HALO

Data Sheet
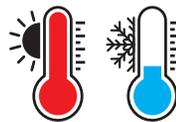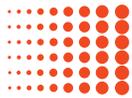
HALO 2
ELV (Extra Low Voltage)

HALO 2 is a premium grade specialized high performance 'extra low voltage' LED strip lighting solution, that consists of LED strip lighting that is energised by external power controllers. These power controllers are connected to the existing AC low voltage, which converts that existing voltage into an 'extra low-safe to the touch' DC voltage, which in turn illuminates the LEDs.

- Premium Grade Lighting
- 100% Waterproof - IP68 rated
- Dust-Tech Tm Integrated dust repellent technology
- Proven life expectancy exceeding 10 years
- Designed to manage continuously on conditions 24/7/365
- Suited for extreme heat/extreme cold operating temperatures from -45 °C (-49 °F) to +45 °C (+113 °F)
- Non-Corrosive
- Fire retardant
- Zero toxicity when burned
- Halogen free cabling
- Zero maintenance
- Patented 2013
- Double for Your Trouble
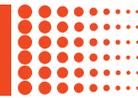- Upgrades available.

FIRE Resistant

24 365 7

ANTI-CORROSION

LONG LIFE

ZERO MAINTENANCE

Dust Proof

IP68

HF Halogen Free

IMPACT RESISTANT
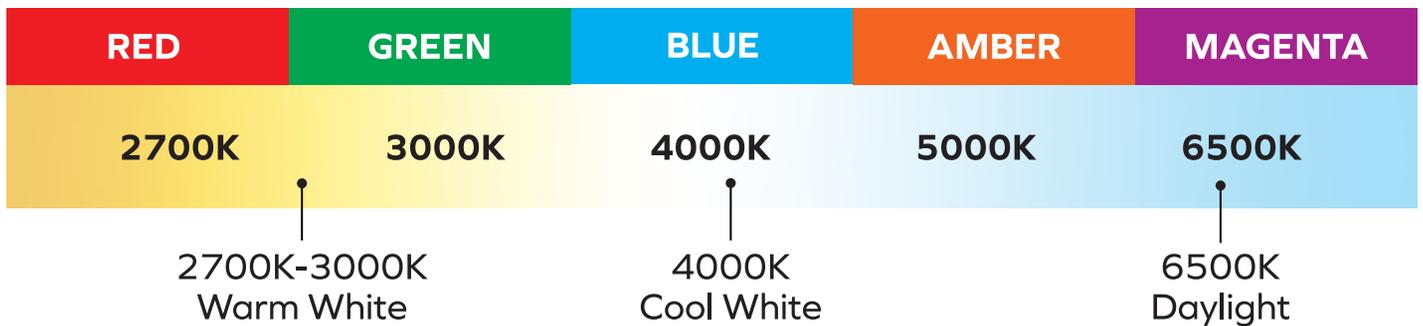
FEATURES

FIRE

WATER

ICE

HALO 2 is available in all popular colours in 4 brightness options namely:

