

# COTwo Marker

## Built to last

### Laser marking with guaranteed quality

When marking a workpiece, the goal is to apply a permanent, high-contrast, high-resolution identifying mark to it. The impact on the material, along with any changes to its properties, needs to be kept to a minimum.

**Business CO2** laser systems are the perfect solution for fulfilling these requirements.

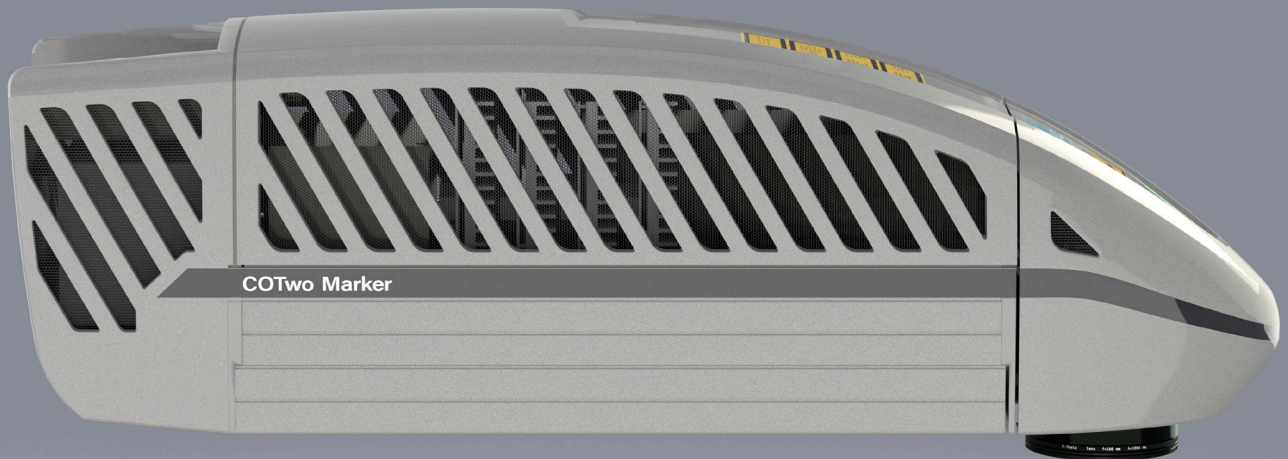
To ensure that they will always run smoothly, our products are subject to strict quality control at both the development and the production stage. This guarantees safe, reliable operation from machinery that will stand the test of time.

The functional, compact design of these laser systems is taking industrial laser marking to new places.

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# COTwo Marker



COTwo Marker

## **Cost-effective gas laser for industrial marking and cutting applications**

The fully air-cooled, compact laser system is suitable for producing both small and large batch sizes. The COTwo Marker is a gas laser that operates at a wavelength of 10,600 nm. The COTwo Marker is available as a 20 W or a 30 W system.

→ Features/properties

→ Optional features

→ Technical specifications

## Features/properties

- Functional safety rating PLe acc. to EN ISO 13849-1
- 100% air-cooled
- Optical focus finder and preview function
- Compactness
- High degree of operational reliability

### Including

- Magic Mark V3 marking software
- Code module for generating all common barcodes and data matrix codes (ECC200, QR code, PDF417)
- Programming and communication module for creating customer-specific programs and functional sequences, marking software controlled via external .NET-based programs
- Remote maintenance module

### Standard interfaces

- Wide input range of 100-240 V AC
- 8 digital inputs and outputs
- External safety circuit rated PLe
- Interlock connection:
  - Two-circuit interlock
  - SD-ready

## Optional features

- Imaging systems for automatic object identification (AOI) and camera-assisted positioning of markings (CPM)
- Code readers
- Different lenses for different sizes of marking area
- External USB output e.g. for camera applications

The **COTwo Marker** marking laser is incredibly compact. All its optical, electronic and mechanical components are integrated in a housing. Operational reliability is improved because there is no longer any need for external electronic assemblies, plus the laser is stable and requires little maintenance.

Compared to systems with similar functions, the **COTwo Marker** is incredibly easy to integrate into existing production lines thanks to its compact and lightweight design.

The **COTwo Marker** features an optical focus finder and a preview function to make it easier to use. The **COTwo Marker** is a self-contained system and does not require a CO2 gas supply.

The **COTwo Marker** is a laser safety class 4 solution. To upgrade the system to laser safety class 1 (accessible laser radiation is safe), ACI's **COTwo Marker** can be purchased in conjunction with various protective housings. This means that these laser systems can be used either as manual workstations or as integration components in an automated system.

