



LED LITERIBBON™ - VHO 120, VHO 60, VHO 30 SINGLE COLOR, WARM & COOL WHITE

PRODUCT NAME

VHO LED LiteRibbon™ Warm White, Cool White, VHO 120, VHO 60, VHO 30

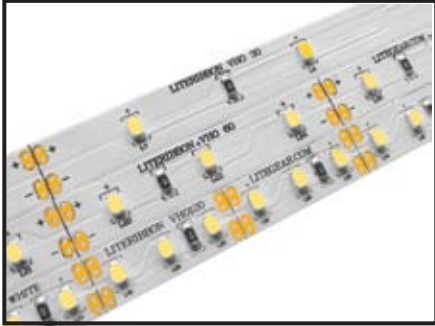
FEATURES

VHO LiteRibbon is a single row of wide-angle low profile LED emitters mounted to a flexible adhesive backed circuit board which has cut points located after every 3 emitters allowing LiteRibbon to be cut to length. VHO LiteRibbon has been designed specifically to be used as a light-source when either flexibility, size or low power consumption are critical.

VHO LiteRibbon is 10mm wide and available in 3 versions: VHO 120 is assembled with 120 emitters per meter (8mm spacing). VHO 60 with 60 emitters per meter (16mm spacing), and VHO 30 with 30 emitters per meter (32mm spacing). The intensity of LiteRibbon is determined by the number of LEDs per mm. The higher the number, the greater the intensity. All VHO LiteRibbon is available in two colors: Warm White (3000k) and Cool White (6000K). The VHO family has an entire control, power, and distribution eco-system, which allows a wide variety of options to handle any situation.

All colors and types of LiteRibbon use the same emitters. This allows maximum flexibility in finding the precise amount of light needed for any application. If you want to design an LED panel that is small, very bright, and can be used tight spaces, VHO 120 may be a good choice. If soft light is desired, a larger panel with VHO 30 spreads the same quantity of emitters over a larger area and creates a beautiful, near-shadowless quality.

VHO LiteRibbon: the building blocks for your next great idea.



LED LiteRibbon VHO 120, 60 and 30



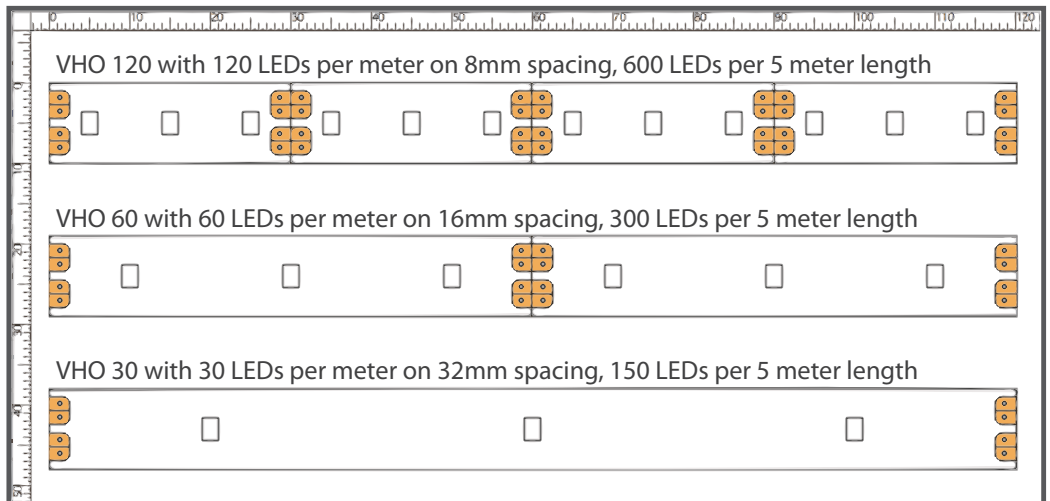
LiteRibbon VHO 120 on Reel



LiteRibbon VHO Kit



LiteRibbon VHO 120 w/ Gaffers Glass



LiteRibbon VHO 120, 60 and 30 comparison layout





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LITERIBBON FEATURES

- Cut To Desired Length
- Adhesive Backed
- Wide-angle Output
- No Heat-sinks
- 12 Volts DC, No Special Drivers
- Handheld And Dmx Controls

