

LUMICHAIN

User's Guide

origin of light



There is a Rhinq reason to use LED for signs

One brilliant ring after another...

LUMICHAIN is so bright, rugged, easy to install, electricity saving, and almost maintenance free. Besides, the color is so rich, multiple, and can be programmed to be so dynamic and vivid. Simply cool, conserving, and care free choice of our times.

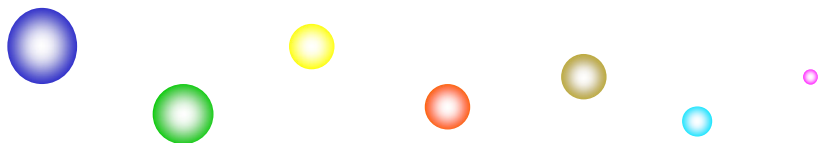


LUMICHAIN
Come Rain or Shine or Hurricane

- Solid state packaging with excellent water proof.
- LED units chained up by flexible cord for easy installment and application versatility
- Ideal for direct backlighting or reverse halo application
- Life up to 100,000 hours, requires minimal maintenance
- Saving electricity and repair labor cost, tremendously



TAIWAN OASIS TECHNOLOGY CO., LTD
DONGGUAN OASIS ELECTRONIC CO., LTD



origin of light

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Product introduction

Safety & Durability:

- Low voltage operation(12V), so No noise and No Danger of fire
- Low power consumption and very low rate of break down
- Illumination levels remain unchanged despite changes in ambient temperature
- Durable and highly resistant to impact
- Waterproof

Design:

- Ease of installation and maintenance. (Fast onsite installation and easy replacement)
- Lightweight and compact

Economical efficiency:

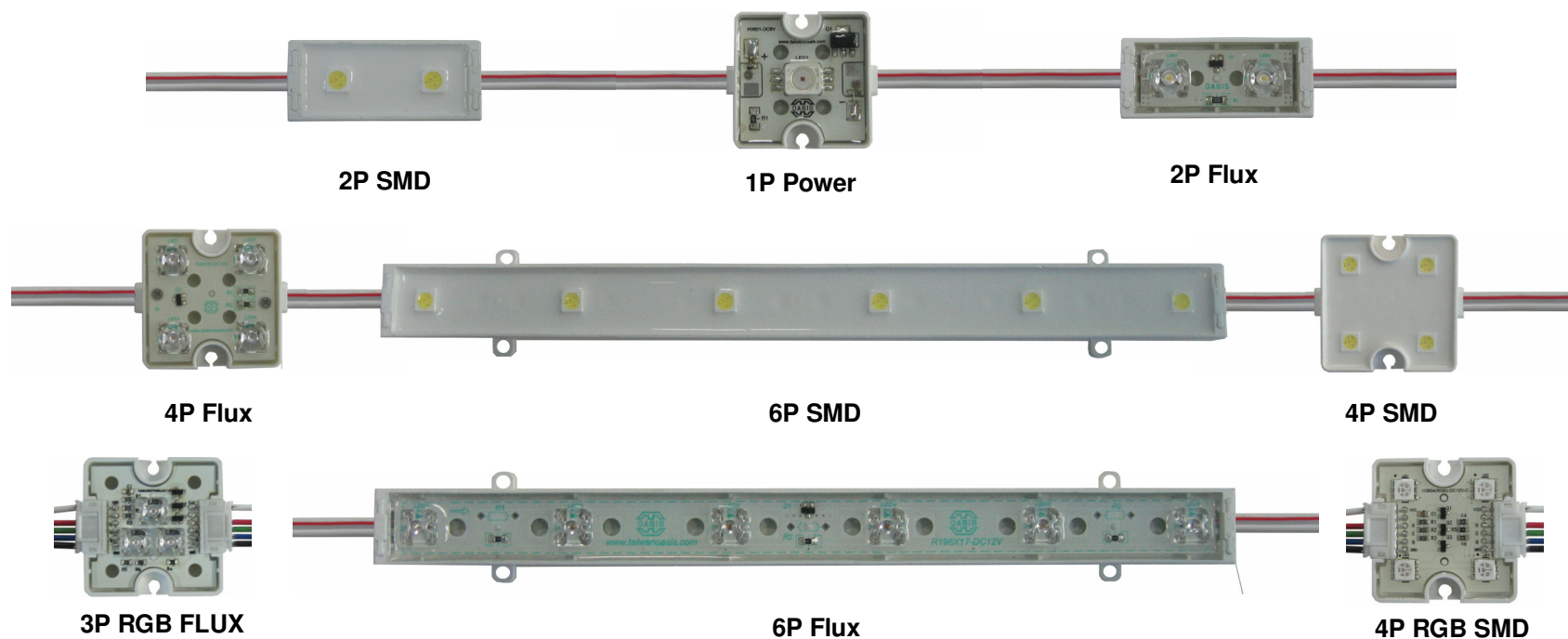
- LED is Everlasting life expectancy
- Very low Power consumption compare with Neon or cold cathode





