



RadCalc EPID module EPID based pre-treatment and in-vivo dosimetry





Fast and accurate **3D EPID dose** reconstruction for RT

RadCalc's EPID module for pre-treatment and in-vivo workflows allows for the reconstruction of 3D dose in the patients' anatomy for any IMRT and VMAT plans. With the acquired EPID images imported, RadCalc uses its collapsed cone algorithm and calculates the dose to the patient CT dataset. This provides a very accurate evaluation of the intended dose versus the delivered dose in an intuitive 3D comparison.

Simple

RadCalc's EPID module utilizes the collected integrated measurements for all static and dynamic beam segments to reconstruct 3D dose on the patient's real anatomy using RadCalc's Collapsed Cone algorithm.

Inherent sensitivity

RadCalc's implementation exploits the inherent sensitivity of the EPID to changes in the patient making it a valuable tool for analysing deviations from the intended dose.

Thorough QA

In-vivo EPID monitoring to verify patient setup errors, patient anatomy changes and identify machine errors.

Timesaving

Inherent LINAC- EPID automation and integration saves time and effort for data capture.

True composite

Actual dose delivered is compared with both the intended dose from the TPS and RadCalc's 3D dose reconstruction for a thorough pre-treatment QA.

Easy configuration

Easy installation and fast time to usage. Supports most clinical configurations of TPS, LINACs and supporting systems.





Which hardware is required?

General requirements

| Operating system | Microsoft® Windows® 7, 8, 8.1, 10 32-bit and 64-bit operating system |
|---------------------|---|
| Processor | Intel i5 or equivalent |
| Memory | 4 GB RAM |
| Video | Minimum resolution 1024 × 768 px and minimum 1 GB video memory (RAM) |
| Graphics | OpenGL 1.1 support required |
| Hard drive | 10 GB available. Varies with quantity and type of patient data |

Recommended dose engine hardware specifications Collapsed Cone module

| Operating system | Microsoft® Windows® 8, 10, Server 2012, 2016, or 2019 64-bit operating system |
|---------------------|--|
| GPU | NVIDIA GeForce RTX 2080 Ti, or similar (Must be NVIDIA) |
| Processor | Intel Core i7-9700, 8 Core, 12 MB Cache |
| Memory | 16 GB RAM |
| Hard drive | 512 GB SSD |

Contact us!

- P +1 866 592 1343
- E info@lap-laser.com
- in LAP Laser
- Iaplaser

LAP GmbH Laser Applikationen Zeppelinstr. 23 21337 Lüneburg Germany

LAP FRANCE SAS, France / LAP GmbH Laser Applikationen c/o representative office DMAN, Russian Federation / LAP Laser Applications Asia Pacific Pte. Ltd., Singapore / LAP Laser Applications China Co. Ltd., China / LAP of America Laser Applications, L.L.C., USA / LAP Sued GmbH, Germany / LifeLine Software, Inc., USA / Our worldwide partners: Argentina / Australia / Brazil / Bulgaria / Canada / Chile / Colombia / Croatia / Czech Republic / Dominican Republic / Egypt / Finland / Greece / Hungary / India / Indonesia / Italy / Japan / Jordan / The Republic of Korea / Kuwait / Latvia / Lebanon / Lithuania / Malaysia / Mali / Malta / México / Netherlands / Norway / Oman / Philippines / Poland / Portugal / Qatar / Romania / Saudi Arabia / Slovakia / Slovenia / South Africa / Spain / Sweden / Switzerland / Taiwan, China / Thailand / Turkey / United Arab Emirates / United Kingdom / Bolivarian Republic of Venezuela / Viet Nam / Republic of Zambia

RadCalc and LAP are registered trademarks of the LAP group in several countries worldwide including the USA and EU. Designations of other companies and products are used for identification purposes only (e.g. to inform about the compatibility). These names can be trademarks or registered trademarks which belong to their respective owners. The use of any of these trademarks by third parties may infringe the rights of the respective owner.

www.lap-laser.com/radcalc