

# BrightBeam<sup>®</sup>

## Forensic laser Systems

### BrightBeam SINGLE Series



The BrightBeam SINGLE is a high power, single color forensic laser system. With laser powers up to 8 Watts of Green (532nm) or 14 Watts of Blue (445nm), speckle free beam affords a high concentration of color and brightness giving the forensic professional unprecedented range and capability, extending well beyond conventional ALS/LED technologies. As the proven standard in latent fingerprint analysis, the 8 Watt Green used in conjunction with complimentary chemistries, provides unmatched fluorescence and clarity for any type of fingerprint processing. The 8 Watt Blue provides similar latent fingerprint results with many of the same chemistries but adds extended spectral range to capture a host of other evidence types, including; bodyfluids, documents, bones, and others.

Built with the latest laser technology, the SINGLE offers a long list of standard features that make the BrightBeam SINGLE an important and useful forensic laser tool for today and for years to come.



# BrightBeam<sup>®</sup>

## SINGLE Wavelength Models

### ADVANCED SYSTEM DESIGN

Incorporating decades of laser expertise, the BrightBeam SINGLE 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 SINGLE is amazingly compact and portable and is easily transported (and stored) via a high quality Pelican case. Once removed from the transport case a SINGLE tips the scales at only 30 lbs and is easily moved around the lab with a built in handle.



### THERMAL

Operating almost "whisper" quiet, the Brightbeam SINGLE utilizes processor controlled, variable speed fans to provide the optimal combination of quiet operation and cooling, ensuring the best possible user experience.

### OPTICAL

Advanced zoom 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 SINGLE to ensure trouble free operation. External computer control is easily accomplished via USB and a provided GUI.

### MECHANICAL

The ruggedized system architecture combined with "field tested" components make the Brightbeam SINGLE a perfect fit for both lab and crime scene environments.

### INTERNAL BATTERY

The BrightBeam SINGLE can be equipped with an optional SMART battery system utilizing the latest Lithium-Ion technologies and delivering up to 5 hours of continuous AC-free operation at full power.



### LASER SAFETY

The Brightbeam SINGLE 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.





## RUGGED DESIGN

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

## ZOOM ADJUST

Intense brightness or broad area illumination is a key discriminating feature of the Brightbeam laser. Equipped with variable zoom optics the user can vary the beam size from a few inches to many feet in diameter, making close up detail work on fingerprints or large area room scanning a breeze.

## ARMORED CABLE

The 5 meter ( ~16.6 feet), stainless steel “umbilical” cable provides for extended range and versatility in the lab or crime scene. The ruggedized cable and smart handpiece combination makes the Brightbeam SINGLE 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 1/4-20 female lug) on underside of headpiece makes for quick and easy installation on a tripod, articulating arm or other compatible hardware.

### FULL POWER ADJUST

The laser source can be controlled via the “smart” handpiece or the front panel of the base unit. The system remembers the last power setting for the laser allowing for quick setup and effective toggling on and off.





## SYSTEM SPECIFICATIONS

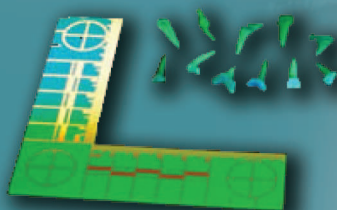
Model	8700G4 Green	8700G8 Green	8708 Blue	8714 Blue
Laser Power (W)*	4.0	8.0	8.0	14
Wavelength (nm)	532	532	445	445
Bandwidth (nm)	1.0	1.0	2.0	2.0
Beam Diameter (cm)	Adjustable from 15 to 35 @ 50 cm			
Beam Quality	Speckle Free Illumination with diffuser			
Start up time	5 seconds from cold start			
Cool down time	None			
Fiber/ Cable Length	5 - meters (Custom lengths available)			
Battery Life (minutes) **	120	120	300	120
System Noise Level	<25dB(A) for normal operation <57dB(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, 100 to 350 Watts			
Line Frequency (Hz)	50 to 60			
Size (inches)	8 x 11.50 x 17.00			
Weight (lbs)	<30 (<50 with optional battery)			
Laser Safety Interlock	Removable Key and rear connector interface			

\* Adjustable from zero to full power via hand controller \*\* Green / Blue typical minimum run times at full power continuous use

## SAMPLE EVIDENCE

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

The BrightBeam SINGLE Forensic Laser – Green or Blue- delivers unparalleled brightness resulting in very high fluorescence for a wide array evidence types, including; latent fingerprints, body fluids, documents, gunshot residue, bruising, bones, etc. Designed for demanding forensic applications in the lab or field, the BrightBeam SINGLE is the perfect combination of size, fit, form and function



Designed and manufactured by:

  
**LASER LIGHT**  
S O L U T I O N S

20 D Worlds Fair Drive, Somerset, New Jersey 08873

www.BrightBeamLaser.com  
tel: 732.979.2143  
email: sales@BrightBeamLaser.com