



MetaBright™ Line Light

Model:MB-LL1307



Vision Light Tech
creating optical solutions



Metaphase offers the industry's breakthrough performance line lights for imaging, web, and high-speed line scan applications requiring ultra-high intensity and uniformity. Our line lights are built as lean fixtures that can be easily controlled and integrated into visions systems.

Our MetaBright™ Line Lights feature an adjustable lens and low current consumption.

BENEFITS:

- High Uniformity both laterally and longitudinally
- High Intensity, over 1 million Lux
- Lens Options for various beam widths and working distances
- Available in various Light wavelengths including IR, UV and RGB
- Strobe synchronization; Control compatibility for high precision pulse-modulation and 0-10V Intensity Control capability
- Adjustable lens focusing range of mm to meters
- Backlight versions for web backlight & silhouetting applications
- From 1" to 120" (10ft) in length
- Built-in constant current driver(s) - consistent illumination output
- 24V version require no special controllers; simply provide 24VDC

APPLICATIONS:

- Road Surface Inspection
- Bottle Inspection
- High Speed Scanning
- Sheet Inspection
- Web Inspection
- Print Inspection

RATINGS:



DOMINANT WAVELENGTH:

Part #	Color	Power Supply
MB-LL1307-W-24	White 5500K	
MB-LL1307-R-24	Red 630nm	
MB-LL1307-B-24	Blue 470nm (Optional 455nm)	
MB-LL1307-G-24	Green 530nm	24 volt power supply available upon request.
MB-LL1307-IRN-24	Infrared 850nm	
MB-LL1307-IRL-24	Infrared 880nm	
MB-LL1307-UVL-24	UV 395nm	
MB-LL1307-UVS-24	UV 365nm	

10 ft. flying leads come standard on all products.
Light features built-in constant current driver.
No expensive controller required.

Vision Light Tech B.V.

Protonenlaan 22, 5405 NE UDEN, P.O. Box 345, 5400 AH UDEN, The Netherlands

Phone: +31 (0)413 26 00 67, Fax +31 (0)413 26 09 38, E-mail: inquiry@vlt.nl, Website: www.vlt.nl

Trade register No. 17150044, VAT No. NL8112.30.946.B01



MetaBright™ Line Light

Model:MB-LL1307



Vision Light Tech
creating optical solutions

ELECTRICAL & CONTROLS:

Current Consumption	13 A
Light Intensity	+/-5%
Illuminance	1.6Million Lux
Operating Temperature	-40°F(-45°) to 100°F (37.8°C)
Lifetime Hours	75,000 Hours

WIRING DIAGRAM:

WHITE & RED	+24VDC
GREEN	Signal Ground
BLACK & GREEN	Ground
WHITE	0-10VDC Intensity Control

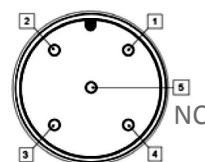
16 AWG 4 WIRES CABLE X 1 w/ 24 AWG 2 WIRES CABLE X 1
When not using intensity control, connect 0-10V control line to
+24 (Max Intensity Control = 25V) and intensity control
ground to ground

HOUSING:

Dimensions	Length: 62.03in/1575.6mm Width: 1.5in/38.1mm Height: 4.58in/116.2mm
Weight	14lb/ 6350.29 g
Housing	Aluminum
Finish	Powder Coating - Black

WIRING DIAGRAM:

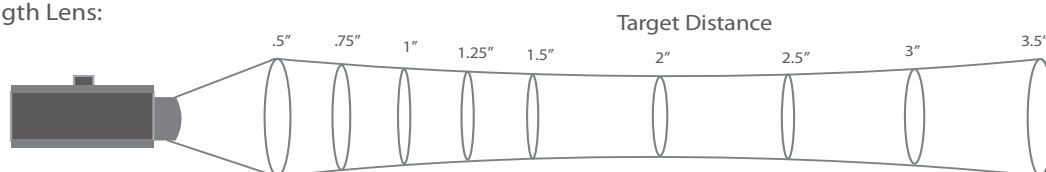
PIN #	Function
1	+24VDC
2	0-10VDC Intensity Control
3	Ground
4	Signal Ground



FOCAL LENS:

