

MONARCH

THE DUTCH POWERHOUSE

TECHNICAL DATASHEET



Product features

Housing material	Aluminium
Finishing	Anodized / Antifouling powder coating RAL 9010 (dirt repellent)
LED protection cover	High transmission glass (transmission >98%)
Beam angle	Narrow Beam: 120° Wide Beam: 140°
Ingress Protection LED compartment	IP67 (dust- and watertight). Fixtures can be cleaned by using pressurized water, the complete electrical circuit is sealed waterproof.
Impact resistance housing	IK10
Impact resistance glass	IK07
Lifespan	L90 - 35,000 hours
Warranty	5 years

Narrow Beam

Light colors

- Low Blue
- Medium Blue
- High Blue
- Broad Spectrum
- Low Blue + White
- Medium Blue + White
- High Blue + White

Optical properties*

Photon Flux (μMol/s)**	Consumed Power (W)	Efficacy (μMol/J)
3100	1010	3.1
3080	1010	3.1
3050	1010	3.0
2610	1010	2.6
2940	1010	2.9
2930	1010	2.9
2900	1010	2.9

Spectral specifications*

blue 400-500	mid 500-600	red 600-700	farred >700
5.4	0	94.6	0
6.7	0	93.3	0
9.4	0	90.6	0
6.8	23.6	68.1	1.5
5	9	85.5	0.5
6.5	9.1	83.9	0.5
9.2	9	81.3	0.5

Other spectrum varieties on request.

Wide Beam

Light colors

- Low Blue
- Medium Blue
- High Blue

Optical properties*

Photon Flux (μMol/s)**	Consumed Power (W)	Efficacy (μMol/J)
3070	1010	3.0
3050	1010	3.0
3020	1010	3.0

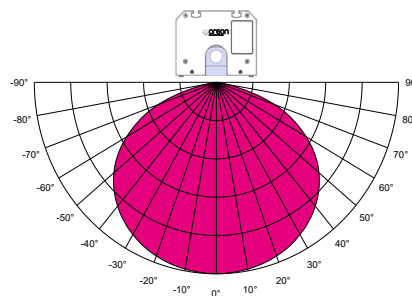
Spectral specifications*

blue 400-500	mid 500-600	red 600-700	farred >700
5.4	0	94.6	0
6.7	0	93.3	0
9.4	0	90.6	0

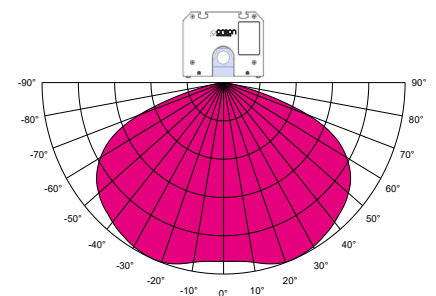
Other spectrum varieties on request.

Light distribution

Narrow Beam



Wide Beam



Technical data

Power factor	> 0.96 @ 400 VAC
Total Harmonic Distortion (THD)	< 11%
Voltage range	200 - 480 VAC
Current range	5.3 - 2.2 A
Frequency range	50/60 Hz
Inrush current	max. 40 A (t< 1 msec)
Leakage current	< 0.75 mA @ 480 VAC
Isolation class	Class I
Connector	Amphenol X-lok (Extension Cord no. 5524603 can be ordered separately)
Operation conditions	32 to 113°F 0 to 45°C / 95% RH
Storage conditions	32 to 140°F 0 to 60°C / 85% RH

Cooling liquid and circuit

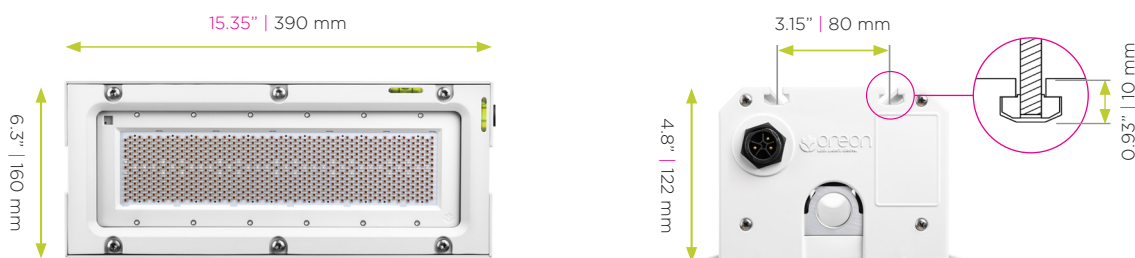
Cooling liquid	Water (PH 4-8)
Cooling liquid temperature	From dew point to 113°F 45°C
Cooling liquid flow rate	> 25 l/min
Imparted heat into cooling system	± 410 W per fixture (Btu/h ± 1399) ± 490 W per fixture (Btu/h ± 1672) Broad Spectrum
Water connection	Pipe thread ISO 228-G 3/4" (2x)

Mounting

Fixture mounting interface 4x M6 T-nut (maximum depth for the bolt is 3/8 inch | 10 mm).
The four T-nuts are included in the delivery.

Weight and dimensions

Nett weight	20.5 lb 9,3 kg
Gross weight (approx.)	24.3 lb 11 kg (including mounting brackets, connectors, pipes)
Product dimensions (L x W x H)	15.35" x 6.3" x 4.8" 390 mm x 160 mm x 122 mm
Carton dimensions (L x W x H)	21.65" x 8.66" x 6.89" 550 mm x 220 mm x 175 mm



Logistic specifications

Quantity per pallet
Gross weight per pallet
Pallet dimensions (EUR)
HS-code

Air freight

49 pcs.
1148.7 lb 521 kg
31.5" x 47.24" x 56.69"
800 x 1200 x 1440 mm
9405 4099 90

Sea/Road freight

63 pcs.
1461.7 lb 663 kg
31.5" x 47.24" x 71.26"
800 x 1200 x 1810 mm
9405 4099 90

Compliance

cMETus listed (ANSI/UL+CSA) (pending)	CE (pending)
- UL 1598	- LVD 2014/35/EU
- CSA C22.2 No. 250.0-08	- EMC 2014/30/EU
	- RoHS 2011/65/EU



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