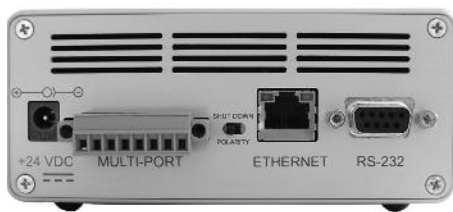




LLS - LLS Light Source, A20960

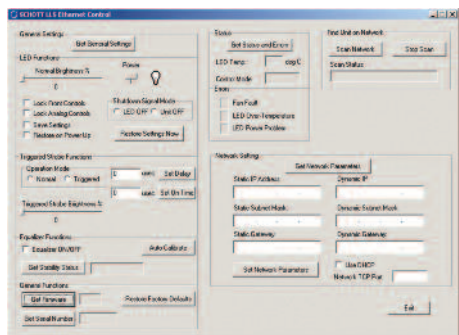


LLS - LLS Light Source, A20960. Rear View shows (from left to right): universal power input, multi-port input, Ethernet input, RS-232 input

Hybrid Solution Pairs LEDs with Fiber Optics

The LLS offers users 4 different modes of control interfaces - a continuous intensity control knob, Ethernet, RS-232 or analog 0-5 Volt.

The auto-sensing inputs eliminate the need to switch manually between the modes. The unit also features a user control lock-out via the Ethernet and RS-232 SCHOTT supplied software.



Screen shot of the supplied Ethernet software

LLS - LED Light Source

Longer Life, Lower Energy Consumption, Higher Performance

Standard Features

- Long life-time (50,000 hours)
- Fits all COLDVision light guides
- Fast triggered strobe capabilities (maximum 1 kHz pulse rate, maximum pulse width 1 msec, duty 1/10)
- Internal light feedback provides stabilized light output for the most demanding machine vision applications
- Low power consumption (less than 25 watts)
- Improved immunity to vibration and shock
- Small footprint and worldwide universally compatible power supply with interchangeable plugs
- RoHS compliant
- CE Approved

Characteristics

Dimensions	Length 197 mm (7.75 in) Width 129 mm (5.08 in) Height 63 mm (2.48 in)
Weight	862 grms (1.9 lbs)
Operating Temperature	5° C (41° F) to 40° C (104° F)
Color Temperature - White	6000K

SCHOTT LLS Technical Information

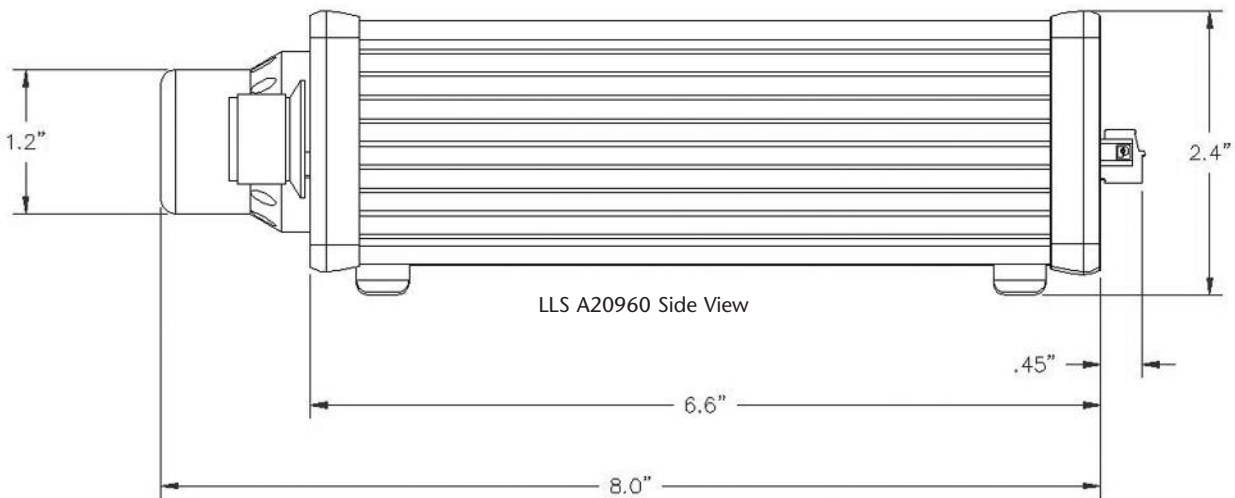
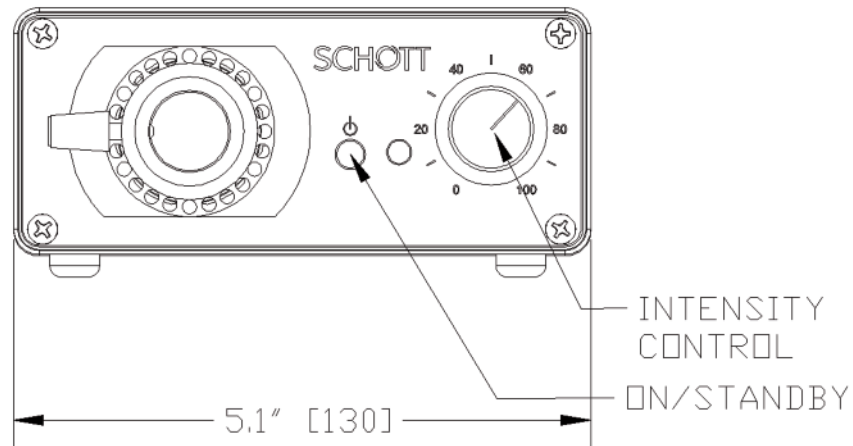
Part No.	Color	Wavelength (nm) (+/- bandwidth 20 nm)	Light Output
A20960	Red	625	120 lm
A20960.1	White	---	275 lm
A20960.2	Green	525	100 lm
A20960.4	Blue	470	40 lm
A20955	Mounting Bracket		

