



# THUNDER LASER NOVA S1

130w CO2 Laser Engraver

1300 x 900mm working area

Pass-through door design

Fire detector fitted

High resolution engraving

3D engraving

Great software interface easy to use

12 month warranty on parts

6 month warranty on laser tube and lens

High quality parts

High speed hybrid motors (no loss of steps)

Motorised Z axis table

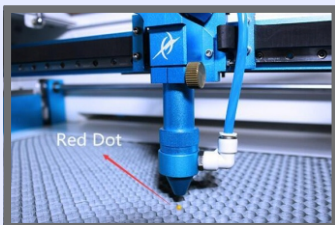
Red dot pointer

Parts readily available

NZ-wide backup and support

**CONTACT US FOR PRICING**

## STANDARD FEATURES



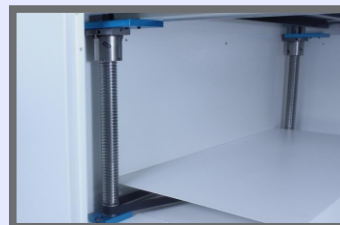
### Visible Red Dot Pointer

See exactly where your laser will cut and engrave



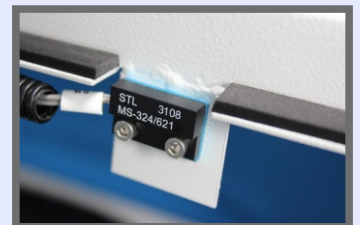
### Emergency Stop

Cuts power to the entire machine immediately



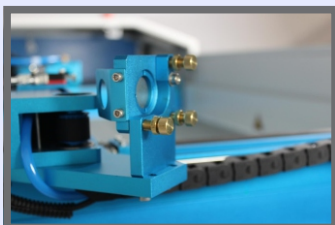
### Z Axis work table

155mm of depth



### Safety interlock

The laser cannot run with the lid open



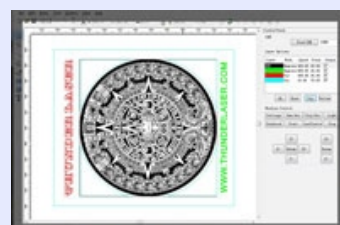
### Beam adjustment

Fine pitch adjustment for the mirrors to maintain perfect beam alignment



### LCD control panel

Simple operation, files saved in the controllers memory



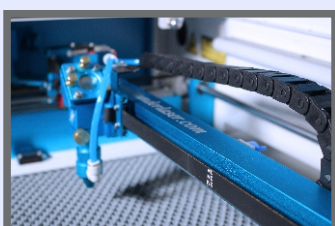
### RDworks software

Easy to use, excellent training videos available at Thunderlaser.com



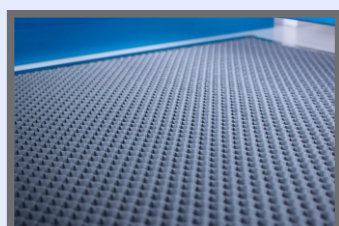
### Industrial water cooling

Keeps the laser tube temperature regulated



### High quality X & Y rails

Faster speeds and high quality results with vector cutting and raster engraving



### Honeycomb table

Great for cutting small parts, allows you to use magnets to hold bendy materials down flat.



### 3D raster engraving



### Smart Board

Programmable timed relay control of the extraction fan and air assist.



# SPECIFICATIONS

Laser tube wattage	130 watts
Laser type	Sealed CO <sup>2</sup> Glass Laser Tube
Cooling	Refrigerated industrial chiller unit, maintains correct water temp within the laser tube.
Work area	1300 x 900mm
Z axis work height	up to 230mm
Max part size	Front door closed 1400x 1030mm x 250 Pass-through door 1400 x unlimited length x 20mm
Table size	1400x 1030
Dimensions (WxDxH)	1900x 1405 x 1040mm
Motion control system	high-speed closed loop hybrid encoded motors
Maximum speed	1000mm/S(40 IPS)
Speed and power control	Computer or manually controlled speed and power. Colour allocation sets speed and power
Software	<b>RDworksV8</b> - simple to use, excellent simulation and time estimate function, accepts AI, DXF, BMP, JPG, TIF and many more formats
Operating modes	Raster (engraving) & vector (cutting)
Resolution	User controlled, up to 1000 DPI (expressed in millimeters)
Computer interface	USB port and Ethernet connections available
PC operating system	Windows XP/2000/Vista/7/8/10, 32 and 64 bit.
Display panel	3" LCD showing current file, total working time, power and speed
Net weight	325kgs
Electrical requirements	240 volts, 50 Hz, single phase
Extraction	2x extraction fans supplied (approx 2000m <sup>3</sup> p/hr), 10m of PVC flexi duct supplied. Output vent is 145 mm OD. Extraction upgrade box is included to draw from the pass through slot. This improves extraction and reduces daily maintenance.

## FEATURES

Red dot pointer  
 2" standard lens  
 4" cutting lens  
 HR head lens (high resolution)  
 Motorised Z axis table  
 Honeycomb cutting table  
 Pass-through door  
 Air assist (small diaphragm pump)  
 2x extraction fans  
 Easily adjustable home position  
 LCD display  
 3D engraving  
 Grayscale photo engraving  
 Water protection  
 Emergency stop  
 Open cover protection  
 Refrigerated water cooling  
 RDworksV8 software  
 Basic parameter library

## BASE PRICE

**NZD \$24,155<sup>gst</sup>**  
VALID FOR 30 DAYS

Local transportation and hiab charges may apply depending on distance from a local port.

Installation, commissioning and basic training is available from \$1600 + GST and travel expenses.

Upgrade your order to include spare parts. Buy your own insurance by including spare parts and save downtime and headaches. Available from \$3150 + GST. This is only available if ordered with your purchase, taking advantage of combined shipping.

## OPTIONAL EXTRAS

Rotary axis, engrave on round / cylindrical items.	\$640.00 +GST
For cutting timber materials thicker than 9mm more air pressure is required than the small diaphragm air pump can provide. The air must be oil and moisture free.	
Oil free air compressor with moisture trap and regulator 0.75 kw	\$375.00 +GST
Oil free air compressor with moisture trap and regulator 1.1 kw	\$700.00 +GST
HR Head (For high resolution engraving)	\$325.00 +GST
4" lens head. For cutting thicker materials	\$195.00 +GST

## MATERIALS

\*The Thunder CO<sup>2</sup> laser will cut and engrave the following materials:

Timber, cloth, leather, felt, acrylic, PE and PP plastics, laserable plastics - dual layered, paper, laserable rubber and more.

The RDworksV8 software comes with a parameter library with some basic parameters for cutting various thickness materials. The parameter library is specific to laser tube wattage.

\*Engrave only:

Anodised aluminium, various metals (with the correct Thermark treatment) and glass.

\* Note that not all materials are consistent and results may vary

\* Cutting or engraving PVC, soft PVC film or vinyl made with a PVC content is not recommended due to corrosive and poisonous exhaust gases.