The Optoelectronic Manufacturing Corporation

24V RGB Flexistrip™

www.omc-uk.com

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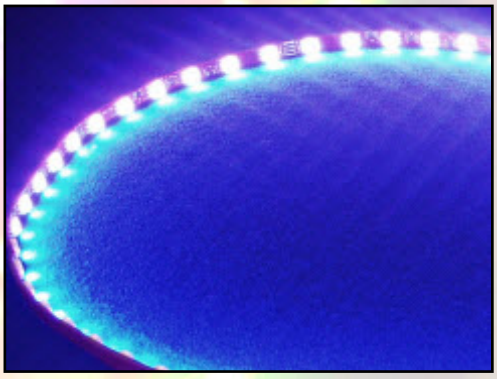
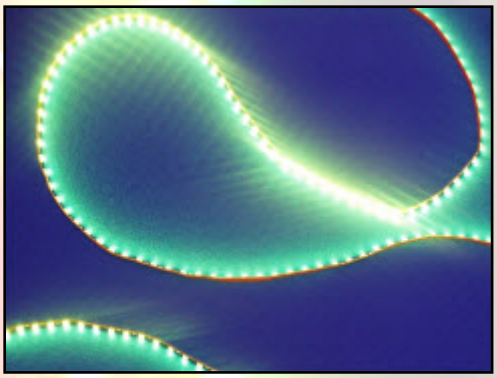
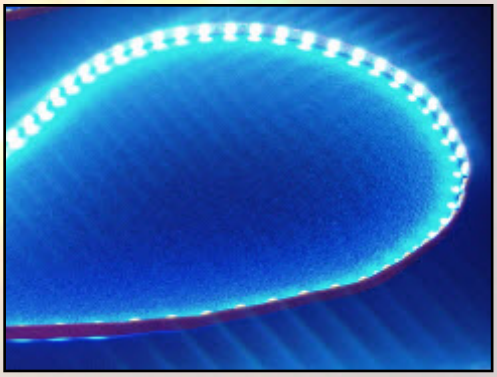
Technical Datasheet

RGB version of the popular Flexistrip™ range of high performance, extreme-versatility DC flexible LED strips designed for industrial, architectural, signage and many other illumination and lighting applications. Compatible with OMC's range of colour-change controllers.







Key Features:

- Energy efficient 24V DC Design
- Industry leading LED density for RGB
- Compatible with wide range of colour-change controllers
- Compact, low profile and highly flexible
- Very high brightness
- Output characterised for lighting applications
- Up to 3 metres can be powered from one end
- Built-in antistatic protection
- Built-in reverse polarity protection
- Cut and link points regularly spaced along strip length
- Can be cut or joined end-to-end to form different lengths
- RoHS Compliant

Typical Applications:

- Replacement of fluorescent light sources
- Built-up and flat-cut letter illumination
- Colour-changing light box illumination
- Accent lighting
- Colour-changing backlighting
- Lighting for machinery
- Colour-changing strip lights
- Furniture illumination
- Long-life alternative to neon
- Low energy lighting
- Lighting for point-of-sale applications
- Edge-illumination of acrylic lightguides
- Signalling and indication

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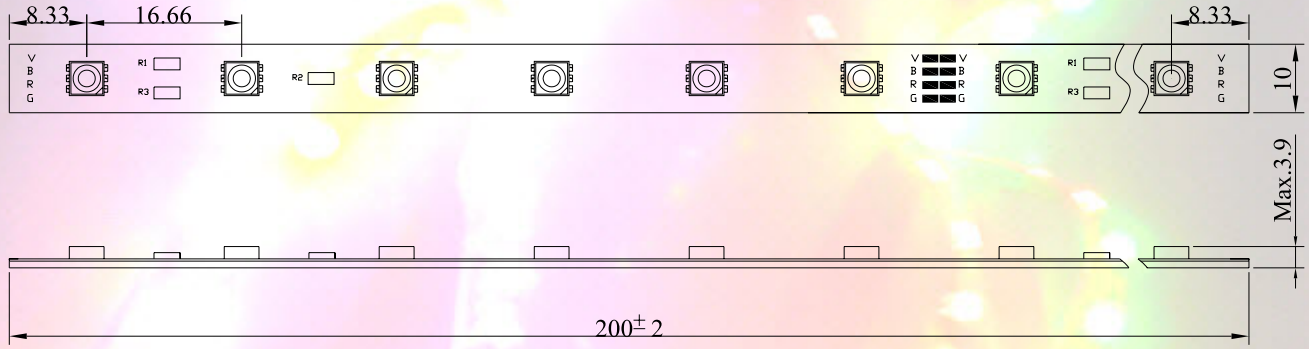
Typical electro-optical characteristics per channel at applied voltage = 24V DC and Ta=25°C

Channel	LEDs per 200mm strip	Light output per 200mm strip	Beam angle 2θ½	Max current draw
Red	12 x Ultrabright Red Chips	7.1 lm	**120°**	40mA
Green	12 x Ultrabright Green Chips	29.5 lm	**120°**	40mA
Blue	12 x Ultrabright Blue Chips	9.2 lm	**120°**	40mA

Colours are for ease of reference only and do not indicate exact shade of LED output.

Mechanical information

- Strip length 200mm
- Strip width 10mm
- Strip height 2.1mm
- 12 x 3 chip RGB LEDs per 200mm strip (180 chips per metre)
- Terminals are common anode as shown
- Note: Also available joined together in reels
- Cut/solder points every 6 LED packages (100mm)



(Dimensions in mm, tolerance ±0.5mm unless otherwise stated)

Absolute maximum ratings (Ta=25°C where applicable)

Quantity	Rating
Applied Voltage to any Channel	24V DC
LED Reverse Voltage	5V
Operating Temperature Range	-35°C to +55°C
LED Forward Current	20mA
Temperature Range in Storage	-35°C to +100°C
Strip Forward DC Current	120mA

Application notes

- Do not apply voltages greater than 24V DC to this product or damage may occur.
- Although electrostatic protection is built into this product, as with any semiconductor device it is recommended to avoid unnecessary electrostatic discharge.
- Connect anode to V solder pad, cathode to B (for blue channel), G (for green channel), R (for red channel) solder pads.
- For strip lengths greater than 3m, wiring in a "ring main" style configuration (i.e. a power feed at each end) is strongly recommended to reduce voltage drop. For very long lengths it is recommended to connect a power feed back to the supply after every 6m.
- Cut only at designated cut points. Do not cut between cut points as this will damage the product.
- Use of a regulated 24V DC supply is recommended.
- Do not expose to moisture unless product has been damp protected.
- Product may be fixed in place using double sided adhesive foam, hot glue or silicone.
- For soldering, use of a small 25W general purpose mains soldering iron is recommended, recommended soldering temperature is 260°C for maximum 5 seconds.
- When used in ambient temperatures greater than 25°C, please derate the drive current to ensure maximum reliability. Please contact us should you require a derating curve.

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