continues to be a key factor in the MSL business plan. Our skilled team has total control over all design, production and delivery processes. Imported product brands do not provide MSL's level of support and service.

Components are manufactured from premium grade materials. Machined components are produced by hi-tech CNC lathe and machining centre technology, resulting in high tolerances and surface finishes.

Quality control inspections are carried out at key times with every production process to ensure customers' requirements and compliance with all current Standards and Regulations are achieved.

For special applications our flexible manufacturing capabilities can provide modifications to accommodate specific customer requirements.



### Key MSL LED Technology Features and Benefits

Series 1 & 3 models utilise compact 15 Watt LED modules. They are specifically designed for medical examination lighting tasks. Each module comprises 7 LED's, driver and lens.

The precision engineered lens and reflector design delivers a controlled 8.4 degree light beam, maximising the light performance.

Optimum colour temperature.

High Colour Rendering Index and complies with the cyanosis observation index (COI).

There is almost no damaging infrared or UV radiation, resulting in greater patient/operator comfort.

Low energy consumption.

High shock resistance and long service life.



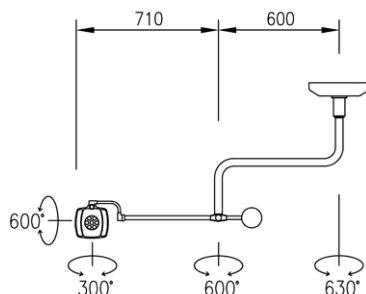
# MSL SERIES 1 - CEILING, WALL & MOBILE TROLLEY

## MSL Model Number

## Dimensions & Range of Movement

## Features & Options

MSL-SL115C



Custom made ceiling mounts to ensure lights are installed at the correct height as per the Australian standards.

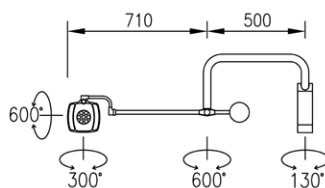
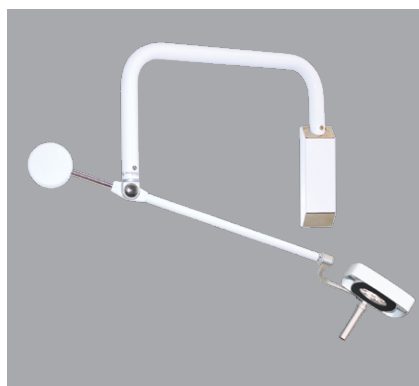
Optional 360° continuous rotating electrical connector at the ceiling mount joint.

To specify add / **360°**

Removable sterilisable handle (autoclavable).

Ease of installation, supplied as a number of pre-assembled components.

MSL-SL115W



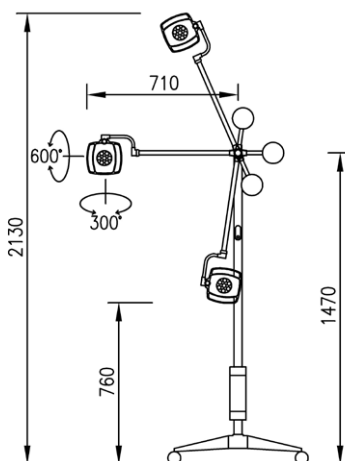
Optional orange hospital grade flex and plug fitted to wall mount box. Length of cord required to be nominated at time of order.

To specify add / **FP**

Removable sterilisable handle (autoclavable).

Ease of installation, supplied as a number of pre-assembled components.

MSL-SL115M



Standard wheels supplied are 50mm diameter. Optional heavy duty 75mm diameter wheels are available.

To specify add / **HDW**

Compact five leg base with two opposing brake wheels for increased stability.

Three metre orange power cord with hospital grade plug. Cord support on pole when not in use.

Removable sterilisable handle (autoclavable).

Ease of installation, supplied as a number of pre-assembled components.

# MSL - SERIES 1 KEY FEATURES & TECHNICAL DATA

**Fully enclosed low voltage cables:**  
No wear points at joints.

**Cleaning, infection control:** Round, flat, smooth surfaces - all metal construction with powder coated and anodised finishes for durability and resistance to cleaning agents.

**Ease of installation:** Supplied as a number of pre-assembled components - quick connect electrical terminals.

**Light head:** 'Slimline' design - sealed - user friendly, rotates at both the light head and yoke allowing accurate positioning - purpose designed heat sinking for the thermal management of the LEDs.

