Specifications Optical and electrical data is typical unless indicated otherwise.

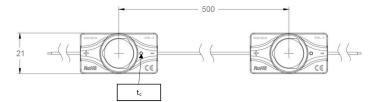
Part No.	OL-SOL3-4000-1	OL-SOL3-5000-1	OL-SOL3-6500-1
Input Voltage	3.1VDC to 3.4VDC (Max)	3.1VDC to 3.4VDC (Max)	3.0VDC to 3.4VDC (Max)
Operating Current	700mA (Max.)		
Power Consumption	350mA: 0.98W (Typ.) to 1.12 (Max.) 700mA: 2.05W (Typ.) to 2.38W (Max.)		
Dimension	40(L) x 21(W) x 7.7mm(H)		
Beam Angle	Super Wide		
Luminous Flux (Max.)	308lm (Max.)	308lm (Max.)	311lm (Max.)
Colour bin / Temp. / CRI	J23 & J41 / 4000K / 70	HC4 / 5000K / 70	FC4 / 6250K / 70

Dimensions and location of Tc point

All specs @ ta 25°C @ 700ma



Part no.: 314 A moisture resistant 3-port wire gel crimp connector





Further specifications and user instructions

L/70 @ 54K hrs: 54,000 hrs to 70% of initial brightness when Tj does not exceed 115°C
Life time is reduced when max temp exceeded
Max surface temp at Tc must not exceed 65°C
Use On Aluminium or Aluminium Composite
Observe MIN and MAX Number Of Modules stated for the LED driver used
Do Not Connect With Reverse Polarity
Fire-rated & suitable for Airport and LUL sect. 12
Maximum voltage in chain up to 500V DC

Use cable type 22AWG FT-1 BS6231 600/1000V 0.5mm2 Heat Resisting $90^{\circ}\mathrm{C}$

Do Not Pull Or Twist Wires With Force
Meets the requirements of EN 62031 - LED module 'in
built LED module'. Risk group EN 62471: exempt.
Meets safety requirements for fire resistance. Module is
cast from Lexan*925 AU resin which is non-chlorinated,
non-brominated flame retardant polycarbonate with
UL-VO rating and is UV stabilised. Lens is moulded from
hard burning, self-extinguishing acrylic and has a fire
rating UL94 HB. Cable is 22AWG tinned copper 7/0.254
with silicon rubber sheath which is low-smoke and zero
halogen (LSZH) rated UL3239.



Use 314 3M Scotchlok IDC connectors or other

POSHINO

Installation and Operating Instructions



Need advice? Tel 0115 964 1305 or email sales@oshino.co.uk

Super Orbis LED Gen3 LED modules used for illumination of signs and signage

Installation and servicing of this lighting equipment shall be done in compliance with these instructions, within the requirements of BS599: 2009 and the latest edition of BS7671 (The IEE Wiring Regulations) plus any relevant site, market, customer or national electrical, product and safety requirements.

CAUTION: Live parts inside. This is <u>NOT</u> a low-voltage (12 or 24V) system and high voltages up to 500V DC maybe present. Do Not Connect Modules Directly To The Normal 'Mains' Supply.

The sign <u>maybe LIVE</u> even when unlit. Isolate from 'mains' supply before servicing. Servicing must be carried out by qualified persons only.



Please hand this leaflet to the user of the sign for future reference

Important notes

- 1. Use only with a CONSTANT CURRENT power supply up to a maximum of 700mA
- 2. Do not use a constant voltage power supply (e.g. 12V, 24V) in any circumstances as irreparable damage will occur not covered by our warranty
- 2. Make connections between LED driver and module chain BEFORE powering-up the LED driver. Connecting modules to an already energised LED driver may be <u>HAZARDOUS</u> and will result in irreparable damage to modules not covered by our warranty
- 4. Do observe in minimum and maximum quantity of modules per driver as shown
- 5. Do observe correct polarity +pos and –neg. Reversing polarity can cause damage to the modules
- 6. If in doubt, ask someone from our sales or technical team a detailed diagram showing the layout of modules with suitable LED drivers for your particular sign is always available on request

Mechanical assembly of modules to the sign

- The lowest installation temperature of **Super Orbis GEN3** is 10°C.
- Use only modules from single brightness and colour category for signs delivered to the same installation location. LED binning is shown on product labels placed on module reels.
- Super Orbis GEN3 modules are designed to be placed inside a luminaire, which can be either a sign box or a built up letter. These modules MUST NOT be connected directly to the normal 'Mains' supply.
- Super Orbis GEN3 module has a self-cooling design and therefore does not require a specific heat sink or forced cooling but must be placed on and properly adhered to aluminium or aluminium composite sheet material. A bright, plain or specular aluminium surface or white reflective surface usually produces the best results (Cont'.)

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Mechanical assembly of modules to the sign (cont'.)

STEP 1

Clean the installation surface properly before beginning the assembly. Installation surface needs to be straight, dry and free of dust, moisture and grease residues

STEP 2

Unpack modules carefully, without damaging them mechanically. Cut the module chain to the appropriate length needed. Use pre-mounted adhesive pads to place modules to correct positions. Remove the protecting backing **just before** placement. If the adhesive pads get dirty, change them to new ones. Do not touch the adhesives with bare hands.



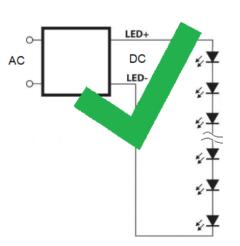
STEP 3

Press modules firmly against the surface for **three (3) seconds.** Full bond strength is reached within 24 hours. Use cable restraints to prevent excess wires from snagging during the sign's installation or from contacting the lit face when shadows cab become evident.

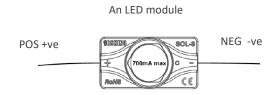


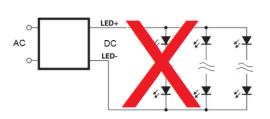
Electrical wiring of modules

Power using only a single-series chain of modules



Circuit Diagram





NO PARALLEL CIRCUITS ALLOWED

Electrical wiring of modules (cont.')

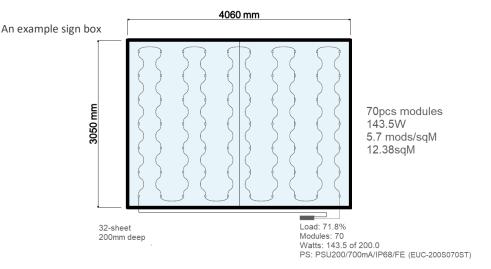
USE ONLY APPROVED LED DRIVERS NEVER USE A 12V OR 24V LED DRIVER



Important: connect only the number of LED modules including and between the minimum and maximum shown below for a range of LED driver wattages

350mA driver Wattage: 150:between 43min & 132max

700mA driver Wattage: 36W: 5min & 17max // 60W: 15min & 25max // 96W: 24min & 40max //150W: 39min & 62max // 200W: 57min & 83max // 240W: 57min & 100max



70pcs Modules: Oshino - Super Orbis LED Gen3 module 700mA max 5000K white OL-SOL-5000-1 143.5 module Watts 159.4 circuit Watts 0.69A loce Power Supply: Oshino - PSU200/700mA/IP67/FE