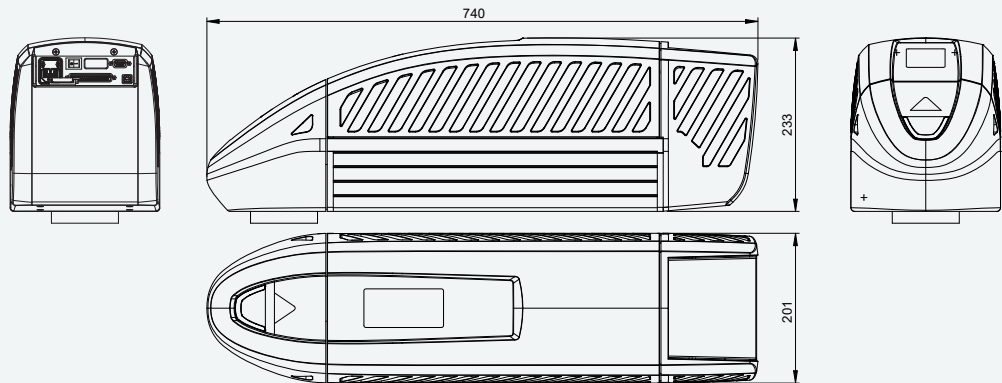


## COTwo Marker

### Dimensions/view

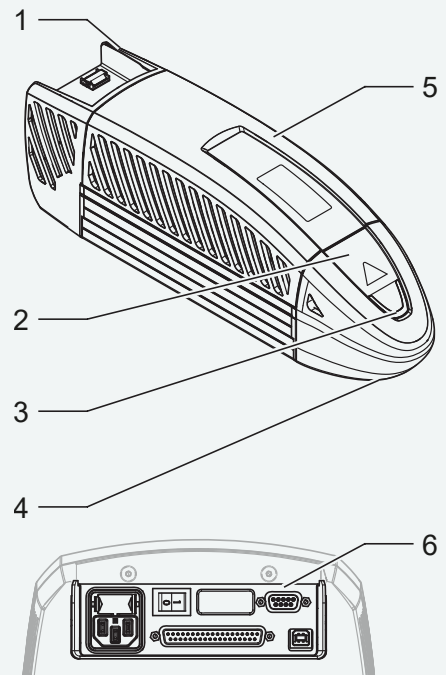
#### Laser head

Dimensions (l × w × h)  
740 x 201 x 233 mm



The functional units of the laser marking device include the following assemblies:

- 1 Air cooler for beam source
- 2 Galvanometer scanning unit
- 3 Multi-function display
- 4 Lens (laser beam outlet)
- 5 Laser electronics, beam source, beam expander and shutter (beam dump)
- 6 Power input module and interfaces



# Technical specifications

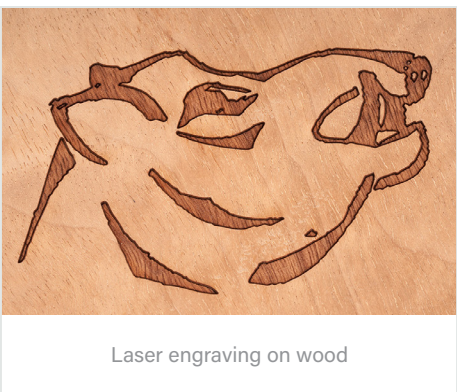
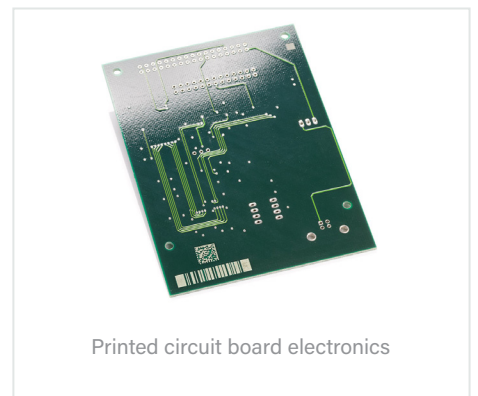
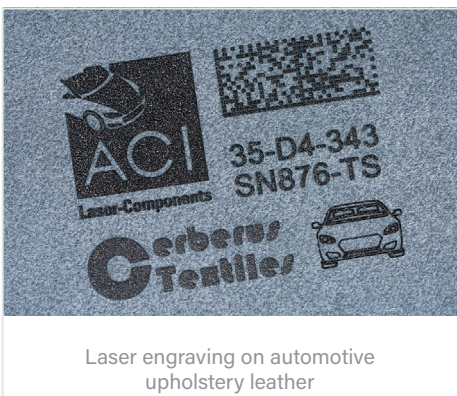
## COTwo Marker Business CO2

Laser type	CO2, sealed off		
Wavelength	10,600 nm		
Laser power (max.)	20 W, 30 W		
Beam quality (typ.)	M2 < 1.2		
Laser class	4, optionally 1		
Lens (choose from options)	100	150	250
Size of marking area	50 x 50 mm	90 x 90 mm	150 x 150 mm
Power consumption	600 W		
Dimensions (l×w×h)	740 × 201 × 233 mm		
Weight	20 kg		
Mains connection	100–240 V AC/16 A/50–60 Hz		
Laser head dimensions (l×w×h)	464 x 149 x 107 mm		
Software	Magic Mark V3		
Interfaces	2 serial ports (RS232/RS485)*, 2 Ethernet ports*, USB port, optional trimming module, interlock connection, laser-control interface with 8 digital inputs/outputs, power input module		
Functional safety in accordance with DIN EN ISO 13849-1	PLe		