LLS - LED Light Source

Dimensions in () are in mm

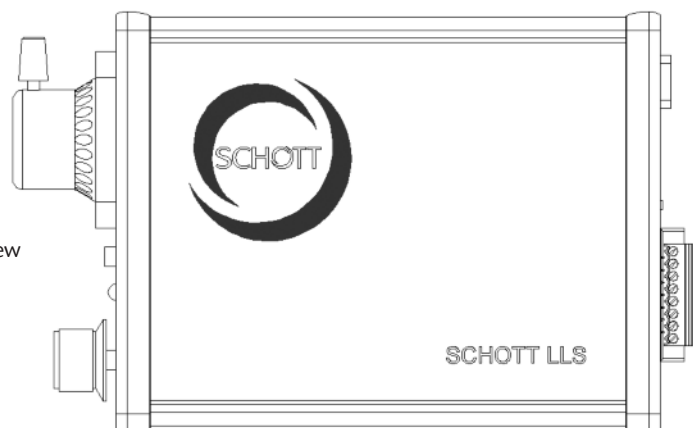
Product improvements may result in specification or feature changes without notice.

LLS A20960 Front View



LLS A20960 Side View

LLS A20960 Top View

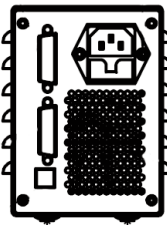


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LLS 2 - LLS Light Source



LLS 2 - LLS Light Source, Rear View shows (from left to right): universal power input, multi-port input, Ethernet input, RS-232 input

Making use of the fast progress in LED technology, SCHOTT offers its new LLS 2 LED light source for machine vision applications, outclassing conventional lighting techniques.

NOTE:

External control pin layout compatible with Moritex halogen light sources. Please follow standard safety procedures when operating the LLS 2 Light Source

LLS 2 - LED Light Source

Long Life, Low Energy Consumption, High Performance

Standard Features

- Long life-time (more than 50,000 hours) (*)
- Low power consumption: 35 watts (max.)
- Light output (**): 175 klx at active diameter 8 mm
- Color temperature: 5,500 K
- Accepts light guides up to 13 mm
- External strobe capabilities: minimal pulse duration 200 μ s at 20% duty
- Voltage input: 90 VAC to 260 VAC (50/60 Hz)
- Optical output: optimized for 4 - 10 mm
- Uniformity of light spot: Gaussian like light distribution shape
- RoHS compliant
- CE Approved

Characteristics	
Dimensions	Length 240 mm (9.45 in) Widths 85 mm (3.35 in) Height 120 mm (4.72 in)
Weight	2,1 kg (4.62 lbs)
Operating Temperature	- 10° C (+ 14°F) to 40° C (104°F) (humidity 20% to 90%)
Storage Temperature	- 40° C (- 40°F) to + 80° C (+ 176°F) (humidity 10% to 95%)
Cooling Method	Forced Air Cooling (fan)
Housing	Powder painted steel

