

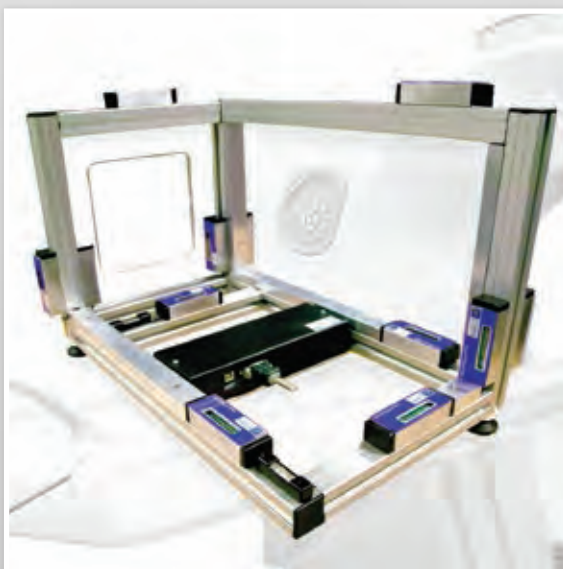


# CYRPA

REVOLUTIONARY ACCURACY

## Add a Healthy Dose of *Innovation* to Your Linac and CT Rooms

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...with CYRPA Patient Positioning Lasers

*CYRPA presents...*

## REAL INNOVATION IN PATIENT POSITIONING LASER SYSTEMS

- ✓ Red laser / green laser at the touch of a button\*
- ✓ SmartPhantom® calibrates the system automatically, so you don't have to
- ✓ Unparalleled accuracy of  $\pm 0.1$  MM
- ✓ Extraordinary mechanical stability reduces the frequency of calibrations
- ✓ Fully customizable systems for your specific requirements (e.g. proton vaults)

\*Blue laser option also available

## SUB-MILLIMETER ACCURACY

The CYRPA technology for mobile lasers includes a built-in microprocessor and encoder that gives **real-time feedback** to the software on the requested position. An **external linear encoder varies the position of the optical head** to ensure the best accuracy in patient positioning.

Reader's note: "CYRPA" is pronounced "sir-puh"

# SMARTPHANTOM CT®

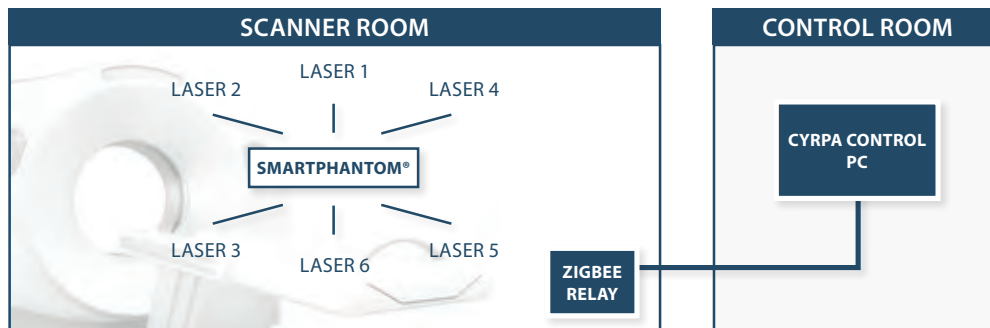
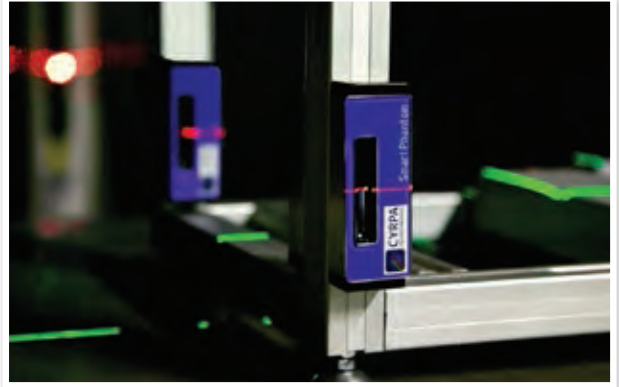
## No manual adjustment needed: real ISO automatic calibration

