

MatriXX RESOLUTION[™]

Highest resolution for IMRT & VMAT Patient QA measurements and for Machine QA

- ✓ 6.5 mm resolution
- ✓ 1,521 ionization chambers
- Battery operated, cable-free design



MatriXX RESOLUTION[™]



Highest resolution ionization chamber detector array for independent VMAT/IMRT Patient QA and Machine QA



Unrivaled Efficiency

- Fast and straightforward detector setup.
- No cables required through complete wireless and battery-powered design.
- Efficient measurements and verification with myQA® software.



Outstanding Accuracy

- 50 % more measurement points compared to previous MatriXX detectors for highest IMRT & VMAT measurement resolution.
- Wireless Gantry Sensor+ enables precise QA of rotational cases.
- Confidence through independent QA.

Efficiency & Accuracy

Workflow simplicity

MatriXX Resolution is optimized for your workflow efficiency. The entire process is typically completed in less than 5 minutes, from detector setup to measurement to test result:

Fast and easy setup

- Laser alignment of the detector or phantom on the treatment couch.
- Wireless connection to the software or alternatively with Ethernet cable.

Beam-triggered measurements

The detector waits for the beam.

- Automatic measurements of all beam energies in a single run with myQA software.
- __FF/FFF beams supported.

Instant results

- Immediate and automatic processing of the measurements in myQA.
- Easy validation of test results.

Test approval and archiving

- Approval and commenting option with adjustable user rights.
- Results are stored centrally for in-depth reviews, analysis, and reporting.

Benchmark technology

6.5 mm highest resolution for VMAT/IMRT QA

- 1521 ionization chambers.
- -25.3×25.3 cm² field size.
- Measure field sizes larger than 40 cm with combined fields functionality.

Center chamber

9 chambers in the center of the array provide accurate dose and calibration measurements.

High-resolution centerline and diagonal measurements

The 39 ionization chambers for each centerline offer greater accuracy, especially in the penumbra regions.

Light field check

Field size markers permit easy verification of the light field's conformity with the radiation field.



The wireless / cable-free design enables a convenient workflow from fast system setup to the flexible use of MatriXX Resolution at multiple Linacs.

myQA[®] software and accessories for Patient QA

Smartly designed measurement tools and advanced integrated verification software are your basis for efficient & precise QA. MatriXX Resolution represents the optimal solution for pre-treatment plan verification and Linac QA.



miniPhantom R & Gantry Sensor+

- Solid phantom with elliptical geometry used for optimal Patient and Machine QA with the MatriXX Resolution, film, and ionization chambers.
- Simulate measurements at a certain material depth.
- Fast and reproducible setup and position of the MatriXX detector, chambers, or films.
- Optional: 3 different chamber inserts and film insert with effective points of measurement matching the MatriXX Resolution detector.
- Gantry Sensor+ for accurate measurements of rotational treatments.





Software myQA Patients

- myQA Patients software enables efficient plan verification in 4 easy steps. Discover more about myQA on our <u>website</u>.
- Connected to myQA and central database for network-wide data access.
- Field-by-field workflow for TG-119 IMRT commissioning supported.
- Combined fields for the support of QA for large fields (>40 cm).
- Automated alignment and isocenter location.

myQA[®] software and accessories for Machine QA

MatriXX Resolution supports measurements for your advanced Linac Machine QA. Dedicated software and energy verification plates are the perfect additions to widen the applications of your MatriXX Resolution detector.



Energy Verification Plates for Energy Constancy Verification

- Dedicated build-up plates for the MatriXX Resolution detector.
- Convenient beam constancy verification in one single shot.