Channel sign led module – *Lumichain*

Lumichain is ideal for advertising, channel sign lighting and outdoor illumination purposes. It has several advantages like saving consumers electricity and almost everlasting life expectancy. And Lumichain's easy to install & maintain, also it's adopted a wire to wire method so it can be freely lined and all models are compatible with each other.



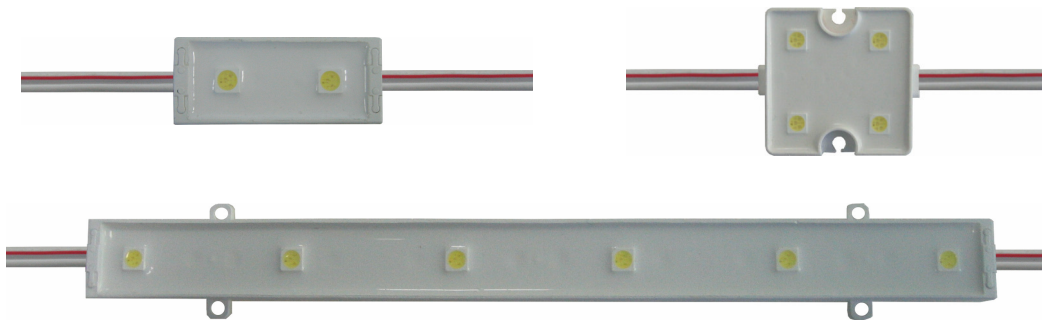
Luminchain Series



Model No.	LED type	LED quantity	units/set	Color
TOLB-R40X17(3XX)2PX10-DC12V	SMD Single color	2pcs / unit	10units / 1set	R, G, B, Y, W
TOLB-R36X36(3XX)4PX10-DC12V	SMD Single color	4pcs / unit	10units / 1set	R, G, B, Y, W
TOLB-R196X17(3XX)6P-DC12V	SMD Single color	6pcs / unit	1unit / 1set	R, G, B, Y, W
TOLB-R40X17(F1XX)2PX10-DC12V	Flux single color	2pcs / unit	10units / 1set	R, G, B, Y, W
TOLB-R36X36(F1XX)4PX10-DC12V	Flux single color	4pcs / unit	10units / 1set	R, G, B, Y, W
TOLB-R196X17(F1XX)6P-DC12V	Flux single color	6pcs / unit	1unit / 1set	R, G, B, Y, W
TOLB-R36X36(Z3XX)1P-DC12V	High power single color	1pcs / unit	1unit / 1set	R, G, B, Y, W
TOLB-R36X36(RGB)4P-DC12V	SMD 3 in 1 RGB	4pcs / unit	10units / 1set	RGB
TOLB-R36X36(FRGB)3P-DC12V	FLUX RGB	3pcs / unit	10units / 1set	RGB