### Adjustment and calibration

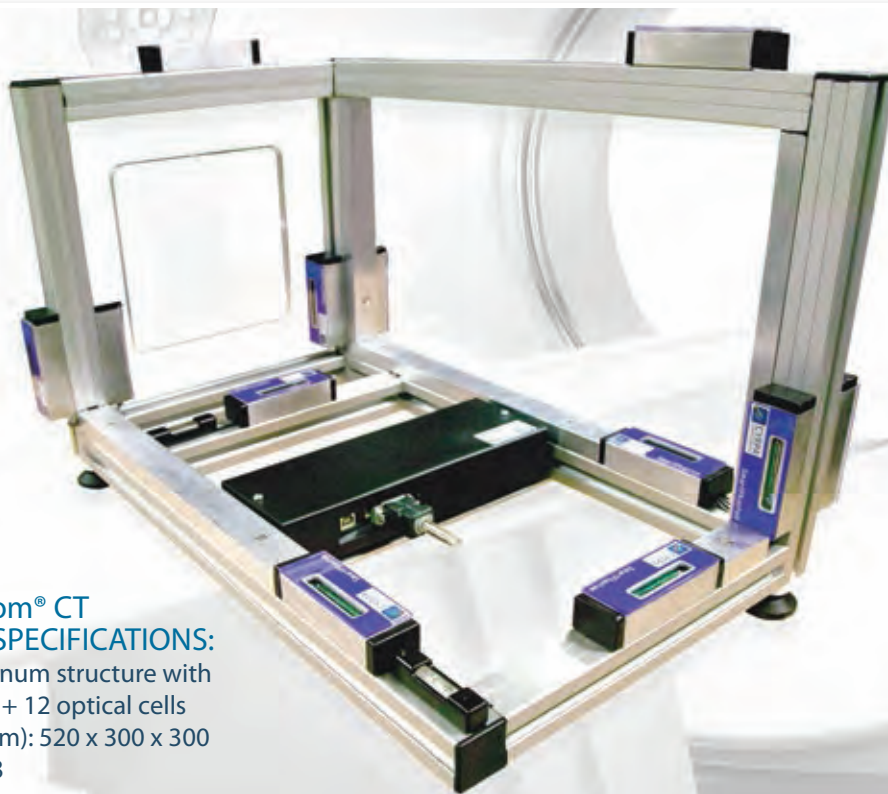
The SmartPhantom®, placed on the scanner table and positioned at the isocenter, provides accurate setpoints for all laser beams through its many integrated sensors.

### Automatic calibration

Once the signal acquisition sequence has been launched through the tablet PC, the SmartPhantom® can provide the exact coordinates of the laser beams. The result is automatic calibration to isocenter of  $\pm 0.1\text{mm}$  in around 10 minutes.



Example of a CYRPA installation: HIT6



### SmartPhantom® CT TECHNICAL SPECIFICATIONS:

Material: Aluminum structure with adjustable feet + 12 optical cells  
Dimensions (mm): 520 x 300 x 300  
Weight (kg): 2,8

# VIRTUAL SIMULATION

## CT SIMULATOR ROOM LASERS

The CYRPA HIT precise laser systems represent the next innovation in virtual simulation. With a combination of configurations, the HIT virtual simulation lasers have been designed with the user and patient in mind. With a touch of a button, the user can select a green or red diode laser line, each with a laser line accuracy of +/- 0.1mm, allowing for a faster and more accurate simulation.

