

CAD-PRO

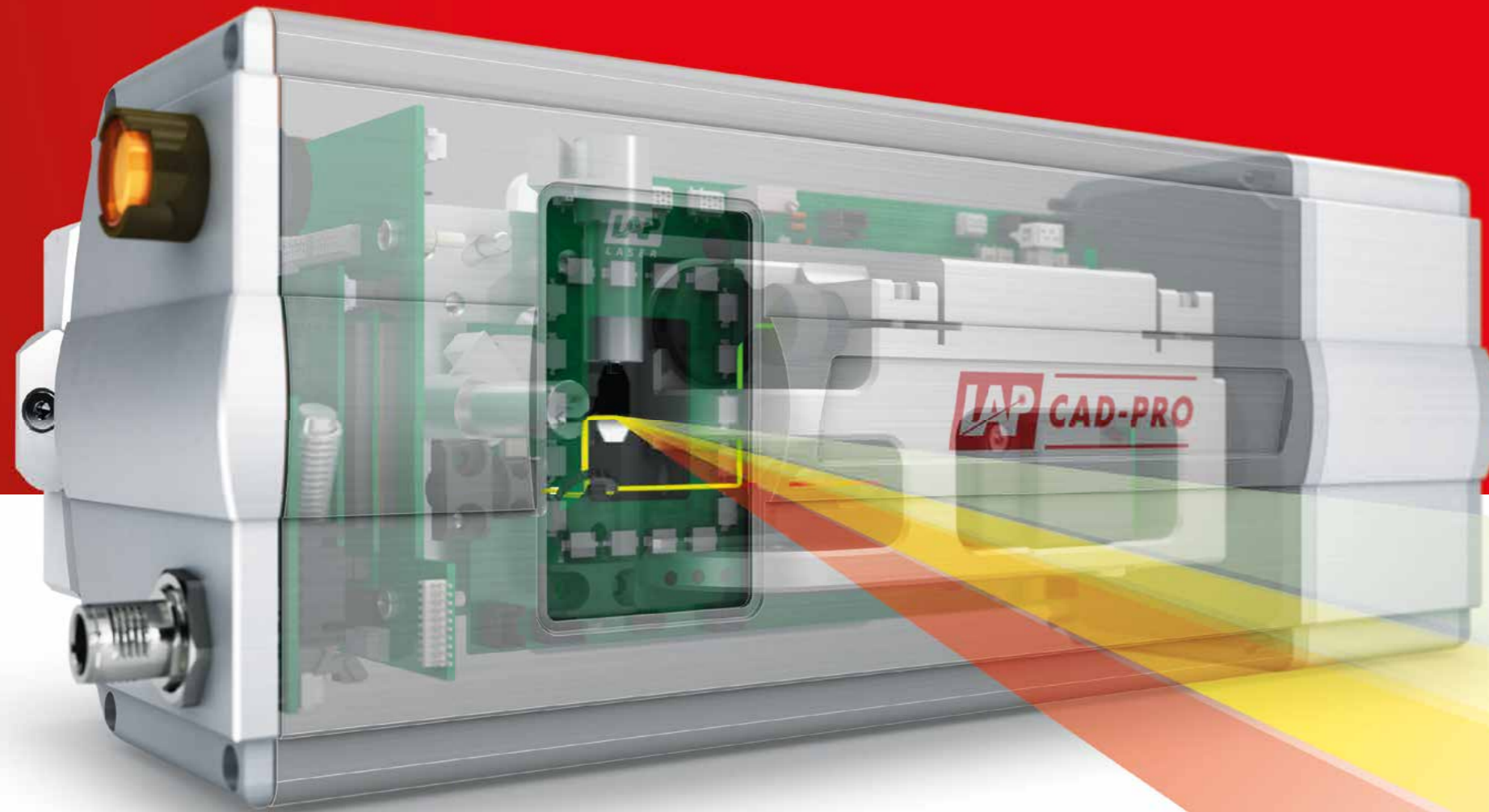
LASER PROJECTORS

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LASER PROJECTORS FOR INDUSTRY AND CRAFTS.
MARKING, ALIGNING, POSITIONING, CHECKING.





CAD-PRO

In a projection system, CAD-PRO laser projectors generate the visible lines on the surface of objects or tools. For providing data you may use the PRO-SOFT projection software or access via API.

The system is controlled and handled by a PC and remote controls. Installation is done according to customer's needs, including mechanical (ceiling supports, jigs ...) and electrical (turn-key cabinet, distribution boxes, cable ...) components.

CAD-PRO REAL SIZE PROJECTION OF CAD DATA

Wherever CAD data has to be projected true to scale on real surfaces, you may use LAP laser projection systems. The handy

projector can be chosen from several models with different laser color and power to suit your application.