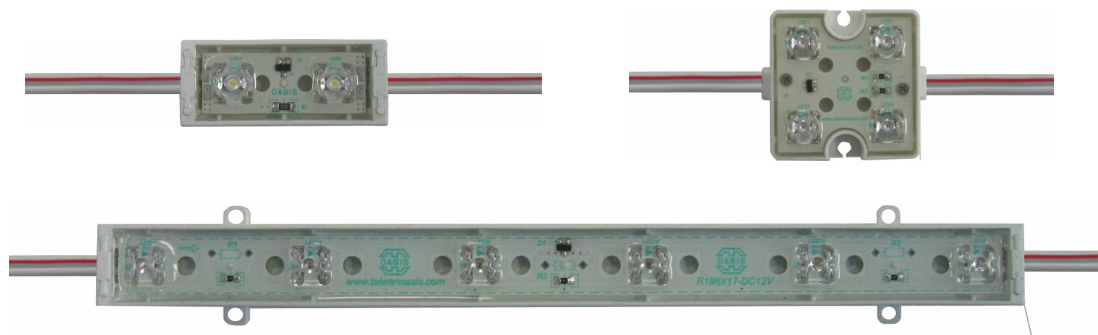
Product spec

- SMD Single color type



Operating Voltage	12V
Power per module	2P: 0.48W, 4P: 0.96W, 6P:1.44W
LED Colors	W, R, G, B, Y
LED Type	SMD 5050
Viewing Angle	120 degree
Operating Temperature	-25 to +85 Degree
Waterproof Rank	IP68
Recommendation Unit quantity For 1 line Connection	2P: 50, 4P: 30, 6P: 15

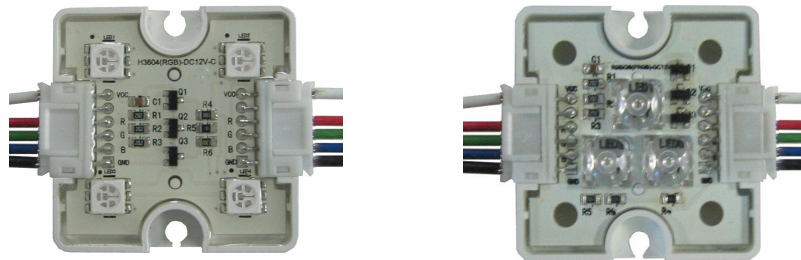
- Super flux Single color type



Operating Voltage	12V
Power per module	2P: 0.48W, 4P: 0.96W, 6P:1.44W
LED Colors	W, R, G, B, Y
LED Type	Flux 350
Viewing Angle	100-120 degree
Operating Temperature	-25 to +85 Degree
Waterproof Rank	IP68
Recommendation Unit quantity For 1 line Connection	2P: 50, 4P: 30, 6P: 15

Product spec

- RGB color SMD & Flux type



Operating Voltage	12V
Power per module	1.44W
LED Colors	RGB
LED Type	SMD 5050 RGB, Flux 350 RGB
Viewing Angle	120 degree
Operating Temperature	-25 to +85 Degree
Waterproof Rank	IP68
Recommendation Unit quantity For 1 line Connection	SMD: 30, Flux: 40

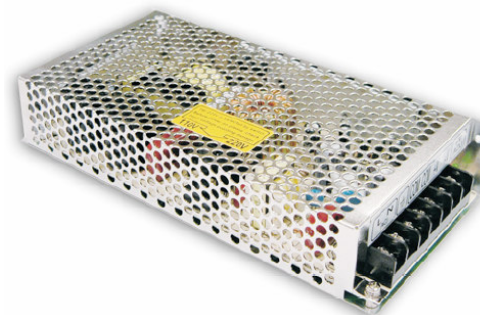
- Single color High Power type



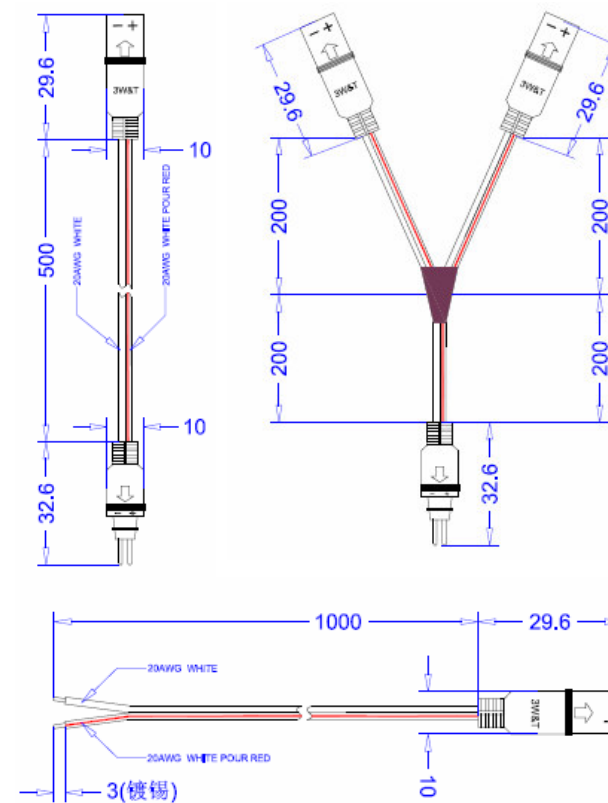
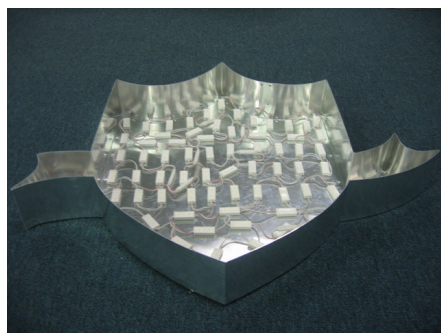
Operating Voltage	12V
Power per module	1.44W
LED Colors	W, R, G, B, Y
LED Type	High power LED 1.5 W
Viewing Angle	125 degree
Operating Temperature	-25 to +85 Degree
Waterproof Rank	IP68
Recommendation Unit quantity For 1 line Connection	30

