

.NEW

TruFiber G – Your economical cutting solution

# Unleash Cutting Excellence

05

## VariMode

Tailored cutting processes with adjustable beam parameters for diverse materials and thicknesses

01

## Unrivalled beam quality

Superior precision with better defined beam parameter product

02

## Boosted power redundancy

High power redundancy, maintaining stable performance and reducing downtime

03

## Enhanced power stability

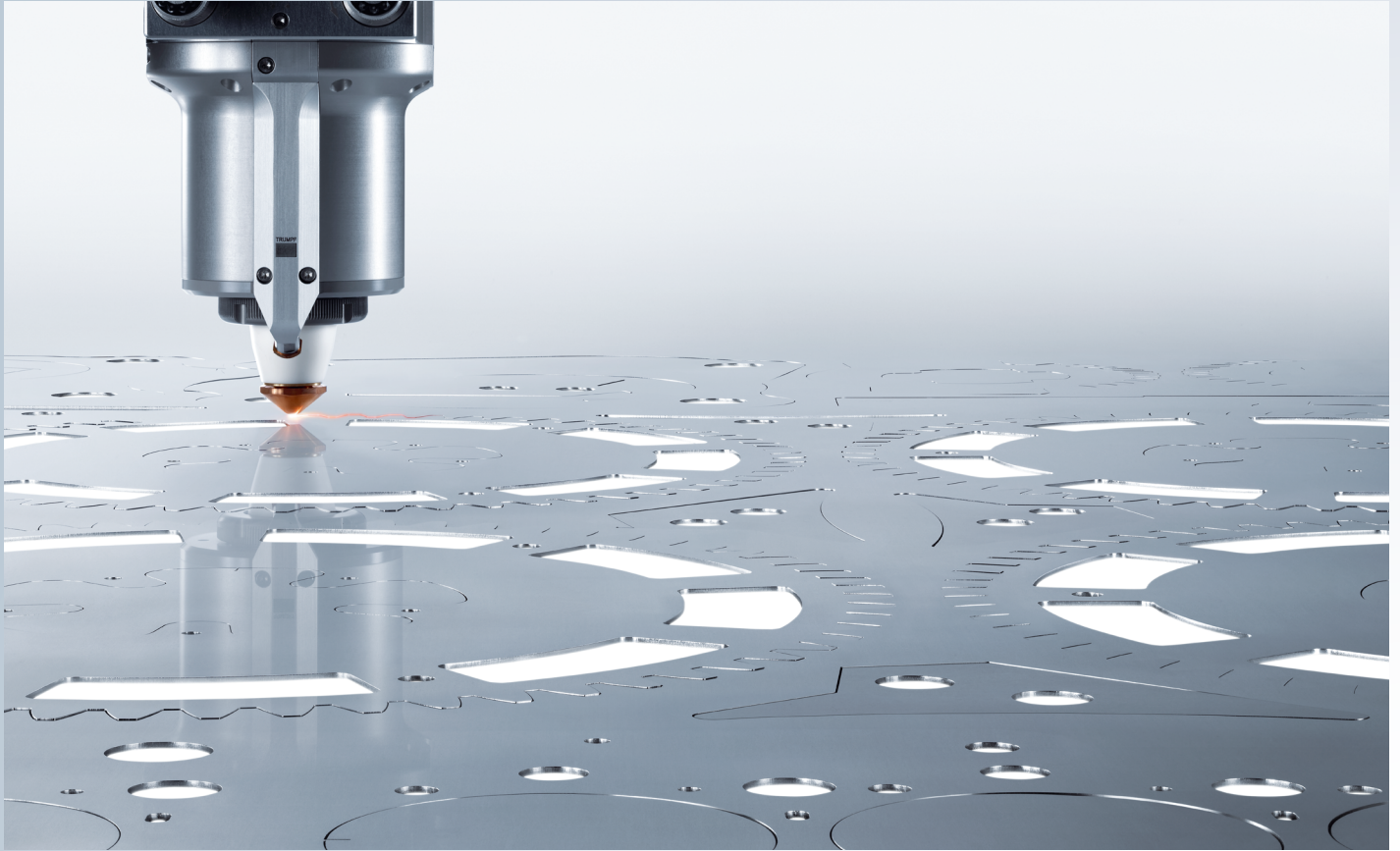
Consistent cutting performance with  $\pm 1\%$  power stability

04

## Uncompromised safety

Global safety standards with Performance Level e (PLe)





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## Unrivalled beam quality

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The TruFiber G series boasts exceptional beam quality across all models, delivering unmatched cutting precision and accuracy. This superior beam quality enables clean, precise cuts for a wide variety of materials and applications, setting the TruFiber G apart from its competitors.

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## Boosted power redundancy

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The TruFiber G series features plenty of power redundancy. This built-in power overhead feature maintains consistent performance over the full deployment lifetime and ensures sufficient power for every situation.

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## Compliant, safe & user-friendly

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The fully-featured laser control and safety suite ensures seamless integration into global working environments. The TruFiber G Series is compliant with Performance Level e (PLe) and CE standard. With IP54 rating and EtherCAT integration, it meets and exceeds operational standards worldwide.