SMALL SIZE, LITTLE WEIGHT

LAP CAD-PRO is the smallest and lightest laser projector in the market. This makes CAD-PRO easy to handle, from installation to replacement and shipping. The projector clicks into its tilting bracket and is fixed with one Allen screw. Only ONE cable has to be connected.



MULTICOLOR PROJECTION

LAP CAD-PRO is the only projector in the market that can simultaneously project in three colors. You may display lines in any shape: outlines, straight lines or curves, icons or text.

ENHANCED SERVICE LIFE WITH DIODE LASER SOURCES

The new CAD-PRO LD models use green laser diodes that offer an operating lifetime of up to 30.000 hours – more than three times the service life of DPSS lasers.

DIGITAL CONTROL OF GALVANOMETERS

The actuators for the turning mirrors in CAD-PRO laser projectors are controlled digitally. This eliminates typical errors of analog systems like thermal drift or susceptibility to EMP. Using the parameters of the digital control, the projectors may be optimized for their individual task.

SYSTEMS FOR A WIDE VARIETY OF REQUIREMENTS

You may select from different models and build applications of one to 16 projectors to create solutions from small workplaces to large multi-head systems for aircraft parts or rotor blades of wind energy converters.

SCALABILITY

One system may handle up to 16 CAD-PRO projectors. Depending on PRO-SOFT software version, they can be used single, connected or in independent groups. Projection areas may be adjacent or partly or completely overlapping. Complex projection tasks are automatically balanced between projectors covering the same area.

EASY HANDLING

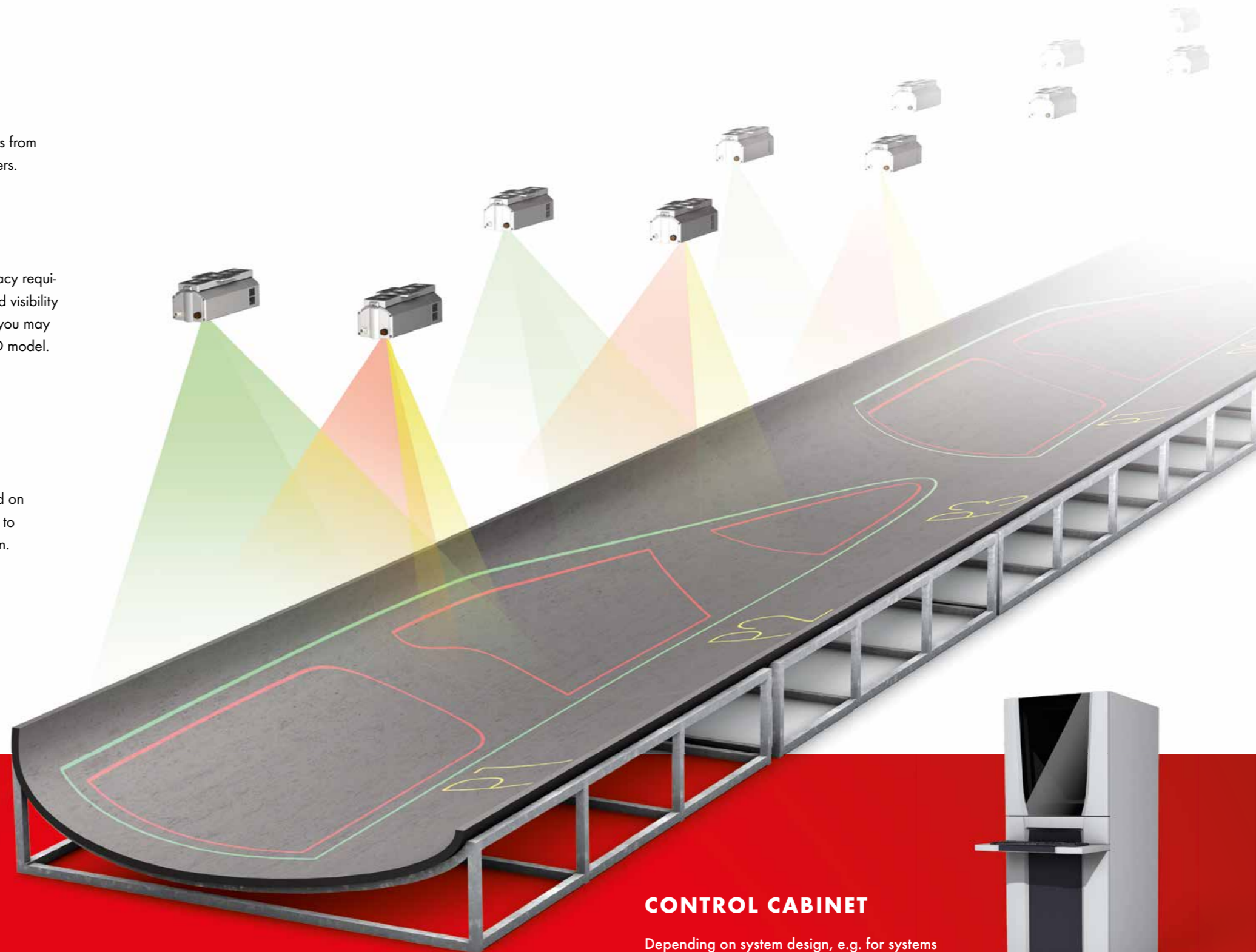
You may use CAD-PRO either by PC and remote control or by tablet PC. For rough working environments (humidity, dirt ...) there is a „heavy duty“ remote control. You can operate CAD-PRO either by PC and remote control or by tablet PC.

