

SWIR LED ILLUMINATION

Wavelengths from 1050nm to 1650nm are now offered in the Exolight v2.0 model. Short-wave infrared technology provides the necessary contrast to illuminate test objects that visible and ultraviolet light cannot provide.

The Exolight v2.0 includes molded Lumiform diffuser that provides a dramatic increase in uniformity, coverage area, and is resistant to impact. With a 120° spread of uniform lighting, the EXO2 is perfect for even the most sensitive area scan application and its high level of diffusion makes it a great candidate for transmission or backlight applications; even for line scan. Hard molding makes the diffuser extremely durable to impact and can be configured for an IP rating with greater water and dust resistance.

Available Wavelengths



Broadband IR

is available for the SWIR Exo2 model. The SWIR Exo2 can be configured with any combination of these six available wavelengths.



FEATURES

- Lumiform diffuser with 120° (±10%) uniform lighting
- Hard molded diffuser for durability and resistance to impacts
- Features a clamping style tilt bracket to allow for easy positioning from 0 – 180°
- Available in a limited amount of standard sizes but can be custom designed per order
- Built-in Constant Current Driver with 0 – 10V intensity control.
- Compatible with DDC-3 and ILD-35-24-L Dimmers

WAVELENGTH (nanometers)

W	White 6000K, Nominal
SWIR	1050nm
SWIR	1200nm
SWIR	1300nm
SWIR	1450nm
SWIR	1550nm
SWIR	1650nm

SPECIFICATIONS

Power Source:	24VDC ±5%
Cable (Standard):	10 ft. (3 m) with flying leads
Housing:	Black Anodized Aluminum
IP Rating:	IP65 sealed, IP50 unsealed
Ambient Temperature:	-20°C to 40°C

SWIR (Short-Wave Infrared)

SWIR EXO2 LIGHTS						
MODEL*	Lens Length Inches (cm)	Weight lbs/Kg	Cable QTY	Cable Length	Cable Description	Max. Current @24VDC
ISO2-10	11.51 (29.2)	2.07 / .939	2	10ft	18 AWG, 4 Conductor and 24 AWG, 8 Conductor	0.5A max
ISO2-20	21.62 (54.9)	3.67 / 1.66				1.2A max.
ISO2-30	31.73 (80.6)	5.39 / 2.44				1.8A max.
ISO2-40	41.73 (106.0)	7.09 / 3.22				2.5A max.
ISO2-50	51.73 (131.4)	8.54 / 3.87				3.2A max.

*Custom sizes and configuration are available

Cable#1 Wiring (4 conductor)	
Wire Color	Function
RED	+24VDC
WHITE	+24VDC
BLACK	GROUND (24V RTN)
GREEN	GROUND (24V RTN)

Cable#2 Wiring (8 conductor)	
Wire Color	Function
BROWN	IR1050, 0-10V Intensity Control
ORANGE	IR1200, 0-10V Intensity Control
BLUE	IR1300, 0-10V Intensity Control
GREEN	IR1450, 0-10V Intensity Control
BROWN-white	IR1550, 0-10V Intensity Control
ORANGE-white	IR1650, 0-10V Intensity Control
BLUE-white	No Connection
GREEN-white	No Connection

Note: The 0-10VDC Intensity Control input can accept voltages from 0-24VDC where the light will operate at full intensity in the 10-24VDC range. The light is proportionally dimmer for any Intensity Control voltage less than 10VDC and the light is OFF at approximately 0V or not connected (floating).

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MODEL NUMBER KEY								
MODEL	-	LENS LENGTH	-	COLOR/WAVELENGTH	-	OPTION 1	-	OPTION 2
ISO2	-	XX	-	XXXX	-	XXX	-	X-XXX
ISO2		10 (10" Length ID) 20 (20" Length ID) 30 (30" Length ID) 40 (40" Length ID) 50 (50" Length ID)		W (White 6000K) IR05 (1050nm) IR20 (1200nm) IR30 (1300nm) IR45 (1450nm) IR55 (1550nm) IR65 (1650nm)		24 (+24VDC, standard)		T (M12 Connector)
						U (ULC-2 interface) KEY (Keyence Controller) ILD (In Line Dimmer) ILS (In Line Strobe)		XXX (Customizable per order)
				Choose all that apply				

Contact Metaphase Technologies or your local representative for options such as custom diffusers, lenses, polarizers, IP-rated enclosures for harsh environments, higher intensity, custom wavelengths, higher uniformity, etc. Not all options are available for all lights.



