Atom 42

PRODUCT SPECIFICATION SHEET

Robust and powerful, engineered and sophisticated.
The Atoms are well balanced from about every aspect, including their cost-efficiency.

Atom units are structurally designed the same way as our world-class Spectrums, using the same innovative **foam aluminium material for the chassis**, but with a few differences that allow for a more economical price tag.
The latest Atom is a fine-crafted semiconductor FAC-diode based full-colour laser display system that provides its user with powerful output, unified beams, crisp colours, and advanced control features and connections.

The Atoms emit beams with unrivalled divergence while maintaining guaranteed power output across the entire scanning range. This is something pretty unique that not many other manufacturers can guarantee.

Our Atoms already showed their potential in power demanding applications while we manage to keep their sales price at a reasonable level.

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SPECIFICATIONS

Source | IP-rating | Type:	Semiconductor laser diode | IP65 | Full-colour 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 60825-2
Weight [kg]:	31
Size [WxHxD, mm]:	491 x 310 x 396
Guaranteed opt. output:	42 watts
Installed modules R | G | B [W]:	9 | 13 | 20 *note A
Wavelengths [nm, ±5nm]:	638 | 525 | 455
Beam size [mm]:	7 x 7
Beam divergence [mrad]:	1.1 mrad [full angle, **note]
Analogue modulation [kHz]:	100
X-Y scanners:	Juno 5 | 30 kpps @ 8°, max. scanning angle 50° on both axes
Power requirements [V] | Input:	100-240/50-60Hz | Neutrik powerCON TRUE1
Max. power consumption [VA]:	1200
Operation temperature [°C]:	10-35 [-20 to +35 when installed in Monsoon protection enclosure with AC unit]
Included in the set:	Heavy-duty flight case, 1.5M AC power cable, 25M Ethernet rj45 signal cable, E-STOP Remote with 25M 3-pin XLR cable, Set of 4 safety keys, Interlock bypass dongle [supplied for the USA only], USB memory stick with the user manual, QC certificate. Pangolin QuickShow laser control and creation software is available for FREE download.
HW features:	DMX-controlled LED blinder / Device Visual Identifier (4x 5-watt LED, 4000K, each diode is controlled separately) 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. Colour Balance display mode.
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.