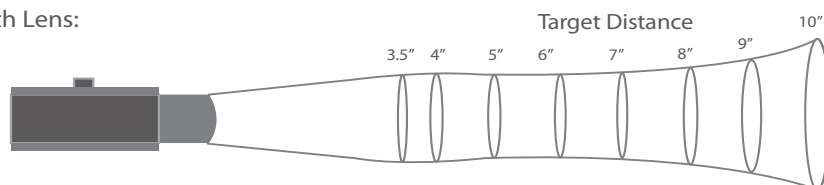
KEY: values in parenthesis are millimeter measurements

Standard Focal Length Lens:



Target Distance	0.5" (13)	0.75" (19)	1.00" (25)	1.25" (32)	1.50 (38)	2.00" (51)	2.50" (68)	3.00" (88)	3.50" (89)
Intensity (million LUX)	.80	1.27	1.21	1.18	1.16	.90	.66	.47	.32
Line Width	0.4 (10)	.25 (6.3)	.2 (5)	.2 (5)	.18 (4.6)	.18 (4.6)	.18 (4.6)	.3 (7.6)	>.3 (10)

Longer Focal Length Lens:



Target Distance	3.5" (89)	4.0" (102)	5.0" (127)	6.0" (162)	7.0" (178)	8.0" (203)	9.0" (229)	10.0" (264)
Intensity (million LUX)*	1.07	1.1	1.1	1.1	1.1	1.09	1.04	.98
Line Width	.2 (5)	.2 (5)	.2 (5)	.35 (8.9)	.4 (10)	.4 (10)	.5 (12.7)	.6 (15.2)

Vision Light Tech B.V.

Protonenlaan 22, 5405 NE UDEN, P.O. Box 345, 5400 AH UDEN, The Netherlands

Phone: +31 (0)413 26 00 67, Fax +31 (0)413 26 09 38, E-mail: inquiry@vlt.nl, Website: www.vlt.nl

Trade register No. 17150044, VAT No. NL8112.30.946.B01



REVISIONS

ZONE	REV.	DESCRIPTION	DATE	APPROVED

SEE NOTE #1

COOLING FAN (8)

10.00 [254]

10.00 [254]

10.00 [254]

10.00 [254]

10.00 [254]

5.00 [127]

31.02 [787.8]

61.28 [1556.5]

62.03 [1575.6]

.25 [6.4]

3.38 [85.7]

2.38 [60.3]

4.58 [116.2]

1.50 [38.1]

.75 [19.1]

NOTES: UNLESS OTHERWISE SPECIFIED

1. ELECTRICAL CABLE (2) :

(1) FOUR CONDUCTOR, 16 AWG
RED & WHITE (+24VDC)
BLACK & GREEN GROUND

(1) TWO CONDUCTOR, 24 AWG
WHITE (0-10VDC)
GREEN (SIGNAL) GROUND

10 FT. LONG WITH FLYING LEADWIRE ENDS.

PROPERTY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
METAPHASE TECHNOLOGIES, INC. ANY
REPRODUCTION IN PART OR AS A WHOLE
WITHOUT THE WRITTEN PERMISSION OF
METAPHASE TECHNOLOGIES, INC. IS
PROHIBITED.

UNLESS OTHERWISE SPECIFIED:	NAME	DATE
CONVERSIONS ARE IN INCHES TOLERANCES FRACTIONAL	DRW	12/8/2011
ANGULAR: MATCH	CHKD	
TWO PLACE DECIMAL	ENG APPR.	
THREE PLACE DECIMAL	MG APPR.	
UNLESS GEOMETRIC TOLERANCING PER: DIN 15001	COMMENTS	

NEXT ASSY

ISSUED ON

APPLICATION

DO NOT SCALE DRAWING

TITLE:
LINE LIGHT, 60 INCH
REINFORCED

SIZE: 11x17
DWG. NO.: MB-LL1307
SCALE: 1:10/WEIGHT:
SHEET 1 OF 1

REV

• MB-LL1307 - ☐ - 24 -

W- White 6000k
R- Red 630nm
G- Green 530nm
B- Blue 470 nm
 (Optional 450nm)
IRN- Infrared 850nm
UVL- (long) 395nm
UVS- (short) 365nm

***BLANK**- 10 ft. Flying Leads
T- M12 Quick Disconnect
ILD- In Line Dimmer
ILS- In Line Strobe (customer provide trigger info)
LL - Long Focal Lens
NF- No Fans

Trade register No. 17150044, VAT No. NL8112.30.946.B01