\* Depending on system used

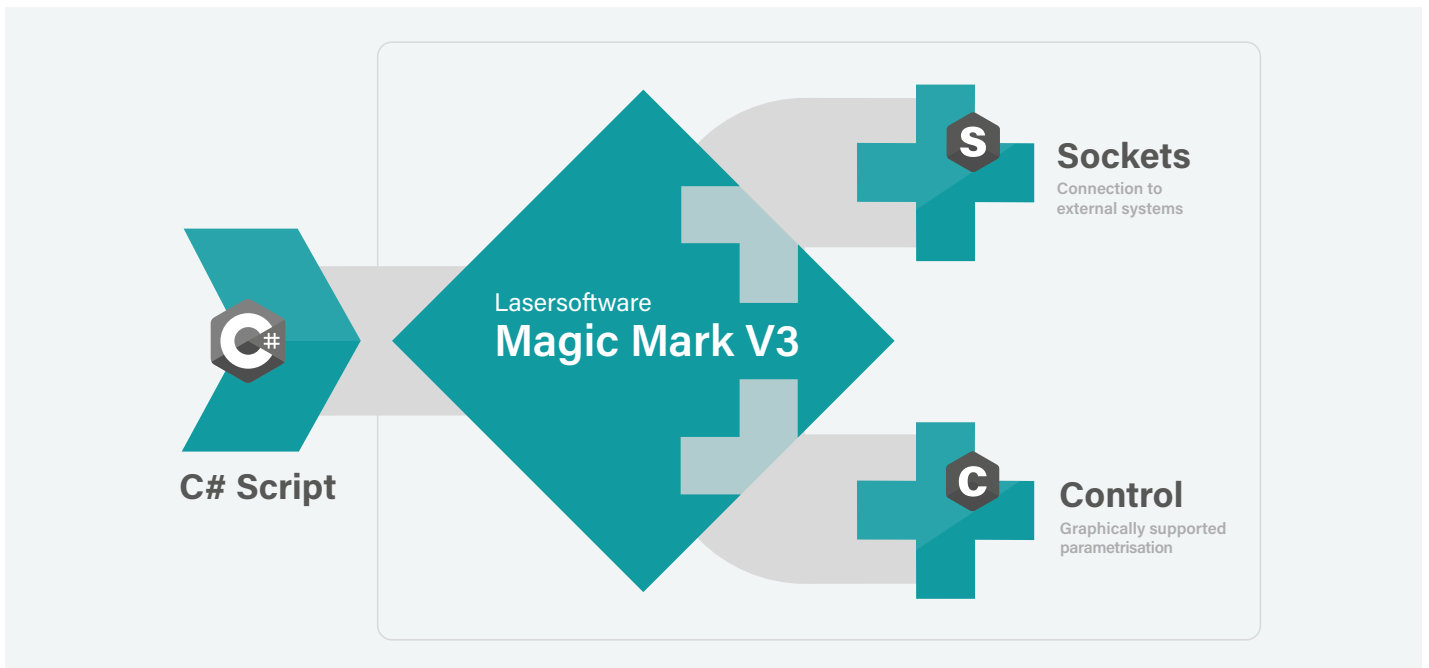
# Applications

The **COTwo Marker** is a gas laser that operates at a wavelength of 10,600 nm. It is ideal for marking organic materials such as wood, leather and paper, but it can also be used to mark plastics, glass and printed circuit boards. What's more, it is suitable for cutting plastics and for laser engraving.



# Software-based control

The modern software architecture of the **Magic Mark V3** laser marking software enables targeted access to all available functions and allows users to control the laser and laser peripherals (workstation/axis of rotation, etc.).



## Internal programming

VB.Net [Winwrap Basic]  
integrated into Magic Mark V3

## External programming

C#.Net [MS Visual Studio]  
Access to class library

## Benefits of Magic Mark V3

**Software package**  
included with product

**Predefinable**  
parameter sets

**Easily add features**  
through plugins







## Collaborating with ACI Laser Benefits for customers

We prioritise cultivating excellent working relationships with our customers so we can successfully serve their needs. We offer our customers sustainable solutions based on all-encompassing advice, reliability and stability.

ACI Laser is proud to offer:

- ✓ *German engineering* – development and production drawing on over 20 years' experience
- ✓ Complete solutions from a single source: Laser systems, protective housings, software and accessories
- ✓ Customisable laser systems
- ✓ Plugins for easy addition of software features

  
Made in Germany



We would be happy to advise you.

We guarantee you a tailor-made, all-in-one solution that meets the requirements of your application. Our experienced sales team will provide you with comprehensive, in-depth advice. We look forward to hearing from you.

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