

T20 Dose Detector



RTI

From Radiation
to Information

Almost Not There

T20 is a solid state detector dedicated for measurements on Rad/Fluoro systems when it is crucial that the detector itself does not have any effect on the system output or disturbs the X-ray beam.



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T20 is a solid state detector dedicated for measurements on Rad/Fluoro systems when it is crucial that the detector itself does not have any effect on the system output or disturbs the X-ray beam.

It was developed mainly for measurements of the patient entrance dose (skin dose) and maximum dose rate in the radiographic and fluoroscopic field. Despite its small size, the T20 is completely protected from picking up backscatter.

Anywhere in the X-ray Field

T20 can be placed anywhere in the X-ray field apart from many other detectors. For instance – the RTI Dose Probe – is small but not small enough in all situations. It still has to be placed outside the active area to avoid affecting the feedback of the system.

Independent and Sensitive

T20 can connect to either Piranha, Cobia Flex, Cobia Sense or Barracuda (two different models of T20) and has a built-in correction filter which allows the detector to self-compensate for different beam energies. Therefore it has a flat energy response in the radiographic range with no need for correction factors. T20 gives five times higher sensitivity than ion chambers.

It fulfills the IEC directive for dose detectors regarding energy independency, measuring range and angular dependency for RQR50–150 kV.



Almost Not There

Specifications

With Black Piranha

Ranges:	0.7 nGy – 10 kGy 0.08 μ R – 1 MR 27 nGy/S – 500 mGy/s 3 μ R/s – 57 R/s
Inaccuracy:	\pm 5 % (RQR 50 – 150 kV)
Energy Dependence:	Less than 5 % RQR 50–150 kV
Size of detector house:	24x5 square millimeter
Length:	318 mm (rod 280 mm + detector 26 mm + back mount 12 mm)
Trig models:	After Exposure, Continuous, Timed and Free Run

With Cobia Flex / Sense

Dose:	35 nGy – 15 kGy 4 μ R – 1700 kR
Dose Rate:	1.5 μ Gy/s – 1500 mGy/s 10 mR/min – 10 kR/min
Dose per pulse:	5 nGy/pulse - 11 Gy/pulse 0.6 μ R/pulse - 1.3 kR/pulse
Inaccuracy:	\pm 5 %
Size of detector house:	24x5 square millimeter
Length:	318 mm (rod 280 mm + detector 26 mm + back mount 12 mm)
Trig models:	After Exposure, Continuous, Timed and Free Run

Article Nr (for Piranha and Cobia Flex): 9730015-00

Article Nr (for Barracuda): 9730014-00