Other material spec

Specification	2P		4P		6P, Z power, RGB	
	Max (Unit)	Recommend (Unit)	Max (Unit)	Recommend (Unit)	Max (Unit)	Recommend (Unit)
12V-20W-1.2A	30	23	15	11	10	8
12V-20W-1.6A	40	30	20	15	13	10
12V-60W-5A	120	90	60	45	40	30
12V-100W-8.3A	200	150	100	75	70	53
12V-150W-12.5A	312	234	156	117	104	78
12V-240W-20A	500	375	250	187	166	125
12V-320W-26.6A	665	498	332	249	221	166



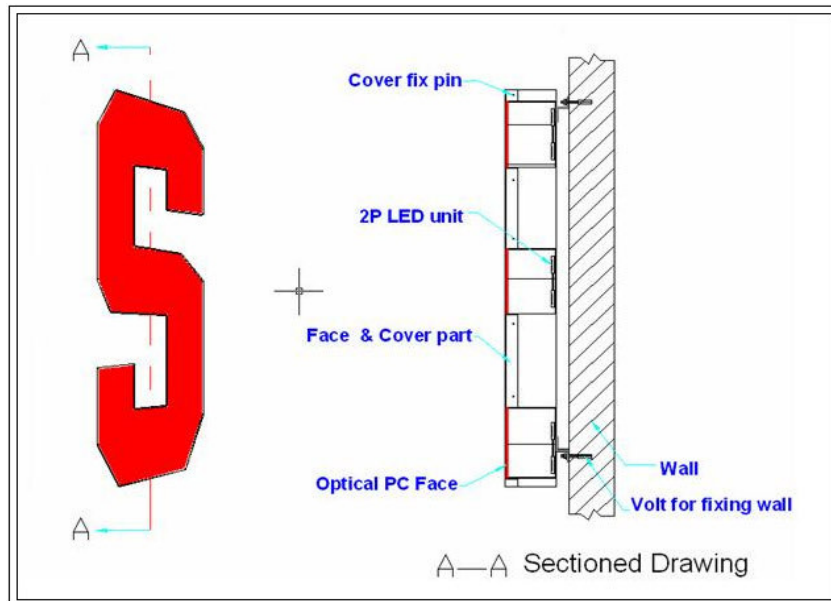
Other material spec



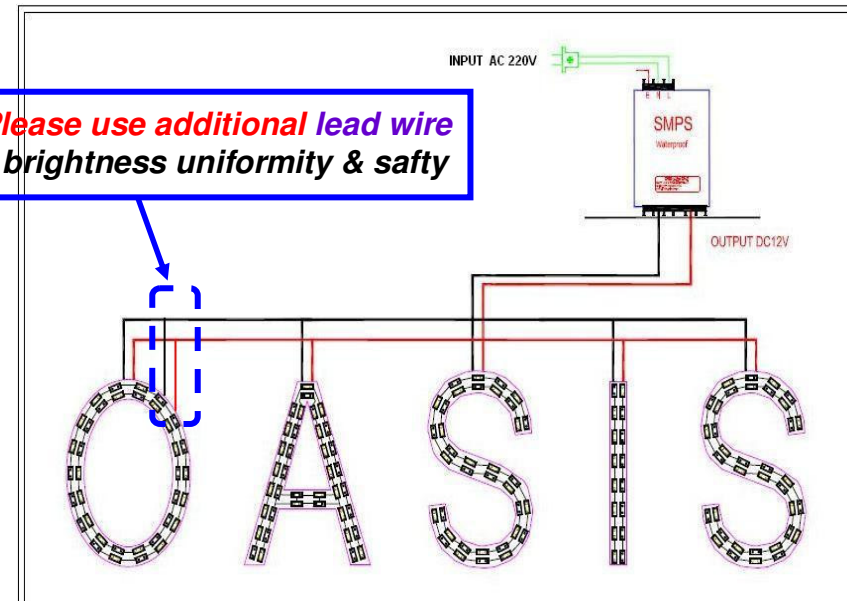
** Connector MOQ: 1000pcs

Recommendations

Installation form



**** Please use additional lead wire for brightness uniformity & safety**



LED type	SMD Single			Flux Single			SMD RGB	Z power
LED Quantity / Unit	2P	4P	6P	2P	4P	6P	4P	1P
Limitation Unit quantity Of 1 line connection	50	30	15	50	30	16	30	30

**** Recommendation:**
If connection is longer then Limitation unit quantity of 1 line connection,
Please use additional lead wire

**** Lead wire gauge Recommendation:**

- Under recommendation unit quantity: **AWG14**
- Over recommendation unit quantity: **AWG12**

(Please refer left side table)

**** Lead wire length**

from SMPS to module Recommendation:

- Please don't over **10M**

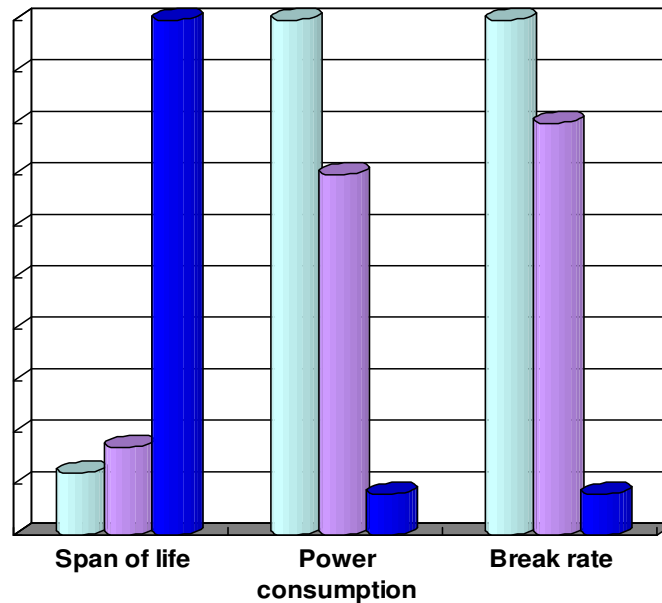


