

A NEW HANDY WAY TO IMPROVE YOUR PARTICLE THERAPY QA

AQURACY

- ✓ **WHAT?**
AQuracy is a beam profiling system for spot characterization and machine QA. It is based on a scintillating screen and a charged coupled device camera.
- ✓ **WHERE?**
AQuracy is conceived to be precisely aligned at the isocenter to characterize the therapeutic particle beam.
- ✓ **WHEN?**
AQuracy allows to verify the radiation field, lateral penumbras, flatness and asymmetry with an estimated uncertainty <2% during beam characterization tests and prior to particle treatments.

For spot characterization and machine QA

- ✓ **WHO?**
AQuracy provides medical physicists with a real-time quantitative measure of the ion beam profile with high spatial resolution and fast processing.
- ✓ **HOW?**
AQuracy consists of a 5 cm diameter scintillating screen and a highly sensitive and low-noise CCD camera, which collects the light coming from the scintillator when hit by the ion beam.
- ✓ **WHY?**
AQuracy embeds power supply and electronic interfaces, thus simplifying the device setup and ensuring an optimized signal-to-noise ratio.

Based on a scintillating screen and a highly sensitive and low-noise charged coupled device camera

TYPE OF DETECTOR	CCD Camera + Scintillator
TOTAL SENSITIVE AREA	Ø: 5 cm
SCINTILLATOR SCREEN	Emission peak ~ 410 nm, Thickness 1 mm
NATIVE RESOLUTION	<10 µm
REPEATABILITY	>99%
DATA COMMUNICATION	Ethernet TCP/IP
EXTERNAL DIMENSIONS	400x125x395 mm ³
WEIGHT	<10 kg

ALL COLORS OF INNOVATION



**HIGH PRECISION
PARTICLE DETECTORS
TAILORED TO YOUR NEEDS**