Control Characteristics	
Manual Control Interfaces (front)	On / Off switch Manual / remote switch Brightness control LED status indicator lights
Electronic Control Interface (back)	Analog Input: 0 - 5 V (intensity) Digital input (8 bit parallel) intensity, invertible logic
For Remote Control	Remote light On / Off (invertible logic) Error signal outputs: over - temperature, over-current. Galvanically insulated digital inputs and outputs (opto couplers)

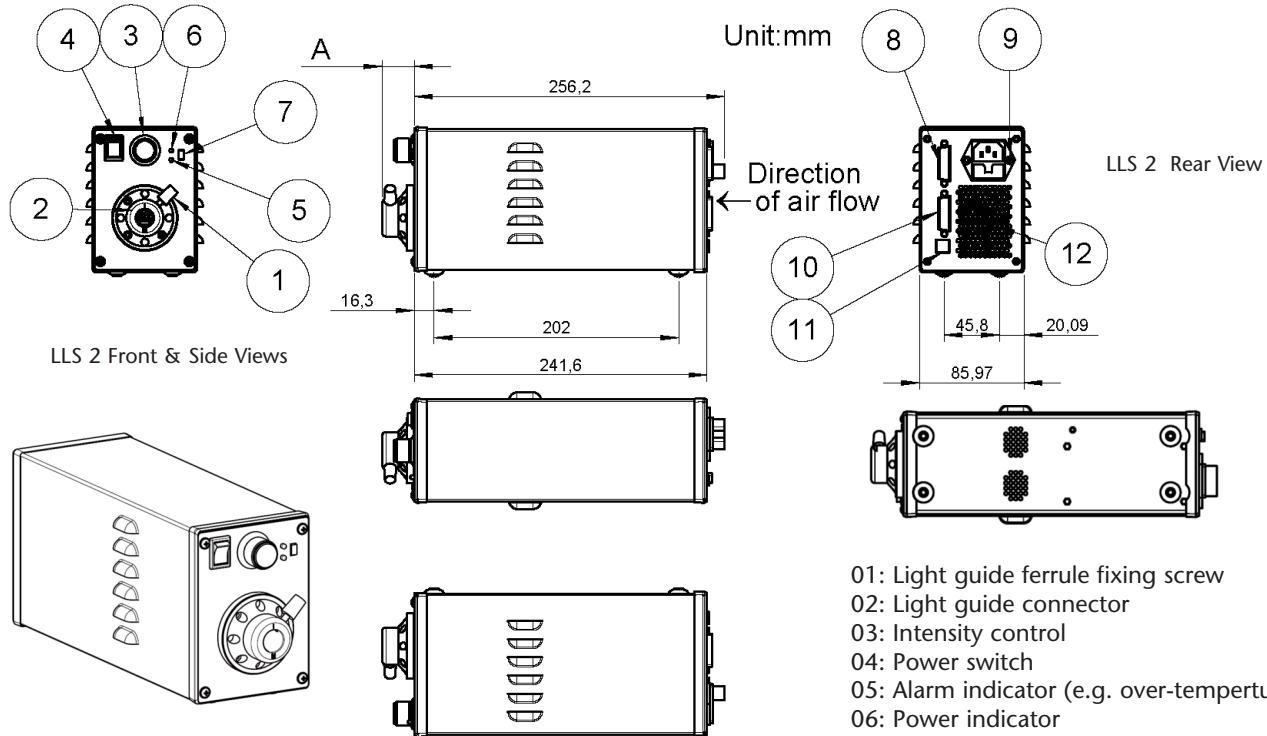
(*): 70% drop of intensity according to LED supplier
(**): Measured after 1,100 mm long light guide at 50 mm distance