MANY USES

- Source For Your Own Panel Lights
- Under Cabinets And Shelves
- Vehicle Dashboards & Dome Lights
- Product Shots
- Soffits
- Handheld Props Or Costumes

SPECIFICATIONS COMMON TO VHO 120, 60, & 30

SIZE: 10mm (0.39") wide x 1.8mm (.07") tall

LIFESPAN: 50,000 Hours (depending on environmental conditions)

OPTICAL: 120° Beam angle

VHO 120 SPECIFICATIONS

LR-VHO120-WW-12-(Length), WARM WHITE / TUNGSTEN)

LR-VHO120-CW-12-(Length), COOL WHITE / DAYLIGHT)

ELECTRICAL: 12V DC, (8-13v) 19.2 watts, 1.6 amps per meter (0.5a per foot)

PHYSICAL: 120 LED'S per meter, on 8mm (.32") centers, cuttable every (3) emitters (25mm, 1")

VHO 60 SPECIFICATIONS

LR-VHO60-WW-12-(Length), WARM WHITE / TUNGSTEN)

LR-VHO60-CW-12-(Length), COOL WHITE / DAYLIGHT)

ELECTRICAL: 12V DC, (8-13v) 9.6 watts, 0.8 amps per meter (0.25a per foot)

PHYSICAL: 60 LED'S per meter, on 16mm (.63") centers, cuttable every (3) emitters (50mm, 2")

VHO 30 SPECIFICATIONS

LR-VHO30-WW-12-(Length), WARM WHITE / TUNGSTEN)

LR-VHO30-CW-12-(Length), COOL WHITE / DAYLIGHT)

ELECTRICAL: 12V DC, (8-13v) 4.8 watts, 0.4 amps per meter (0.125a per foot)

PHYSICAL: 30 LED'S per meter, on 32mm (1.25") centers, cuttable every (3) emitters (100mm, 4")

CURRENT / AMPS	120	60	30
PER INCH	0.04	0.02	0.01
1 FOOT (0.3M, 30CM)	0.50	0.25	0.13
2 FEET (0.6M, 60CM)	1.00	0.50	0.25
3 FEET (0.9M, 91CM)	1.50	0.75	0.38
1.25 METER (49", 4')	1.60	0.80	0.40
5 FEET (1.5M, 152CM)	2.50	1.25	0.63
6 FEET (1.8M, 182CM)	3.00	1.50	0.75
2 METER (78", 6.5')	3.20	1.60	0.80
7 FEET (2.1M, 213CM)	3.50	1.75	0.88
2.5 METER (98", 8.2')	4.00	2.00	1.00
9 FEET (2.7M, 274CM)	4.50	2.25	1.13
3 METER (118", 10')	4.80	2.40	1.20
11 FEET (3.3M, 335CM)	5.50	2.75	1.38
3.5 METER (137", 11.4')	5.60	2.80	1.40
12 FEET (3.6M, 365CM)	6.00	3.00	1.50
4 METER (157", 13.1')	6.40	3.20	1.60
14 FEET (4.2M, 426CM)	7.00	3.50	1.75
15 FEET (4.6, 457CM)	7.50	3.75	1.88
5 METER (196", 16.4')	8.00	4.00	2.00
10 METER (393", 32.8')	16.00	8.00	4.00

CURRENT CALCULATIONS

Multiply LED quantity by 0.013 = Amperage

PHOTOMETRICS

Color / Model	Kelvin Temp.	Footcandles at	3"	6"	12"	18"	2'	3'	4'	5'	6'
VHO 120 Warm White	3000° K		530	277	123	71	49	28	18	12.4	9.5
VHO 60 Warm White	3000° K	(1 Meter length)	298	146	64	40	26.4	14.4	9.2	6.6	4.9
VHO 30 Warm White	3000° K		161	78	35	21.3	14.5	8.1	5.1	3.8	2.9
VHO 120 Cool White	6000° K		665	355	164	100	64	37	23.7	15	12.5
VHO 60 Cool White	6000° K	(1 Meter length)	344	174	84	46.8	34.9	19.3	12.3	8.7	6.3
VHO 30 Cool White	6000° K		170	80	37.9	23.2	16.4	9.1	5.8	4	3.1

