

LD 20 Atom

PRODUCT SPECIFICATION SHEET



DESCRIPTION

We officially launched our first semiconductor diode laser system back in 2011 in Birmingham, UK. Today's Atom series combines the latest semiconductor diode laser technology with battlefield proven construction and integrated FB4 controller.

Our Atoms already showed their potential in power demanding applications while we manage to keep their sales price at a reasonably low level. Atom lasers are the bridge between smaller Clubmax FB4 systems and our flagship Spectrum laser projectors.

KVANT **LD 20 Atom** is a high-power semiconductor diode laser system that's equipped with Low Divergence output optics, making the **beam divergence as low as 0.46 mrad at a full angle**. As a result, this laser projector's beams are a lot brighter than those from typical 20W RGB lasers. This robust system is built to last, suitable for touring and hire, and it is equipped with the 30 Kpps Saturn9 scanning as standard. Besides other ways of control, it can be controlled directly from a lighting desk over the ArtNet.

Every KVANT laser system is delivered with a Quality Control Certificate. The certificate includes the power output measurement of each laser wavelength within the system.

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SPECIFICATIONS

Source Type:	semiconductor diode full-colour LD RGB laser projector
Suitability:	outdoor laser displays [atmospheric, abstract, text, animations]
System control:	FB4-SK [Ethernet, ArtNet, DMX, ILDA PC, Lighting Console or Autoplay]
Compliant with:	EN 60825-1 [tested by TÜV SÜD], FDA
Weight [kg]:	37
Size [WxHxD, mm]:	510 x 273 x 396
Guaranteed opt. output [mW]:	20000
R G B [mW]:	6000 5700 9000 [*see note A below]
Wavelengths [nm, ±5nm]:	637 520 445
Beam size [mm]:	10 x 10
Beam divergence [mrad]:	0.46 [full angle, averaged value, *see note B below]
Modulation [kHz] type:	100 analogue
X-Y scanners:	Saturn9 30 Kpps @ 8°, max. 40°
Power requirements [V] Input:	100-230/50-60Hz Neutrik powerCON TRUE1
Max. power consumption [VA]:	1200
Operation temperature [°C]:	10-40
Included in the set:	Heavy-duty flight case, 1.5M power lead, 25M Ethernet rj45 signal cable, E-STOP remote with 30M 3-pin XLR cable, set of 4 safety keys, interlock connector [for the USA only], USB memory stick with the user manual. Pangolin QuickShow laser control and creation software is available for FREE download.
HW features:	All the basic system settings and adjustments such as power output adjustment for each colour, X & Y axes invert, X & Y size and position, etc. are managed via the built-in FB4 control interface. Scanning system overload protection.
Laser safety features:	Keyed interlock, emission delay, magnetic interlock, scan-fail safety, fast electromechanical shutter [reaction time <20ms], adjustable aperture masking plate, Emergency STOP system with keyed remote and manual RESTART button.
note A	Due to Advanced Optical Correction technology used in Kvant systems, the real power output of each laser module installed within the system may slightly differ from its specification. This doesn't affect the total guaranteed power output of the system.
note B	The beam divergence total is calculated as an average arithmetic value of all individual colours. The divergence of each colour is calculated as: 1. FWHM of the beam cross-section for round beams, or 2. The arithmetic average of the beam's horizontal and vertical divergence for all rectangular beams.