FLEXIBILITY

Depending on objective, accuracy requirements, projection distance and visibility of laser color on your material you may select an appropriate CAD-PRO model.

MOBILITY

LAP CAD-PRO may be provided on a movable trolley with batteries to allow for independent operation.



SYSTEM DESIGN AND OPERATION

You can find the specific description of features and operation in the PRO-SOFT software brochure and in the description of applications or industry solutions.

CONTROL CABINET

Depending on system design, e.g. for systems with multitasking and/or multi-client-ability, a central switch cabinet with a server may be used for control.



SPECIFICATIONS

CAD-PRO

MODEL	PRECISION */**	LASERTYPE, WAVELENGTH	PROJECTION COLORS	LASER POWER	LASER CLASS
CAD-PRO	± 0.2 mm/m	green: DPSS, 532 nm	●	5 mW	2M
				10 mW Power	3B
	± 0.1 mm/m HP (high precision)	color: red diode + green DPSS	● ● ●	5 mW	2M
				10 mW Power	3B
CAD-PRO LD	± 0.2 mm/m	red: diode, 640 nm	●	5 mW	2M
				10 mW Power	3B
	± 0.1 mm/m HP (high precision)	green: diode, 520 nm	●	5 mW	2M
				10 mW Power	3B
		color: red diode + green diode	● ● ●	5 mW	2M
				10 mW Power	3B

Repeatability*/**	± 0.025 mm/m
Beam width*	0.5 mm FWHM
Max. projection angle	80°
Enclosure rating	IP 54
Ambient conditions	0 ... 40 °C, 35 ... 85 % rel. humidity, non-condensing
Power supply	24 VDC, 1.5 ... 3 A
Connection	RS 485, Ethernet by interface
Dimensions (L x W x H)	300 x 110 x 110 mm
Weight	ca. 3 kg

* within ± 30° projection area in up to 4 m distance, beam impact perpendicular to surface, optimal focusing and calibration, > 30 minutes warm-up time

** mm per m distance projector to surface



ACCESSORIES

CAD-PRO

CALIBRATION PLATE

Customized, precisely measured calibration plate with targets and certificate for quality monitoring (optional)



REMOTE CONTROL

Infrared remote control (standard), „heavy duty“ RC optional

CONTROL CABINET

Optional. Alternatively connection to customer PC via switchboxes and interface.

TARGETS

High precision reflectors for calibration of the projection system, number depends on application, different shapes and pin diameters, repair kit (optional)



TILTING BRACKET

with spring-loaded catch and locking screw (standard)



CAD-PRO, HIGH-TECH QUALITY BY LAP

For more than 30 years, LAP has been developing, manufacturing and distributing laser measurement systems, line lasers and laser template projectors for industrial and medical applications. LAP products are high-precision devices *Made in Germany*. Using LAP laser systems, our customers improve performance and increase the quality of their products as well as the effectiveness of their processes.

As a result of continuous product innovation, LAP has become a world leader in lasers for projection and measurement. LAP products are setting the standards in a wide range of markets from manufacturing to heavy industrial environments and medical applications.

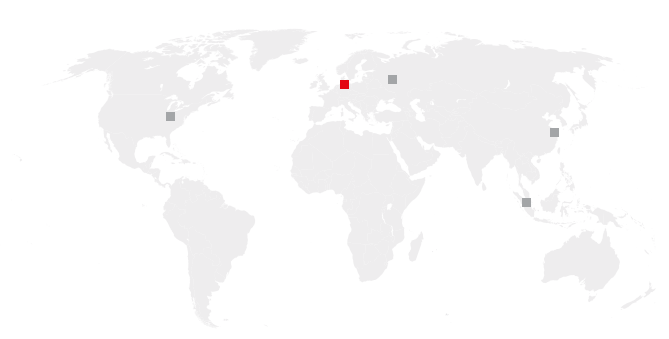
Environmental protection is important to us. We use solar panels, green electricity and roofs planted with grass. Our production is planned by standards of sustainability.

Quality has always been part of our commitment. We are content if you are. We know your high demands. To meet your requirements, the quality management of LAP is certified by DIN EN ISO 9001:2008 for industrial products and by EN ISO 13485:2007 for medical engineering products.

www.lap-laser.com/CAD-PRO



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