Comparison data

Strong point of LED product

* If turn on for 10hours / day (Size 20m² Channel)

Items	Fluorescent	Neon	LED
Voltage	220 V	15000 V	12 V
Power consumption	672 KWh	480 KWh	0.216 KWh
Span of life	under 10K hours	20K hours	50K-100K hours



Fluorescent

Neon

LED



Portfolio - Lumichain



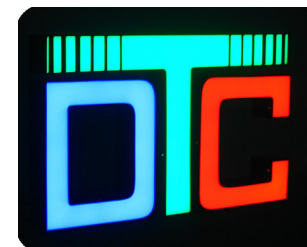
KOREA



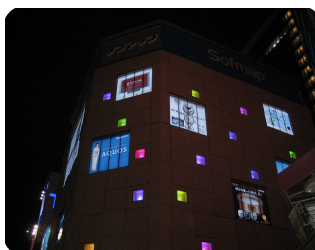
AMERICA



MALAYSIA



THAILAND



JAPAN



KOREA



AMERICA



INDONESIA

Customer support

- **Inspection of Product Concern**
Within 24 Hour after Customer raised the product quality concern.
- **Temporary Product Problem Solution**
Within 72 Hours after Customer Return of problem samples.
- **Root-Cause Counter Measure**
Within 5 Days after Inspection of the problem samples.
- **Follow-Up and Follow Through**
Effectiveness of Counter measures will be followed for 6 months

Point to Notice

- **Please concern for polarity (+ -)**
- **For the safety of operation, please use 75% of Power supplier output current**
- **Please don't connect LUMICHAIN to AC directly**
- **From Power supplier to LUMICHAIN MAX wire distance is less then 10M**
- **Don't try to open the product, it can be cause breakdown and can't get A/S**