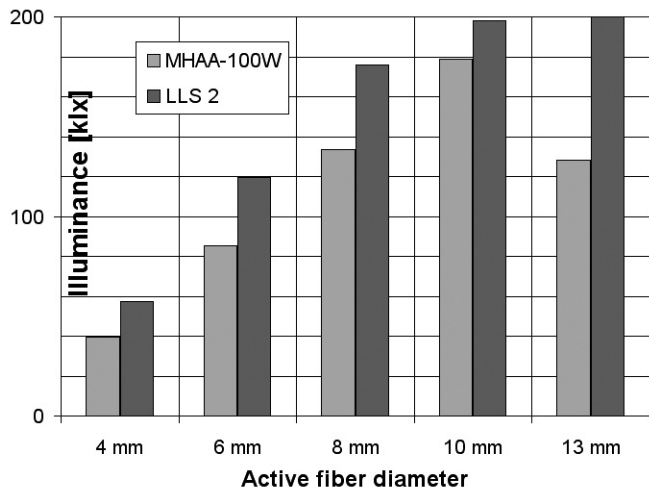
LLS 2 - LED Light Source

Dimensions in () are in mm

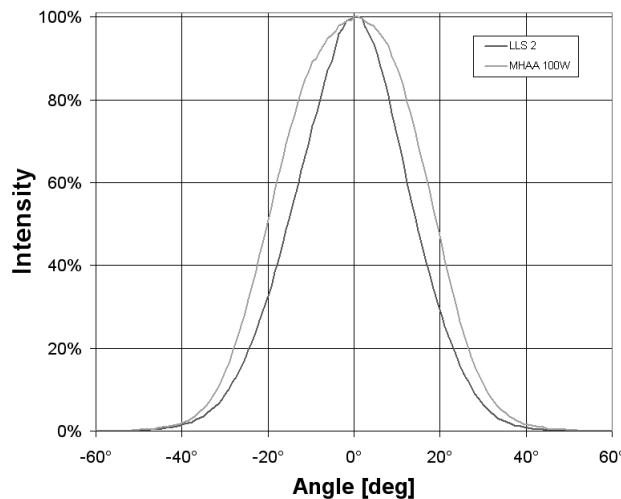
Product improvements may result in specification or feature changes without notice.



- 01: Light guide ferrule fixing screw
- 02: Light guide connector
- 03: Intensity control
- 04: Power switch
- 05: Alarm indicator (e.g. over-temperature)
- 06: Power indicator
- 07: Remote / manual switch
- 08: Analog interface
- 09: AC power supply inlet
- 10: Digital interface
- 11: Dip switches
- 12: Cooling air intake



Illuminance of LLS 2 and Halogen Light Source at 50 mm distance



Angular Light Distribution with 10 mm Light Guide

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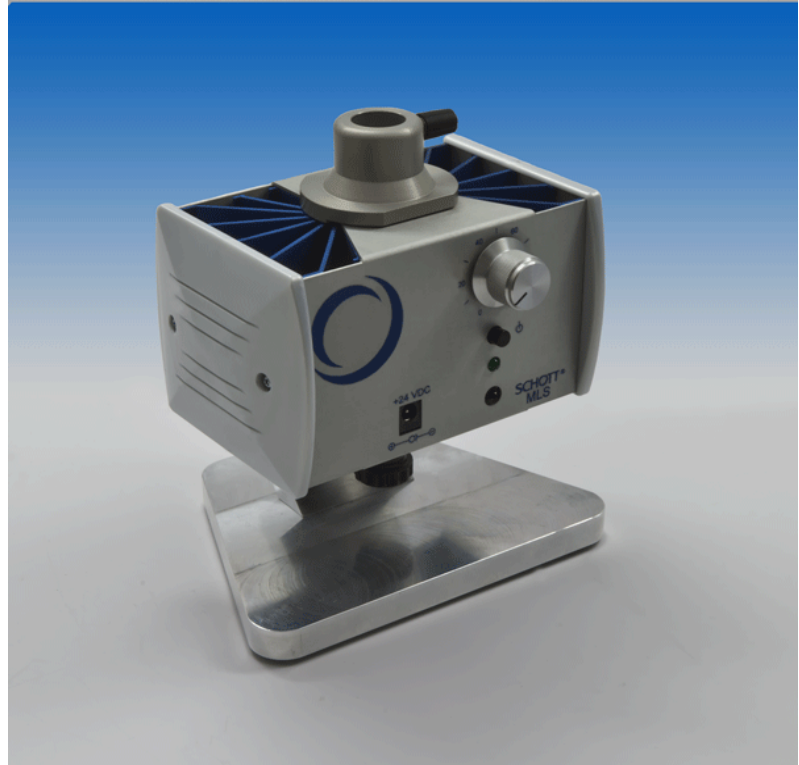
NEW!
Designed for manual
inspection applications!