**Electronic switching**  
4 stage dimming.

**Fixed grip handle:**  
For easy positioning and user control.

**Integral low voltage LED power supply.**

**Removable light head.**

**LED Light source.**

**Safety glass:** High light transmission - eliminates reflections.

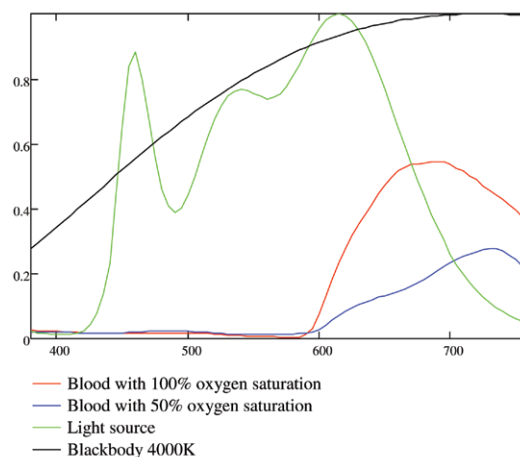
**Removable sterilisable handle**  
(autoclavable).

**Counter balanced arm movement:**  
Effortlessly repositionable and drift free - easy rotation and positioning of the light - provides extended reach for full patient coverage.

## Colour Rendering Index:

The MSL 15W-LED medical module has been tested by an independent test institute. Results have confirmed its suitability for Australian hospitals and medical tasks that are required to comply with the Cyanosis Observation Index (COI) as per AS/NZS1680.2.5:1997. This is an important Standard that takes into account the strict guidelines that apply to the use of lamps in the diagnosis of patients in hospital wards, medical clinics and associated areas.

The LED module has a high "Special CRI R9" deep saturated red value (not included in normal CRI calculations). For medical examination tasks this R9 value is the key issue in diagnosis and accurate tissue identification.



## MSL- SERIES 1

Wattage:	15W
Illumination @ 600mm	44,900 lux
Illumination @ 1000mm	18,800 lux
Beam diameter @ 600mm	82mm - Measured at 50% of peak value
Beam diameter @ 1000mm	127mm - Measured at 50% of peak value
LED average life:	35,000 - 50,000 hours
Colour temperature:	4,546°K
Colour rendering index (CRI)	Ra 95
Cyanosis observation index (COI)	2.2
Dimming function:	4 Stage electronic dimming
ARTG identifier	159702 Class 1 medical device
Cardiac protection:	Compliant
EMC Approval:	EMCTEST.688
Voltage:	36V DC
Weight:	Ceiling = 12Kg / Wall = 9Kg / Mobile = 15Kg



*Designed and Manufactured in Australia*

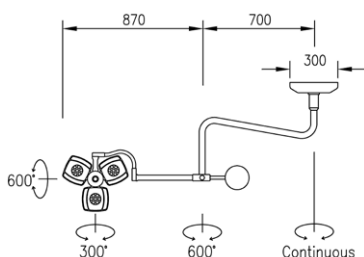
# MSL SERIES 3 - CEILING, WALL & MOBILE TROLLEY

## MSL Model Number

## Dimensions & Range of Movement

## Features & Options

MSL-SL315C



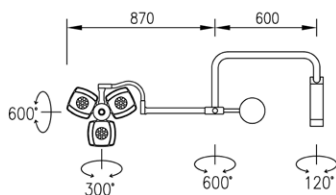
Custom made ceiling mounts to ensure lights are installed at the correct height as per the Australian standards.

Standard with 360° continuous rotating electrical connector at the ceiling mount joint.

Removable sterilisable handle (autoclavable).

Ease of installation, supplied as a number of pre-assembled components.

MSL-SL315W



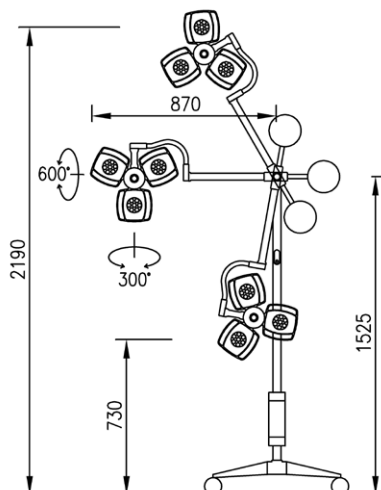
Optional orange hospital grade flex and plug fitted to wall mount box. Length of cord required to be nominated at time of order.