## CYRPA High Impact Technology



## HIT 1 - HIT 3 - HIT 5 - HIT 6 : MOBILE LASERS

RED LASER	GREEN LASER	MOTORIZED LASER BOX
Type: Diode Wavelength: 635nm Maximum output power: < 1mW Laser class: Class 2 Line width: < 1mm Line Length: > 3m	Type : DPSS Wavelength: 532nm Maximum output power: < 1mW Laser class: Class 2 Line width: < 1mm Line Length: > 3m	Overall Dimensions (HxWxD): 920mm x105mm x 90mm Weight: 5kg Power supply: Internal 110/230 VAC. Consumption of less than 500mA Temperature: 15-30 °C room temperature Type of control: Motorized. Remote control via a wireless network interface and a tablet PC <b>Accuracy of isocenter adjustments: +/- 0,1mm</b> Length of travel: 540mm
DOUBLE DIODE		

All devices carry a one-year direct CYRPA warranty.



## HIT SYSTEM CONFIGURATIONS FOR VIRTUAL SIMULATION

	HIT 1	HIT 3	HIT 5	HIT 6
MOBILE LASERS	1	3	5	6
MOTORIZED BOX	2	2	no couch movement	

The cross or the line may be red/green, changeable at any time. The change from one color to the other is done remotely and instantly. The adjustment of the laser beams is accessible remotely via a tablet PC and a wireless network and with a PC in the control room with CYRPASoft.

# TREATMENT DELIVERY

## LINEAR ACCELERATOR ROOM LASERS

CYRPA's **HITM** Package consists of 3 fixed motorized lasers

2 lateral lasers, each generating a cross  
1 sagittal laser, generating a line

Each laser can be red and green\*, switchable at any time.

The system also includes a tablet PC that allows the user to control each laser beam remotely through a wireless network and with a PC in the control room with CYRPAsoft.

## HITM: FIXED MOTORIZED LASERS

RED LASER	GREEN LASER	MOTORIZED LASER BOX
Type: Diode Wavelength: 635nm Maximum output power: < 1mW Laser class: Class 2 Line width: < 1mm Line Length: > 3m	Type: DPSS Wavelength: 532nm Maximum output power: < 1mW Laser class: Class 2 Line width: < 1mm Line Length: > 3m	Overall Dimensions (HxWxD): 220mm x 205mm x 110mm Weight: 4kg Power supply: Internal 110/230 VAC. Consumption of less than 500mA Temperature: 15-30 °C room temperature Type of control: Motorized. Remote control via a wireless network interface and a tablet PC Accuracy of isocenter adjustments: +/- 0.1mm
DOUBLE DIODE		

\*Blue diode optional

All devices carry a one-year direct CYRPA warranty.

SmartPhantom RT is also available for the linear accelerator room.



## The HIT SINGLE DIODE is a FIXED LASER SYSTEM with MANUAL ADJUSTMENT

The HIT Single Diode includes one diode per optical head, available in red, green, or blue. The HITSD consists of: 1 sagittal line laser and 2 lateral cross lasers.

### What advantages does the CYRPA HIT Single Diode offer when compared to other systems?

- The adjustment of laser lines on all three movements is possible **without opening the laser cover**. This allows for better **stability** since opening of covers can sometimes affect stability. With the CYRPA HITSD, only a simple wrench is necessary to adjust the laser, and can be used from the outside without removing the laser cover.
- The CYRPA HITSD also has a very low **tilt sensitivity**, which allows a more simple and more stable adjustment.

### Stable adjustment without removing the laser cover



## HITSD: FIXED MANUAL LASERS

RED LASER	GREEN LASER	MANUAL LASER BOX
Type: Diode Wavelength: 635nm Maximum output power: <1mW Laser class: Class II Fineness of the line: <1mm Line length: >3m	Type: DPSS Wavelength: 532nm Maximum output power: <1mW Laser class: Class II Fineness of the line: <1mm Line length: >3m	Overall dimensions (HxWxD): 220mm x 205mm x 110mm Weight: 2kg Power supply: Internal 11/230 VAC Consumption of less than 500mA Temperature: 15-30°C room temperature Type of control: Manual



**CYRPA**  
REVOLUTIONARY ACCURACY

ISO 13485 Certified by TUV Sud



**RADIOLOGY  
ONCOLOGY  
SYSTEMS**

### U.S. DISTRIBUTOR

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