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## VariMode option

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With VariMode, you can dynamically switch between low and high beam parameter product modes for optimal cutting performance. Adapt the beam profile in real-time to best suit your specific cutting application, resulting in faster process speeds and improved cut quality.

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## Enhanced power stability

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The TruFiber G Series ensures consistent cutting performance with  $\pm 1\%$  power stability. This high level of stability guarantees reliable results every time, maintaining quality and efficiency in your cutting operations.

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## Rapid modulation

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Translate full power into full productivity with the TruFiber G's modulation speed of up to 10 kHz and a full suite of control modes. Several analog, digital and software modulation modes enable optimised process control. Smart functionality reduces processing time and boosts overall performance.

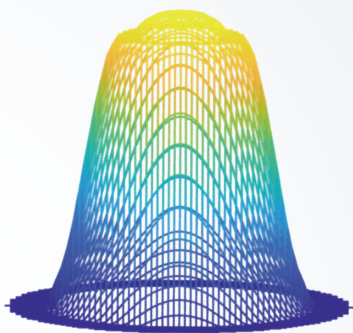


# Experience the TruFiber G series advantage, stay ahead of the competition.

## Patented TRUMPF VariMode option

### Benefits:

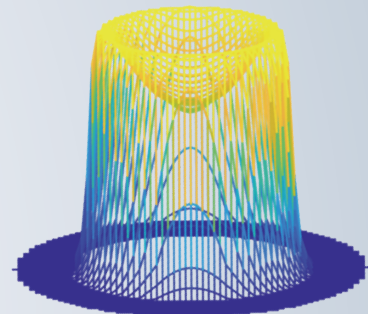
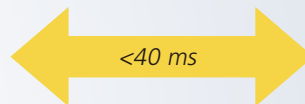
- Beam profile tailored to your process
- Vastly increases process window → dramatically reduces set up times
- Optimised processing of wider range of materials and thicknesses → improved system flexibility
- Potential to use standard focus head, replacing a zoom version → reduced weight and cost of overall system



### Low BPP Mode

Optimised for high speed, high quality piercing in thick sheets and giving fastest cut speeds in thin materials.

Switch between  
beams at your  
convenience



### High BPP Mode

Optimised for cutting through thick metal sheets at high speed, producing an excellent surface finish

## Various applications in the area of laser cutting

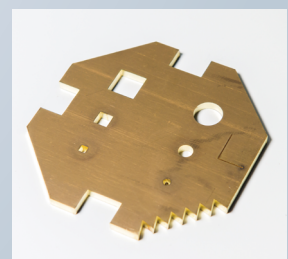
### Material magician

TruFiber G Laser – your go-to solution for cutting various materials with confidence: from mild to stainless steel all the way to highly reflective materials.



### Shape your vision

TruFiber G Laser – navigating complex contours effortlessly for unmatched cutting results. Our powerful laser technology smoothly follows the curves of your designs, ensuring a flawless finish every time.



| TruFiber G                              |              |  |                 |                  |
|---|--------------|--|-----------------|------------------|
|   |              | TruFiber 3001 G  | TruFiber 6001 G | TruFiber 12001 G |
| Output power (at delivery fiber output) | kW           | 3  | 6               | 12               |
| Polarization                            |              | Random   |                 |                  |
| Pulse duration                          |              | 20 $\mu$ s – CW  |                 |                  |
| Rise time                               | $\mu$ s      | < 10   |                 |                  |
| Fall time                               | $\mu$ s      | < 10   |                 |                  |
| Max. modulation frequency               | kHz          | 10   |                 |                  |
| Lowest stable output power              | W            | 60   | 120             | 240              |
| Power stability (over 8 hours)          |              | $\pm 1\%$ ( $\pm 0.5\%$ customizable)  |                 |                  |
| Beam quality                            | mm-mrad      | 3.3 / 3.8 / other customizable   |                 |                  |
| Output fiber length                     | m            | 20   |                 |                  |
| Terminator type                         |              | QBH / QD   |                 |                  |
| Coolant temperature (non condensing)    | $^{\circ}$ C | 25 $\pm$ 2   |                 |                  |
| Chiller connection diameter             | mm           | 25.4 (1 inch)  | 25.4 (1 inch)   | 32 (1.25 inch)   |
| Coolant materials compatibility         |              | Stainless steel and plastic (only use DI water )   |                 |                  |
| Width                                   | mm           | 600  |                 |                  |
| Depth                                   | mm           | 1200   |                 |                  |
| Height                                  | mm           | 900  |                 |                  |
| Weight                                  | kg           | 250  | 280             | 370              |
| IP rating                               |              | IP54   |                 |                  |
| Operation environment                   |              | 5 – 45 $^{\circ}$ C, 5 – 80% RH  |                 |                  |
| Storage environment                     |              | -20 – 70 $^{\circ}$ C, 0 – 95% RH  |                 |                  |
| Option                                  |              | VariMode: customizable beam parameter<br>product from 3.3 mm-mrad to 4.5 mm-mrad<br>Fieldbus: EtherCAT<br>Pierce detection |                 |                  |

\*Subject to alteration. Only specifications in our offer and order confirmation are binding.