

# BrightBeam®

## Forensic laser Systems

### BrightBeam® ULTRA PLUS Series



The BrightBeam® series of ULTRA forensic lasers are “field ready”, high power, single or dual color portable systems designed specifically for crime scene situations. Equipped with 8-10 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. An “external-interchangeable” battery design allows for extended use limited only by the availability of charged batteries.

Although the ULTRA series are small and compact, they offer many of the same features available on the table top laboratory systems, including; a backlit hand piece/umbilical with laser power control, “smart fan” technology and an easy to read LCD display.





## RUGGED DESIGN

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

## UMBILICAL CABLE

The ruggedized umbilical provides ample length ( 2 meters) to comfortably survey a crime scene or use as a stationary instrument in the lab.

## HAND CONTROL

### INSTANT ON LASER

Energize the laser instantly with the easy to use handpiece. A backlit, "see in the dark" touchpad allows for power control and laser toggling on and off.

### 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 on and off toggling. Control buttons are backlit for ease of use.

## HANDPIECE MOUNT

A universal mount (1/4-20 female lug) on the underside of handpiece makes for quick and easy installation on a tripod, articulating arm or other compatible hardware.





# BrightBeam®

ULTRA Model

## ADVANCED SYSTEM DESIGN

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



Unit shown in optional backpack



## COMPACT PORTABLE

Compact and light (10 to 17 lbs), worn on the shoulder and powered by “quick change” Li-Ion batteries (full power operation up to 3 hours). The Ultra series of portable forensic lasers are designed to be the perfect tools for the crime scene investigator.



## THERMAL

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

## OPTICAL

The ULTRA's laser optics are coated for high power laser operation and configured to provide a homogenous and “speckle free” beam profile when used with a diffuser lens (supplied with system).

## 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

BrightBeam® ULTRA systems are equipped with Li-Ion batteries utilizing the latest technology and can deliver up to 3 hours of continuous operation at full laser power.

The external batteries can be quickly switched out for longer run times.



## LASER SAFETY

A 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. BrightBeam® systems should never be operated by untrained or inexperienced personnel.

# System SPECIFICATIONS

Model	ULTRA 8710	ULTRA 8700-G8	ULTRA DUAL 8710-G8
Laser Power	Blue 10 Watt	Green 8 Watt	Blue / Green 10 W / 8 W
Wavelength (nm) typical	445	525	445 / 525
Bandwidth (nm) typical	5.0	5.0	5.0 / 5.0
White Light*	No	No	Yes ( 2500 lumens)
Beam Diameter (cm) @50cm	Adjustable 15 to 35	Fixed Optics	Fixed Optics
Beam Quality	Speckle Free Illumination with diffuser		
Start up /Cool down Time	5 seconds from cold start / No cool down required		
Fiber/ Cord Length	2 meters- Umbilical Cable (Custom lengths available)		
Batteries included	2 (5Ahr)	3 (5Ahr)	3 (5Ahr)
Battery Life (minutes)**	180	150	150/180
Battery Charge Level Indicator (%)	Yes	Yes	Yes
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

## Key System Attributes:

- Lasers: Chassis mounted and cooled. Fiber Optic delivery to handpiece.
- Single Backlit Handpiece: Incorporates all power controls. Wavelength toggling.\*\*\*
- Laser Safety Interlock Removable Key and interlock interface (Deadmans trigger optional)
- BrightBeam Ultras Plus warranty- 5 year system and 2 year/5000 hours on laser sources (whichever comes first)

## Environmental

Maximum Operating Temperature (C)	-20 to +40
Storage Temperature (C)	-20 to +85
Relative Humidity	5 to 95% (non condensing)

## Electrical

Electrical Input Included (Va/c)	Independent Universal 90 to 250, 50 to 60 Hz - 24Vdc Supply
Battery input (DC)	24Vdc (4A) up to three slots



\*Near white- best in dark environments \*\* Typical minimum run times at full power continuous use. \*\*\* Adjustable from zero to full power via hand controller  
System includes: Batteries, charger, laser goggles, and auxiliary 24Vdc input transformer. All runtimes at nominal ambient T=25C.

## Sample EVIDENCE

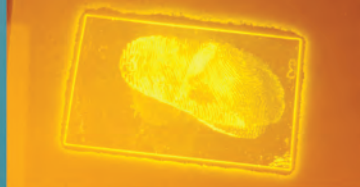
LASERS offer high contrast and superior resolution for a wide range of evidence types.

Blue and Green lasers are especially effective with;

- chemically treated latent prints
- body fluids
- counterfeit documents
- bones,
- GSR
- bruising

Designed and manufactured with the latest laser technologies, the BrightBeam ULTRAS are affordable, "state of the art" light sources 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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