

## AXE900

The **AXE900** motorized laser is a precision alignment solution for medical and industrial applications. The unit creates a remote-controlled adjustable laser plane by projecting a single high-quality red, green or blue laser line. When combined with other similar units, this allows the creation of a 3D reference in the Cartesian space.

### Features

- High-accuracy positioning
- Radio or cabled PC remote control
- 3 degrees of freedom: translation, tilt and rotation
- Long-range translation: 550 mm travel distance
- Securized translation: belt drive with magnetic linear encoder
- Dual laser: two laser lines modules of any color
- Flexible on-wall, in ceiling or on post mounting

### Applications

- Patient setup and marking in the field of radiation therapy
- Alignment and calibration of machinery and industrial equipment
- Leveling and alignment for manufacturing processes
- Metrology and geometric measurements

### Technical specifications

Power supply .....	100–240 V <sub>AC</sub> @ 50/60 Hz
Power consumption .....	49 W max.
Internal voltage .....	12 V <sub>DC</sub>
Operating humidity .....	≤ 80%, non-condensing
Operating temperature .....	15–30 °C
Dimensions (H×W×D) .....	98×920×102 mm
Weight .....	5.3 kg

### Laser output\*

Laser class .....	2
Output power** .....	< 1 mW
Focus range .....	1.5–7 m
Line width .....	≤ 1 mm @ 4 m
Line length .....	≥ 4 m @ 4 m

\* with laser modules **WLCxxx-5-LGCP**, not included (see separate datasheet)

\*\* measured on a 7 mm aperture at 100 mm

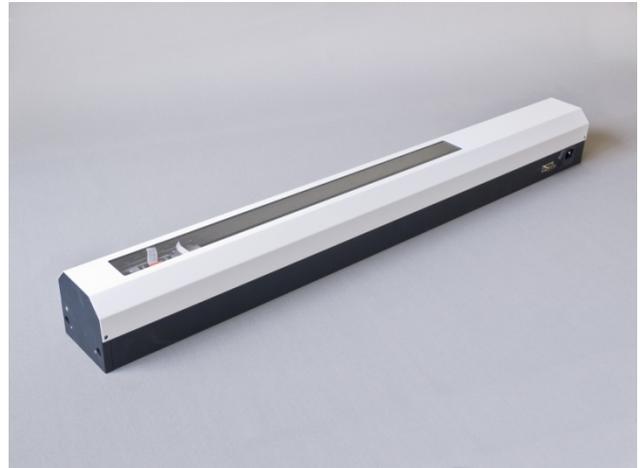
### Mechanical

Adjustment accuracy .....	±0.1 mm @ 3 m
Translation range .....	0–550 mm
Translation resolution .....	15 µm/step
Tilt range .....	±2.2 deg
Tilt resolution .....	25 µm/m
Rotation range .....	±3.5 deg
Rotation resolution .....	40 µm/m

### Connectivity

Physical layer .....	RS485 or radio*
Data rate .....	115200 Baud
Protocol .....	proprietary
5 V <sub>DC</sub> output .....	100 mA max.

\* with the **RDB9-2.4G** external adapter



### External connections

The **AXE900** unit embeds a DB9 male connector for communication and an IEC/EN 60601-1 compliant 100–240 V<sub>AC</sub> IEC inlet.

DB9 connector	Function
1	5 V <sub>DC</sub> power supply output, 100 mA max.
5	Ground
8	RS485 L+ (high for logic 1, low for logic 0)
9	RS485 L- (low for logic 1, high for logic 0)

### Related products

<b>AXE950IRM</b>	Motorized long-range MRI alignment laser
<b>AXE20-XY</b>	Motorized medical alignment crosshair lasers
<b>AXE20-X</b>	Motorized medical alignment horizontal lasers
<b>AXE20-Y</b>	Motorized medical alignment vertical lasers
<b>AXE20F-XY</b>	Manual medical MR alignment crosshair lasers
<b>AXE20F-X</b>	Manual medical MR alignment horizontal lasers
<b>AXE20F-Y</b>	Manual medical MR alignment vertical lasers
<b>WLC635-5-LGCP</b>	Modulated red laser-line module
<b>WLC532-5-LGCP</b>	Modulated green laser-line module
<b>RDB9-2.4G</b>	Radio to RS485 ATB protocol converter
<b>USBRF-2.4G</b>	Radio to USB ATB protocol converter
<b>ISOUSB485</b>	USB to RS485 isolated serial converter

### Ordering code

<b>AXE900*</b>	Standard model
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\* laser modules not included (see **WLCxxx-5-LGCP**)