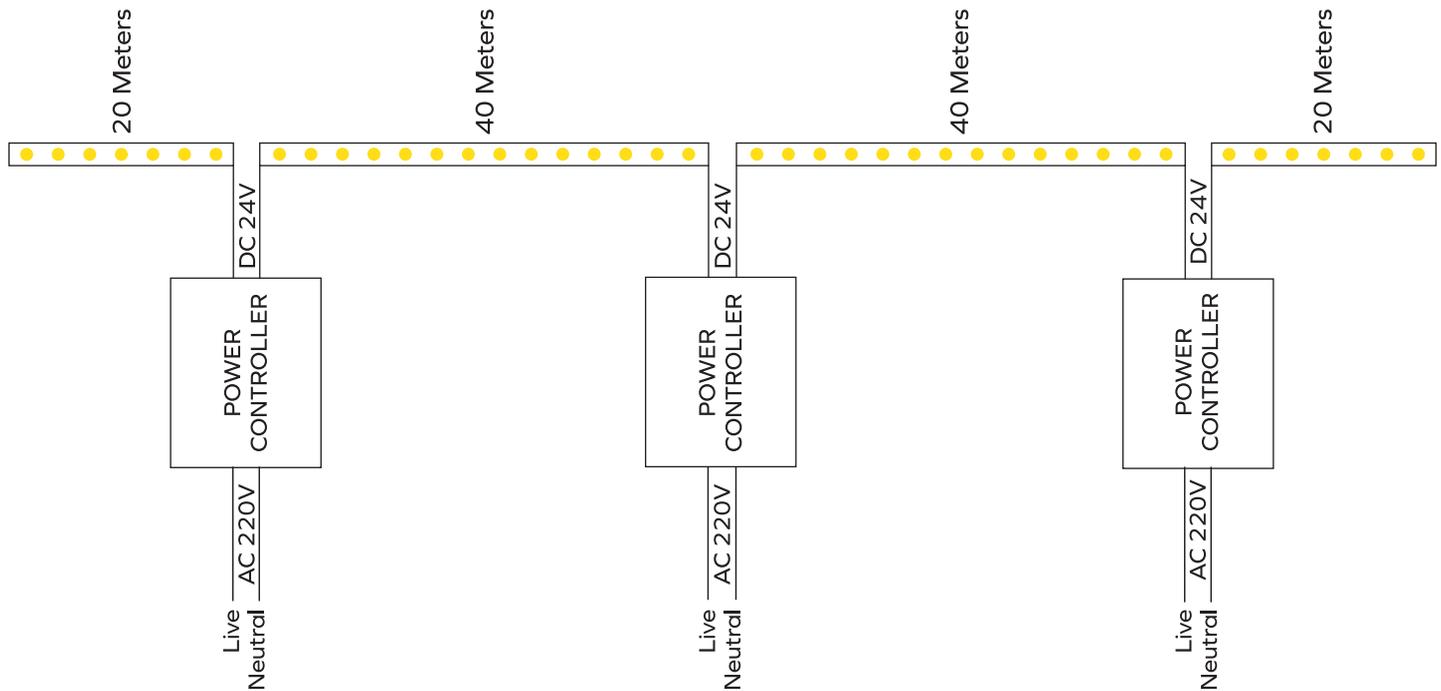**ALPHA** – ULTRA BRIGHT | **BETA** – HIGH BRIGHT | **GAMMA** – MEDIUM BRIGHT | **DELTA** – LOW BRIGHT

RED	GREEN	BLUE	AMBER	MAGENTA
2700K	3000K	4000K	5000K	6500K

2700K-3000K
Warm White

4000K
Cool White

6500K
Daylight

HALO 2 IS SUITABLE FOR THE FOLLOWING APPLICATIONS

- Mining
- Commercial
- Industrial
- Gas
- Petrochemical
- Marine Craft
- Military
- Submarine
- Ports
- Tunnels
- Subways
- Roadways
- Residential
- Architectural

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The **HALO 2** LED strip lighting requires external power controllers to convert the existing AC voltage into the required DC voltage, with these power controllers equipped with a double output system, which allows each power controller to energise two separate lengths of **HALO 2** LED strip lighting simultaneously, and also provide a 'piggyback' continuous run of lighting.

Diagram showing four lengths of LED strip (20 Meters, 40 Meters, 40 Meters, 20 Meters) connected via DC 24V to three POWER CONTROLLER units, each fed by AC 220V (Live / Neutral).

The power controllers are able to illuminate a length of 20 meters on each output in the 24 VDC range, and 30 meters on each output in the 48 VDC range, meaning the 24 VDC has the capacity to manage a total of 40 meters, and the 48 VDC has the capacity to manage a total of 60 meters in total.

HALO 2 is supplied in any length within recommended range capacity ranging, with each piece arriving complete with factory fitted male and female adapters on either end, for "plug and play TM" rapid assembly and/or incorporating accessories in the lighting project build.

'Installation assist accessories include the **HALO** aluminium channels with optional covers for most general installations, and the **HALO** CLIPS typically used when the **HALO** LED strip is installed on straining wire either overhead or vertical.
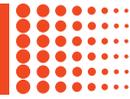
Things to avoid during installation:
- Sharp bends on LED strip
- Unsupported and hanging on own weight
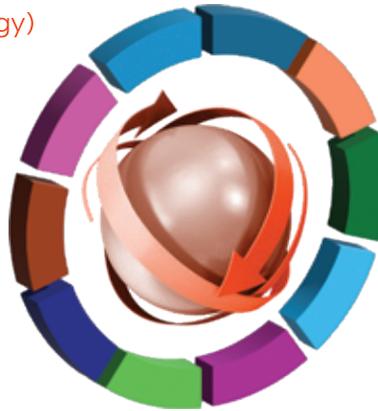- Stress on connectors
- Stress on LED strip
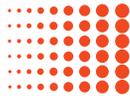
HALO

SOS COMPATIBILITY

Strategic Optimal Synergy

HALO 2 SOS (Strategic Optimal Synergy)

HALO SOS COMPATIBILITY allows for multiple & diverse HALO product compatibility & interchangeability to provide a wholistic & full turnkey solution for all your lighting requirements.

