



# APPLIED RESOLUTION TECHNOLOGIES

Laser application technologies : Mining, Oil & Gas, Agriculture, Industrial

[www.appliedresolution.com.au](http://www.appliedresolution.com.au)

## BLX-515S :

THE WORLD'S FIRST DIRECT GREEN LASER DIODE  
INTRINSICALLY SAFE, IECEX CERTIFIED LASER FOR ANY  
HAZARDOUS ENVIRONMENT USE.

FOR MANY YEARS YOU HAVE ASKED ABOUT THE POSSIBILITY  
OF GREEN RATHER THAN RED. 5X MORE VISIBLE, TWICE THE  
RANGE OF OTHER IS LASERS. SAFE. TOUGH. EFFICIENT.

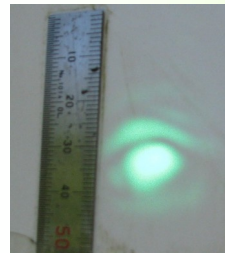


The BLX-515S is a Class 2M alignment laser system used in hazardous environments such as underground mining or conveyor alignment applications. The laser is robust enough for the toughest environment. The BLX-515S is a sensor enabled green version of the BLX-635S which will work with laser sensing systems.

It's visible green beam is safe to use under all conditions, and the precision alignment of the laser beam axis to the body axis allows simple and precise alignment. **Range is OVER 700 metres!!!**

Intrinsically safe by design. Tough. Rugged. Efficient. Safe.

EXIT BEAM DIAMETER 20mm  
BEAM at 175m : Approx 20mm



For many years we have been limited to either red Intrinsically Safe lasers, or some inefficient green laser systems that use complex and unstable technologies. Now, with the release of direct green laser diodes, we are able to offer the very first Intrinsically Safe, Long Range laser product that provides a bright green beam that is visible in the air under low ambient light conditions or with dust. Safe for Mining, safe for construction. Internationally Certified to IECEX Standards.

### CERTIFICATION

- **IECEX SIM 13.00xx** Ex ia I/IIB 136C
- Certified to IEC 60079.11 : 2006
- Supported by Quality Management to IEC 80079-34
- Supported by IECEX SIM S0003 Service Facility Certification
- The BLX-515S laser has a 20mm diameter exit beam, which enables up to 5mW laser power for Class 2M under IEC 60825-1.

### APPLICATIONS :

- Underground survey and alignment
- Tunnelling, boring
- Safe pointing, marking.
- Tunnel and excavation guidance
- Operating theatre patient alignment
- Coal Conveyor Alignment
- Mining and Industrial Automation

### DISTRIBUTOR



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### Specifications :

- Visible laser 515nm (green) < 5.0mW in 20mm diameter, Class 2M
- Working range > 700 m
- Compliant with Standards :
  - IEC 60079-0:2011
  - IEC 60079-11:2011
  - IEC 60825.1:2011
- 400mm long
- Beam aligned to laser body using proprietary means.
- 5 x C-Cell batteries
- Electronically isolated diode laser component
- Micro laser control circuit with Auto Power Control.
- Reverse battery polarity protection and in-built fusing for intrinsic safety compliance
- Long battery life > 100 hrs
- Simple rotary on/off switch with nylon-tipped set screw lock.
- Protective laser window
- Certification information engraved into the laser body for permanent label.
- Optional carry case
- Optional slotted head for close-up alignment
- Optional line output heads and 90 degree prisms.
- Standard TRIBRACH mount options for precise alignment.

## AUTOMATION READY WITH MODULATION



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## BLX-515S :

THE WORLD'S FIRST DIRECT GREEN LASER DIODE INTRINSICALLY SAFE, IECEx CERTIFIED LASER FOR HAZARDOUS ENVIRONMENT USE. GREAT FOR UNDERGROUND COAL MINING, SUITABLE FOR USE IN AIRCRAFT REFUELLING ZONES, AND A MUST-HAVE TOOL FOR COAL CONVEYOR ALIGNMENT



Read about the new direct green laser diode technology [here](#). Current consumption of the new green laser diode technology is approximately 6x lower than for Diode Pumped Solid State green lasers, with visibility of the 515nm beam approximately 5x greater than 635nm red laser output of the same power.

The new 515nm green laser is visible as it scatters in the air under low ambient light conditions, making it a stringline you can see, but will not trip over.

Safe output as a Class 2M laser device makes it safe to use under all mining, building and construction applications, including underground coal mining. The BLX-515S will be the bench-mark laser alignment tool in 2013 and beyond for alignment and laser safety barrier definition in mining automation applications.

### ACCESSORIES :

- TRIBRACH mount : familiar adjustment devices for underground surveyors.
- TRIBRACH : stable and robust adjustment systems familiar to surveyors.
- ROTATING BASE with adjustment and locking knobs, FOR HORIZONTAL ADJUSTMENT
- LINE GENERATING OPTICS, SLIT ADAPTORS FOR CLOSE-UP LINES
- 90 DEGREE PRISMS
- ROOF BOLT MOUNTING SYSTEM FROM M24 THREADS
- CARRY CASE
- ADAPTORS FOR EXISTING LASER MOUNTING SYSTEMS
- LASER SENSOR SYSTEM (DUE 2013) FOR PRECISION ALIGNMENT WITHIN 20MM OVER 1KM!!!!!!)
- NEW ROTATING TRIBRACH ROTATIONAL ADJUSTMENT SYSTEM (DUE MID 2013)
- AVAILABLE IN THEODOLITE MOUNT

LASER SELECTOR : INTRINSICALLY SAFE LASER PRODUCTS MADE BY ART TO MEET YOUR APPLICATION NEEDS. Select **Green** or **Red** laser products below :

Name/color	Power Supply	Battery life	Main features
SLX-635P	2 X AA CELLS	150 HRS	Standard Alignment Laser, lowest cost system, no modulation
SLX-635S	2 X AA CELLS	150HRS	Includes automation modulation
SLM-635S	2 X AA CELLS	150HRS	Modular automation enabled, removable battery system
BLX-635S2	2 X C CELLS	> 200 HRS	Automation enabled, long distance alignment > 700m
BLX-635S3	3 X C-CELLS	> 300 HRS	Automation enabled, extra battery life, > 700m use.
SLX-515S1	5 X AA CELLS	150 HRS	Single body green , short range, automation-enabled
SLX-515S2	5 X AA CELLS	150 HRS	Hex body green laser, short range, automation enabled
SLM-515S	5 X AA CELLS	150 HRS	Modular green laser, automation enabled
BLX-515S	5 X C CELLS	> 100 HRS	Flagship product, green high visibility, automation enabled, long range > 700m

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India, Middle  
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