

AQUARAY® Technical Specification

Product Name: AquaBeam 1000 HD *Ultra*

Electrical: Mains Supply - 50-60Hz, 100-240VAC, 0.3A
Luminaire Supply - 21.5VDC max, 0.7A
Total Power Consumption - 30W

Technology: Solid State Lighting - 10 x CREE® X-RE Q+ PowerLEDs driven at 700mA with custom collimating optics featuring "Total Internal Reflection" for efficient and uniform light distribution

Application: MARINE - reef and fish only aquariums. (Also suitable for planted/tropical/coldwater aquariums).

Usage: 1 unit per 2.5-3ft² (1 unit per 0.2-0.3m²)

KEY FEATURES

				Advantages	Featured on AquaBeam 1000?	Featured on Metal Halides?
DESIGN	Footprint	Compact and space-saving	198 x 198mm	Suitable for use with nano tanks	✓	✗
	Profile	Ultra slim-line casing	47.5mm high	Suitable for fitting in aquarium hoods	✓	✗
	Casing Construction	Water-proof, ABS and acrylic	Shockproof, IP67	Corrosion proof and impact resistant	✓	✗
	Thermal Management	Passive - no fan required	Profiled aluminium	Cool running and low heat transfer to water	✓	✗
	Mounting	AquaRay MMS compatible	Patented	Flexible mounting and fixing options	✓	✗
	Power Supply	Separate DC power supply	Max 24VDC	Ultra safe and silent operation	✓	✗
QUANTITY OF LIGHT	Illuminance or Lux*	High brightness	Up to 20,000 Lux	Suitable for all marine set ups	✓	✓
	Photosynthetic Photon Flux*	High PAR	Up to 300 µeinsteins/sec/m ²	Suitable for all hard corals	✓	✓
	Digital Control**	Timing/dimming	Full function/down to 1%	Sunrise/sunset/moonlight in one unit	✓	✗
<small>* Typical values measured in air at 15"/400mm from focal point of light source ** with AquaRay Control or PowerControl</small>						
QUALITY OF LIGHT	Colour Temperature (CT)	Ultra-cool Marine White and Reef White	14,000-50,000K	Light penetrates deeper water	✓	✓
	Spectral Quality	Emits light at ALL wavelengths in visible spectrum	405nm-750nm	Full spectrum light for plants/zooxanthellae	✓	✗
	Colour Rendition Index (CRI)	High CRI	80+	Renders colours close to nature	✓	✓
	UV Emittance from Lamp	No harmful UV light emitted by lamp	0mJ/cm ²	No UV shielding required	✓	✗
COST OF OPERATION	Lumen and Spectral Maintenance	Long, useable lamp life with no visible spectral shift	50,000 hrs/10 yrs	No need for lamp replacements	✓	✗
	Total Cost of Ownership (5 years)***	Affordable and low running costs	1.5 x purchase cost	Low cost of ownership	✓	✗
<small>*** Includes typical purchase price, replacement lamp costs and electricity at £0.10 per Kh assuming 5000 running hours per year</small>						
ENVIRONMENTAL	Presence of Mercury	No mercury present in lamp or fitting	0 mg HG	Safer for the environment	✓	✗
	Carbon Footprint	Low carbon emissions induced by use	65 CO ₂ kg/yr	Less contribution to "greenhouse" gases	✓	✗