MLS – Microscopy LED Light Source

Longer Life, Lower Energy Consumption, Higher Performance, Compact Design

The SCHOTT MLS offers several advantages over other types of fiber optic light sources used in microscopy & static machine vision applications, including:

- Long-life of LED light engine
- Fan-less, vibration free operation
- Fits all COLDVision light guides
- Stable light output with minimal variation in color temperature
- Low power consumption (~18 watts)
- Small footprint and world-wide, universally compatible power supply with interchangeable plugs
- Optional light On/Off control via handheld remote or footswitch. Handheld remote also controls light output intensity.
- Mounting Options (sold separately):
 - Pedestal Mount
 - Post Mounts
- Temperature monitoring for protection of the LED light engine
- RoHS Compliant & CE Approved. ESD outlet connection.



Characteristics

Dimensions	Length: 102 mm (4 in) Width: 140 mm (5.5 in) Height : 117 mm (4.6 in)
Weight	0.8 kg (1.7 lbs)
Operating Temperature	5° C (41° F) to 40° C (104° F)
Color Temperature – White & Warm White	6000 K / 3100 K
Power Consumption	~ 18 Watts

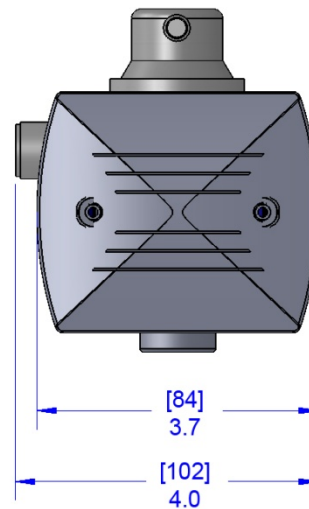
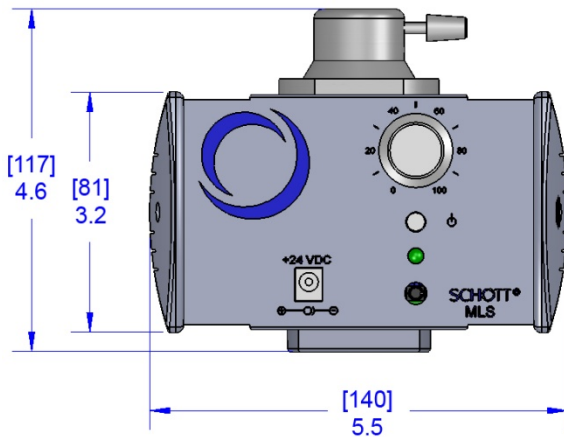
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SCHOTT MLS Technical Information

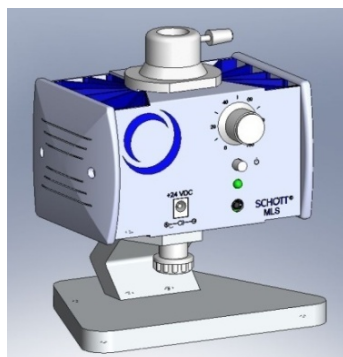
Part Number	Color	Light Output*
A20400/6000	White – 6000 K	300 lm
A20400/3100	Warm White – 3100 K	200 lm
A20410	Handheld Remote (On/Off, pulse, intensity control)	
A20411	Remote Footswitch (On/Off)	
A20420	Pedestal Mount	

*Light output specifications are measured with a 1 m long, 13 mm diameter bundle (A08051.40 bundle).
The light output specification is the typical output and actual output may vary.

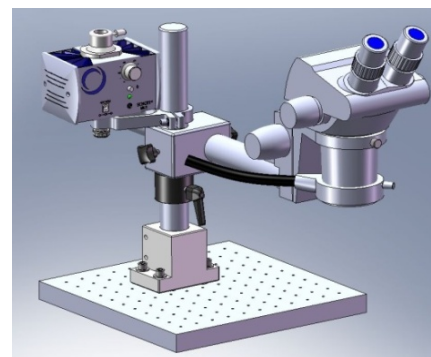
Dimensions in inches and [mm]



Mounting Options



Pedestal Mount



Adapter & KL200 LED Boom Stand Bracket

For more information please contact:

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