- HALO 3
- HALO DAISY CHAIN
- HALO PORTABLE
- HALO EMERG
- HALO EMERG EVAC
- HALO ULTRA LONG DISTANCE
- HALO ULTRA BRIGHT
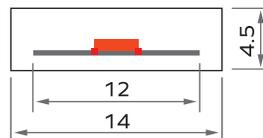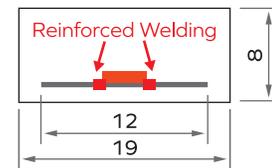- HALO SIGNAL
- HALO BATTEN
- HALO APEX

OPTIONAL UPGRADES
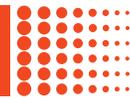
TOUGH-TECH ™

This upgrade includes almost doubling the protective silicone extrusion further increasing the impact resistance to unbelievable levels of IK09, plus the implementation of reinforced internal welded connections.

Standard **HALO**

| 4.5 |
| 12 |
| 14 |

TOUGH-TECH **HALO**

Reinforced Welding

| 8 |
| 12 |
| 19 |

MOOD-TECH ™

With the MOOD-TECH™ upgrade, you can soften the temperament of your lighting providing zones with a more softer mood, for communal areas such as canteens, refuge bays, meeting areas, et cetera, without compromising on high lumen output.
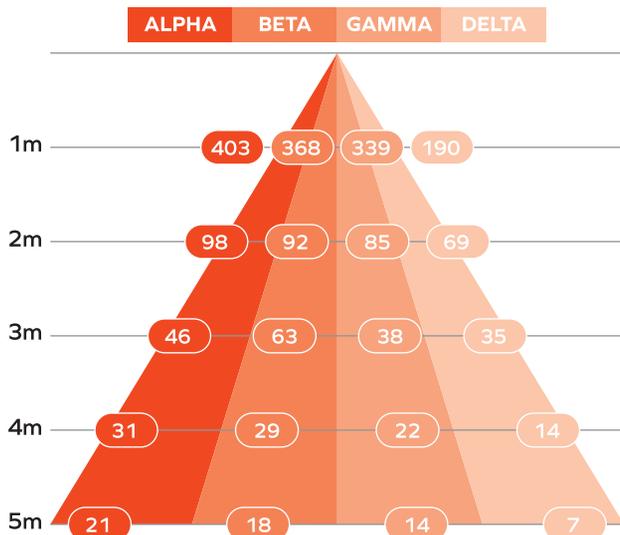
SPECIFICATIONS

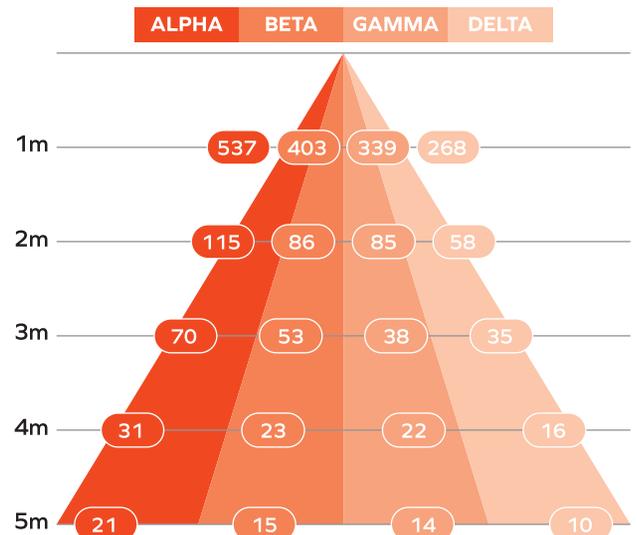## HALO 2 - 24VDC / 48VDC (ELV - Extra Low Voltage)

