

IMACTIS[®] CT-Navigation[™]

An ergonomic universal solution that provides stereotactic needle guidance, enabling intuitive pre-planning and continuous control throughout a wide range of procedures, from diagnosis to treatment

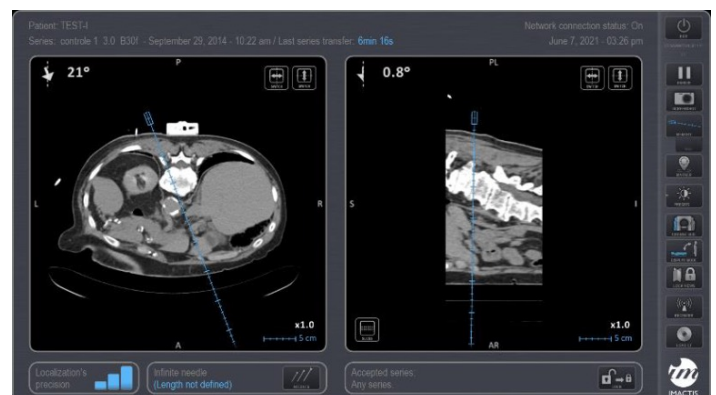
CT-Navigation is a guiding and tracking stereotactic solution for percutaneous CT-guided Interventional Radiology. It displays simulated images on a computer screen of the interventional instrument while also displaying images of the targeted organ(s) allowing the user to anticipate the instrument's trajectory.

Software functionalities

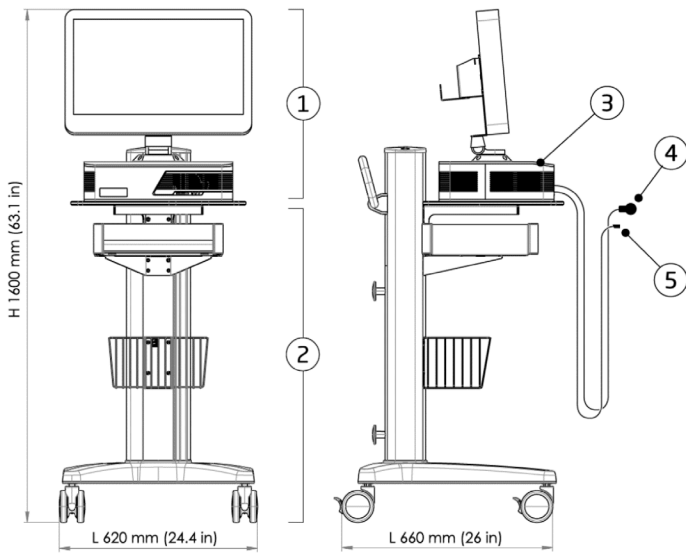
- Automatic Image registration of spatial mapping from image space to physical space
- Real-time reconstruction of 2D orthogonal images in any angulations
- Interactive display of needle virtual trajectory and depth
- Sequential multi-needle capability: navigate a needle in regard to a previous one

User interface settings & main touchscreen options

- Freeze & Screenshot button
- Trajectory memory & display
- Marker on lesion
- Windowing automatic presets
- Image orientation choice
- Manual windowing and zoom
- Access to needle database



CT-Navigation specifications



1 24" Screen Workstation

System software

- Application settings
 - Language selection
 - Needle database
 - Up-to-date cybersecurity functions¹
 - Network parameters configuration
- CT-Navigation and/or CBCT-Navigation²

2 Dedicated Mobile Cart

- Drawer for EM components
- Basket for Navikit
- Four-wheel trolley

3 Electromagnetic Localizer

Electromagnetic components

- 4 EM Emitter included in Fiducial
- 5 EM Sensor



Technology description

- EM navigation range: 50 cm diameter sphere
- EM power range: Class A
- EM frequency: 8kHz-40kHz
- EM max. flux density: 0,01G (1μT)
- Semi-automatic calibration process