myCAI Machines	Maine Malline Chara Add uncheskel Size For Locators Active tasks Task	Na Car		Do not group Group by categor Group by status View	r Referente							n a name in the Tha
ter ander Terrer Terrer Terrer Terrer	C Machines	Aught in the construction of the construc	tripping and a second s	maylow pix 2000mm 2000mm 0	(a) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	Umbing device Connector align- Ref. devices it is 2.5% is 1.00% is 2.5% is 2.5	 Jaod <li< th=""><th>W Creat Nonverlag N</th><th>Veri 10 CAV n 10 CAV</th><th></th><th>Earner Andre Carlos Carlos Andre Carlos Carlos Andre Carlos Carlos Andre Carlos A</th><th>A matchinets</th></li<>	W Creat Nonverlag N	Veri 10 CAV n 10 CAV		Earner Andre Carlos Carlos Andre Carlos Carlos Andre Carlos Carlos Andre Carlos A	A matchinets
		Safety doo	rs							Part	s Warning Fail	

Software myQA Machines

- MatriXX Resolution with myQA Machines software enables advanced Linac Machine QA, e.g. periodic checks (weekly, monthly...). TG-142 supported.
- Tests include profile analysis, trend analysis, energy & dose output / wedge factor.
- Measure all tests with a single beam.
- Enhance your tests with the Energy Verification Plates.

Instant results at your fingertips

The myQA Cockpit is your browser-based interface that provides all your essential QA data and status overviews.

- Instant QA overview with intuitive and clear reporting, accessible anytime and anywhere.
- Quick access to your Patient & Machine QA status and test results.



Supported Treatment Delivery Systems

MatriXX Resolution, your ideal solution for independent Patient QA and Machine QA:

- Standard C-arm Linacs (FF/FFF beams)
- Varian® Ethos™/Halcyon™ 1
- TomoTherapy[®] / Radixact^{® 1}





MatriXX Resolution, your ideal solution for independent VMAT / IMRT **Patient QA and Machine QA**

Specifications

MatriXX Resolution detector array					
Field size/Active measurement area [cm]	25.3 × 25.3				
Number of detecors	1,521				
Resolution [center-center distance] [mm]	6.5				
Detector/sensor type	Vented parallel plate ion chamber				
Detector size / chamber size [mm]	3.2 × 2.0				
Total Chamber volume [mm³]	16				
Array Dimensions [cm]	57.6 × 32 × 4				
Array weight [kg]	8.5 [including battery], battery: 447g				
Supported energies	Electrons/Photons [FF/FFF]				
Power	Rechargable battery				
Data transfer	Wireless or Ethernet				
miniPhantom R					
Outer dimension [cm]	38 × 32.1 × 14.4				
Weight [without inserts, kg]	12.5				
Material	RW3				

myQA® Software	
Supported operating systems:	Windows 10, 64-bit, US English
Supported SQL Servers [™] :	SQL Server [™] 2016 SP2 or higher
Minimum hardware requirements [or equivalent virtual runtime environments]:	 Processor: Intel[®] Core[™] i5 or higher desktop or mobile pro- cessor.
	 RAM of 8GB or more, 16GB required when SRS Detector is used
	 Graphics Card: DirectX 9c compatible, 256 MB Video RAM, no shared memory
	• Ethernet minimum 10Mbit/
	 Ethernet [RJ-45] plug to connect controllers and other measurement devices
Supported screen resolutions and optimal DPI settings:	 1920 × 1080 [FHD] with 100% or 125%
	• 2560 × 1600 with 200%
	 3840 × 2160 [QHD = 4K] with 250%
Supported virtual runtime environments:	 Full desktop virtualizations simulating the above require- ments, e.g.
	• VMware™ ESXi
	• Oracle VirtualBox™
	• Microsoft® Hyper-V™

• XEN Desktop™ 7.15.2000.291 [Windows 10 64-bit, 1 user]

Shaping the future of stereotactic Patient QA:



The power of SRS revealed!

NEW: Need film-class 0.4 mm high resolution and digital workflow efficiency for your SRS & SBRT Patient QA? Discover myQA[®] SRS

- in Linkedin.com/company/iba-dosimetry-gmbh
- YouTube | youtube.com/user/ibadosimetry





MatriXX-Resolution_Br_E_Rev.3_0122 I © IBA 2022 I All rights reserved Technical specifications and product features are subject to change without prior notice. ¹¹ All product and company names are trademarks or registered trademarks of their respective holders. Use of them does not imply any relationship, sponsorship, or endorsement between IBA or its products and the owners of these trademarks.