

BrightBeam[®]

Forensic laser Systems

BrightBeam ULTRA Series



Forensic Laser Systems

The BrightBeam ULTRA is a “field ready”, high power, single color or dual color forensic laser system. Designed specifically for crime scene situations and equipped with 7 to 8 Watt lasers, the ULTRA’s lightweight design combines a high level of functionality with extreme portability.

The ergonomically designed package powered by long lived LI-Ion battery technology, provides the forensic professional with hours of use on a single charge. And if that is not enough, the “external-interchangeable” battery design allows for extended use limited only by the availability of charged batteries.

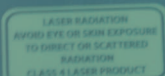
Although the ULTRA is small and compact it offers many of the same features available on the higher level lab grade instruments, including; smart hand piece/umbilical with dynamic zoom and power control, “fan smart” technology and an easy to read LCD display.



Power



Enable



24Vdc



RUGGED DESIGN

Designed for field operation, the BrightBeam laser is shock and vibration tested to endure the rigors of transport and non-laboratory environments.

UMBILICAL CABLE

The 2 meter (~6 feet), rugged "umbilical" cable provides for tremendous range and versatility in the lab or crime scene. The ruggedized cable and smart handpiece combination makes the BrightBeam ULTRA one of the best laser delivery systems in the world.

HAND CONTROL

INSTANT ON LASER

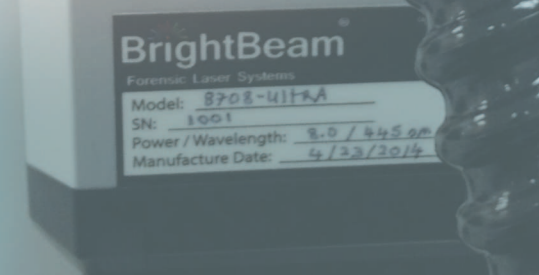
Energize the laser instantly with the easy to use handpiece. Touchpad allows for power control and toggling laser source on and off.

TRIPOD MOUNT

Universal mount (threaded ¼-20 female lug) on underside of handpiece make for quick and easy installation on tripod, articulating arm or other compatible hardware.

FULL POWER ADJUST

The laser source is controlled via the "smart" handpiece. The system remembers the last power setting for the laser allowing for quick setup and effective toggling on and off. The buttons are glow in the dark for ease of use.



BrightBeam®

ULTRA Model

ADVANCED SYSTEM DESIGN

Incorporating decades of laser system expertise, the BrightBeam ULTRA system brings together the latest technologies to achieve “state of the art” performance and reliability. Every element of the system, both internal and external, have been uniquely tailored and optimized for the forensic professional.



COMPACT PORTABLE

The BrightBeam ULTRA is amazingly compact and portable and is easily transported (and stored) via a high quality carry case. Removed from the transport case the ULTRA tips the scales at only ~10 to 17 lbs and fits comfortably on your shoulder by a padded shoulder strap. The carry case also serves to protect the unit in harsh or inclement conditions.



THERMAL

Operating almost “whisper” quiet, the BrightBeam ULTRA utilizes processor controlled, variable speed fans to provide the optimal combination of quiet operation and cooling, ensuring the best possible user experience.

OPTICAL

The ULTRA laser optics coated for high power laser operation and configured to provide a homogenous and “speckle free” beam profile when used with a diffuser (30 degree supplied, 10-50 degree available).

ELECTRICAL

An internal microprocessor monitors all the major functions of the BrightBeam ULTRA to ensure trouble free operation, maximizing battery safety and lifetime.

MECHANICAL

The ruggedized system architecture combined with “field tested” components make the BrightBeam ULTRA a perfect fit for all crime scene environments.

QUICK SWITCH EXTERNAL BATTERY

The BrightBeam ULTRA is equipped with a Li-ion batteries utilizing the latest technologies and delivering up to 3 hours of continuous AC-free operation at laser full power. The external batteries can be quickly switched out for longer run times.



LASER SAFETY

The BrightBeam ULTRA is designed and built for safe operation. With a removable key and a user defined safety interlock port- the system can be easily safeguarded against unauthorized or unintended operation. The BrightBeam system should never be operated by untrained or inexperienced personnel.

System SPECIFICATIONS

Model	ULTRA 8708 Blue	ULTRA 8700-G7 Green	ULTRA 8707-G7 Blue/Green
Laser Power (W)*	8.0	7.0	7.0 / 7.0
Wavelength (nm) typical	445	525	445 / 525
Bandwidth (nm) typical	2.0	2.0	2.0 / 2.0
Beam Diameter (cm) @50cm	Adjustable 15 to 35	Fixed Optics	Fixed Optics
Beam Quality	Speckle Free Illumination with diffuser		
Start up time	5 seconds from cold start		
Cool down time	None		
Fiber/ Cord Length	2 meters- Umbilical Cable (Custom lengths available)		
Batteries included	2 (5Ahr)	3 (5Ahr)	3 (5Ahr)
Battery Life (minutes)**	180	180	150
Battery Fuel Gauge %	System 0 - 100 LCD 5% increments, Battery 25% increments		
System Noise Level	<30dB(A) for normal operation <50dB(A) for harsh environments (auto ramp fans)		
Ambient Operating Temperature (C)	0 to 40		
Storage Temperature (C)	-20 to +85		
Relative Humidity (non condensing)	5 to 95%		
Electrical Input (Vac)	Universal 90 to 250		
Line Frequency (Hz)	50 to 60		
Electrical input (DC)	24Vdc (4A)		
Size (inches)	10 x10 x 4.0	10 x10 x 4.0	10 x13.5 x 4.0
Weight (lbs) with Batteries	10	12	17
Laser Safety Interlock	Removable Key and interlock interface		

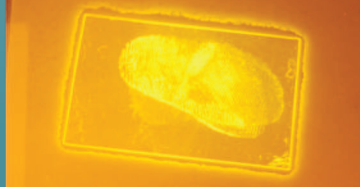
* Adjustable from zero to full power via hand controller ** Blue typical minimum run times at full power continuous use, System includes: Batteries, chargers, carry case, One pair Laser goggles, and auxiliary 24Vdc input transformer.

Sample EVIDENCE

Higher contrast and greater resolution for a wider range of evidence detection and identification:

The 8 Watt Blue laser, is not only extremely effective on chemically treated latent prints but also with a host of other evidence types, including; body fluids, documents, bones, GSR, bruising, and many others. Built with the latest laser technology, the BrightBeam ULTRA is highly affordable forensic laser light source that is designed and built specifically for the forensic professional.

BASIC YELLOW TREATMENT



URINE BODY FLUID



Designed and manufactured by:


LASER LIGHT
S O L U T I O N S

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