Category	ALPHA	BETA	GAMMA	DELTA	ALPHA	BETA	GAMMA	DELTA
Voltage rating	24VDC				48VDC			
Range fed from ONE side	20 Metres				30 Metres			
Range fed from BOTH sides	40 Metres				60 Metres			
Operating temperature	-45°C - 45°C				-45°C - 45°C			
IP Rating	68				68			
Power Consumption /metre	12W	12W	12W	8W	12W	10W	10W	6W
Colour Rendering Index (CRI)	>80				>80			
Colour temperature	5500 Kelvin				5500 Kelvin			
Lumens per metre	1200-1300	1000-1100	900-1000	600-700	1500-1600	1400-1500	920-1100	800-900
Supply Voltage VAC	85 ~ 265VAC				85 ~ 265VAC			
Expected Lifespan	10 Years +				10 Years +			
Warranty Lighting	10 Years				10 Years			
Fire Retardant	Yes				Yes			
Outer Extrusion	Food Grade Silicone				Food Grade Silicone			
Dimensions	4.5mm x 14mm				4.5mm x 14mm			
Tensile Strength	+- 50kg - 60kg				+- 50kg - 60kg			
Overvoltage Protection	Yes				Yes			
Overheat Protection	Yes				Yes			
Dust Repellant	Yes				Yes			

HALO 2 - 24VDC LIGHT GRAPH

| ALPHA | BETA | GAMMA | DELTA |

	ALPHA	BETA	GAMMA	DELTA
1m	403	368	339	190
2m	98	92	85	69
3m	46	63	38	35
4m	31	29	22	14
5m	21	18	14	7

Measured in lux
Readings may vary slightly depending on site conditions

HALO 2 - 48VDC LIGHT GRAPH

| ALPHA | BETA | GAMMA | DELTA |

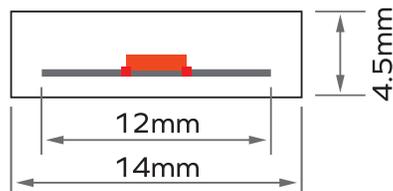|	ALPHA	BETA	GAMMA	DELTA
1m	537	403	339	268
2m	115	86	85	58
3m	70	53	38	35
4m	31	23	22	16
5m	21	15	14	10