Features	Description
Image Acquisition	<ul style="list-style-type: none"> • Dicom 3.0 receiver modality • Dicom network connection • 512 x 512 pixel square images • Constant spacing between slices ≤ 2 mm • 10-700 image series • Automatic registration • Dynamic all plane reconstruction
IT Connection Requirements	<ul style="list-style-type: none"> • Unique and permanent IP address (DHCP or Static IP) • CT-Navigation™ Workstation declaration on CT/CBCT console: AET = IMACTIS-CTN; Port = 104
Indications	<ul style="list-style-type: none"> • Percutaneous CT and CBCT-guided interventions • Linear instruments • Needles from 25G To 11G
Limitations & contraindications	<ul style="list-style-type: none"> • Metallic objects or active implants in navigation range • Flabby skin/fat at fiducial position • Not intended for guidance in: Head, Neck, Central Nervous System and Central Circulatory System (Heart included)



CT-Navigation specifications

Generic Features	Description	
Class of Electric Protection	Class 1	
Level of protection against electric shocks	Type B	
Class of electromagnetic emission CISPR11	Class A	
Functioning Mode	Continuous mode	
Sectioning device / separation from the power supply network	Power supply cable	
Place of use	Only indoors	
Environmental conditions of use	Temperature	15°C (59°F) to 26°C (79 °F)
	Humidity	30% to 75%
	Pressure	794 hPa to 1013 hPa
Environmental conditions for storage	Temperature	0°C (32°F) to 50°C (122 °F)
	Humidity	10% to 90%
	Pressure	794 hPa to 1013 hPa
Dimensions	Length	620 mm (24.41 in)
	Width	660 mm (25.98 in)
	Height	1602 mm (63.07 in)
Device maximum mass	54.3 kg (119.7 lbs)	
Interfaces — safety protection	Equipotential connector	
Power supply	100-230V~ 50/60 Hz 2.0-1.5 A max	
Power supply cable length	5 m (197 in)	
Network connection	Standard	IEEE 802.3 10/100/1000
Connector type	RJ-45 Jack	
Video output	HDMI	
Network cable	Length 10 m (394 in)	
Fiducial cable	Maximum length 3 m (118 in)	
Magnetic sensor cable	Maximum length 3 m (118 in)	
Electric protection / fuses	Phase fuse	T 3.15AH ; 250 V ; 5 x 20 mm
	Neutral fuse	T 3.15AH ; 250 V ; 5 x 20 mm
Fiducial material	PPSU (Polyphenylsulfone)	

Everything you need to get started

- CT-Navigation stand-alone workstation
- CT-Navigation Software
- 24 in touch screen
- Application setting
- User documentation
- Mobile cart
- Training/demonstration phantom
- 10 non-sterile needle holders
- 10 NaviKits
- Initial customer training

Installation

IMACTIS or an approved IMACTIS distributor will provide installation.

Training

Consists of in-person, 3 day training.

Needle Holder and NaviKit™ consumables

CT-Navigation should be used with its dedicated needle holder and the NaviKit, single-use kit, including specific needle holder for instruments ranging from 25G to 11G.



U.S. Catalog #	Europe Catalog #	Description
E85101LA	E85101LA	IMACTIS CT-Navigation System Software and Workstation with CT Software
n/a	E85101LB	IMACTIS CT-Navigation System Software and Workstation with CBCT Software
n/a	E85101LC	IMACTIS CT-Navigation Software Upgrade, option CBCT
n/a	E85101LD	IMACTIS CT-Navigation Software Upgrade, option CT
E85101LE	E85101LE	IMACTIS 1 Box of 5 NaviKits™ + 5 Non-Sterile Needle Holders
E85101LG	E85101LG	IMACTIS 1 Box of 25 NaviKits™ + 25 Non-Sterile Needle Holders

How to purchase your consumables

In the U.S.

Call: 866-281-7545

Fax: 877-279-6990

Email: gehcaccessorysales@ge.com

Shop online

www.gehealthcare.com/accessories

Learn more

Contact your local GE HealthCare representative

¹ See Cybersecurity Guide for more information

² Available in EU only

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