To specify add / **FP**

Removable sterilisable handle (autoclavable).

Ease of installation, supplied as a number of pre-assembled components.

MSL-SL315M



Standard wheels supplied are heavy duty 75mm dia.

Compact five leg base with two opposing brake wheels for increased stability.

Three metre orange power cord with hospital grade plug. Cord support on pole when not in use.

Removable sterilisable handle (autoclavable).

Ease of installation, supplied as a number of pre-assembled components.

# MSL - SERIES 3 KEY FEATURES & TECHNICAL DATA

**Ceiling mount:** Each mount is manufactured to suit the exact ceiling height requirement.

**Note:** Ceiling height must be specified at the time of order.

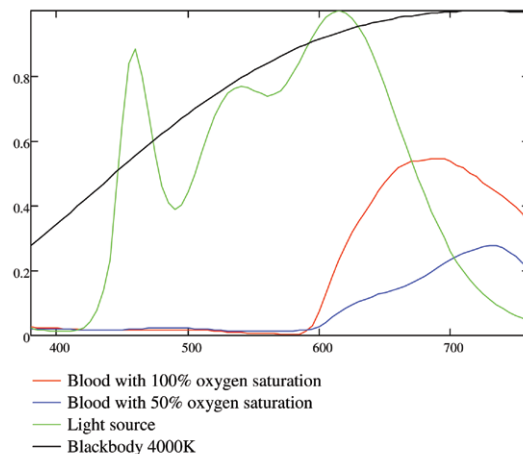
For ceiling heights lower than 2700mm a 'LC' suspension arm is used.



## Colour Rendering Index:

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The LED module has a high "Special CRI R9" deep saturated red value (not included in normal CRI calculations). For medical examination tasks this R9 value is the key issue in diagnosis and accurate tissue identification.



## MSL- SERIES 3

Wattage:	3 x 15W
Illumination @ 600mm	80,800 lux
Illumination @ 1000mm	53,200 lux
Beam diameter @ 600mm	127mm - Measured at 50% of peak value
Beam diameter @ 1000mm	132mm - Measured at 50% of peak value
LED average life:	35,000 - 50,000 hours
Colour temperature:	4,546°K
Colour rendering index (CRI)	Ra 95
Cyanosis observation index (COI)	2.2
Dimming function:	4 Stage electronic dimming
ARTG identifier	159702 Class 1 medical device
Cardiac protection:	Compliant
EMC Approval:	EMCTEST.688
Voltage:	36V DC
Weight	Ceiling = 22Kg / Wall = 18Kg / Mobile = 23Kg



## CONTACTS



**Medical & Surgical Lighting Pty Ltd**  
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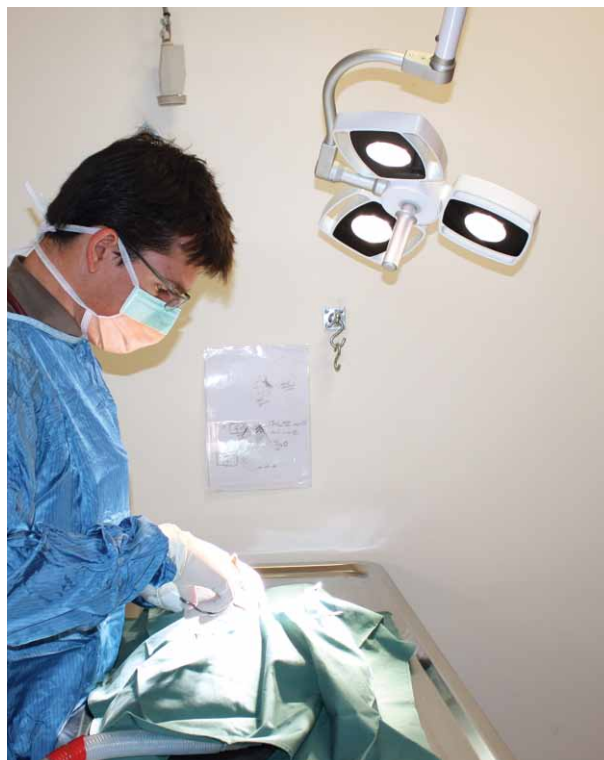
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Please visit our website for additional information.

**[www.mslighting.com.au](http://www.mslighting.com.au)**

MSL operates through a widespread network.  
Our design manufacturing and sales team has  
the capability to assist you through all phases of  
your project.



**Your local distributor:**

*Designed and Manufactured in Australia*