Measured in lux
Readings may vary slightly depending on site conditions

TECHNICAL DRAWINGS

19.00

26.25
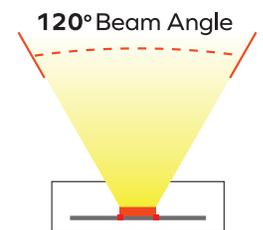
6.50   4.5

12.00

Standard **HALO**

4.5mm

12mm

14mm
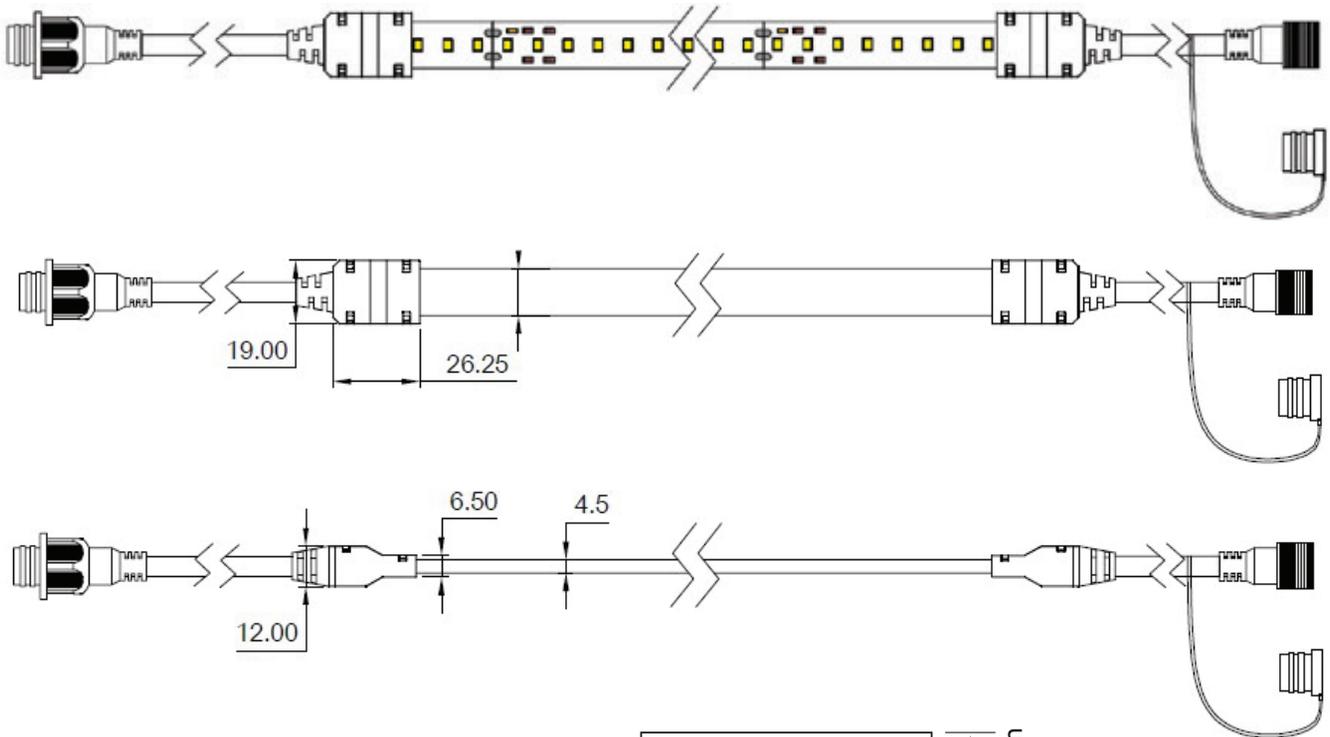
FOCUS-TECH ™

120° Beam Angle

With the implementation of FOCUS-TECH™ technologies as a standardized upgrade on all HALO LED Lighting; all LED's now have a focused 120° beam angle which considerably improves light quality, efficiency & intensity with a remarkable increase in lumen output.

REFLECT-TECH ™

All HALO LED Strip lighting configurations has as a standard feature the incorporation of our REFLECT-TECH™ technologies, this feature incorporates cutting edge reflective technologies, meticulously engineered to cover the entire PCB LED base, thereby reflecting all previously lost lumen output, into the main beam of lighting, drastically increasing the efficiency of your lighting.

Light Losses

29% Reflective Capability

Standard **Base**

Reflective **Base**
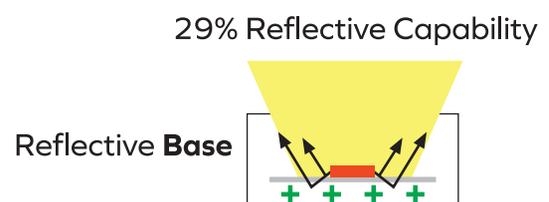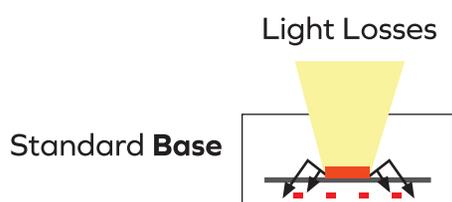
PART NUMBER GENERATION

SPECIFICATIONS HALO 2								
Category	ALPHA	BETA	GAMMA	DELTA	ALPHA	BETA	GAMMA	DELTA
Voltage Rating	24VDC				48VDC			

Name   Category   Voltage Rating

Example: HALO 2 + GAMMA + 24VDC   =   HALO 2 - GAMMA - 24VDC

WARRANTY

10 YEAR WARRANTY - 5 Year 'Double for your trouble'

HALO products have a proven lifespan exceeding 10 years, with **HALO 2** carrying a full **10-year warranty**, this warranty is backed up with a **'Double for your trouble'** replacement policy for the **first 5 years**, which means that we replace double the quantity of any product failures as quickly and as efficiently as possible.

Limited to LED strip lighting excluding accessories falling under general 'one-for-one' warranty replacement policies. With **HALO**, even when you think you lose, you always win.

5 YEARS

Whatever the trouble... receive back **DOUBLE!**

CERTIFICATIONS

ISO9001:2015 SAA | RCM, CE ROHS (TUV) | ETL – C / US (Intertek) | Fire Resistant (MASC) | Toxicity (Firelab) | Anti-Static (MASC) | FCC (GTS) | Dustproof, IP68 Waterproof

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