

The **SF-RTH** smart-phantom is a laser alignment solution for patient setup in the field of radiation therapy. The unit is used in conjunction with the **AXE9xx** and **HITM** motorized laser line generators and allows for high-precision automatic alignment of up to 5 laser planes (4 lateral and one sagittal).

The phantom is connected to a PC via USB or to a RS485 network by cable or using the optional **RDB9-2.4G** radio converter.

Features

- Designed for radiation treatment machines
- Compatible with CT/PET scanners
- High-accuracy detection of 2 transverse, 2 coronal and 1 sagittal plane
- Automatic adjustment of the 5 planes via PC software
- Precise micrometric alignment with the isocenter of the machine using embedded Plexiglas reference markers.
- Radio or cabled communication

Applications

- Automatic alignment of laser lines
- Validation of alignment

Technical specifications

Power supply (via USB) 5 V_{DC} ±10% / 200 mA max.
 Power consumption 1 W max.
 Operating humidity ≤ 80%, non-condensing
 Operating temperature 15–30 °C
 Dimensions (H×W×D) 350×390×350 mm
 Weight..... 6.4 kg

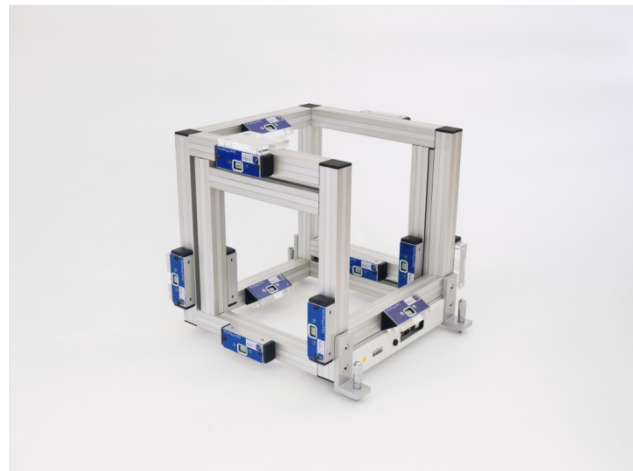
Laser detection

Range ±3 mm
 Resolution 6 μm
 Number of planes 5
 Number of sensors 15

Connectivity

Physical layer USB, RS485 or radio*
 Data rate 115200 Baud
 Protocol proprietary
 5 V_{DC} output 100 mA max.

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



External connections

The **SF-RTH** unit embeds a DB9 male connector for the optional **RDB9-2.4G** adapter and a Type-B USB receptacle for power supply and PC connectivity.

DB9 connector	Function
1	5 V _{DC} 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

AXE950IRM	Motorized long-range MR alignment laser
AXE900	Motorized long-range medical alignment laser
HITM-XY	Motorized medical alignment crosshair lasers
HITM-X	Motorized medical alignment horizontal lasers
HITM-Y	Motorized medical alignment vertical lasers
HITS-D-XY	Manual medical MR alignment crosshair lasers
HITS-D-X	Manual medical MR alignment horizontal lasers
HITS-D-Y	Manual medical MR alignment vertical lasers
WLC635-5-LGCP	Modulated red laser-line module
WLC532-5-LGCP	Modulated green laser-line module
SF-CT	5-plane CT laser alignment smart-phantom
RDB9-2.4G	Radio to RS485 ATB protocol converter
USBRF-2.4G	Radio to USB ATB protocol converter
ISOUSB485	USB to RS485 isolated serial converter

Ordering codes

SF-RTH	Standard model
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