

T20 Translucent Detector



Almost Not There

T20 will allow you to do measurements on conventional radiography and fluoroscopy systems and it is small enough to leave the X-ray system's output undisturbed.



Contact

Details

Innovative X-ray QA Solutions...of Course!

© Copyright 2010 RTI Electronics AB – T20 BAR PIR 201002



World Headquarters

RTI Electronics AB
Flöjelbergsgatan 8 C
SE-431 37 Mölndal
SWEDEN

Phone: + 46 31 746 36 00
Fax: + 46 31 27 05 73
E-mail: sales@rti.se
www.rti.se

US Office

RTI Electronics, Inc.
1275 Bloomfield Avenue
Building 5, Unit 29A
Fairfield, NJ 07004
USA

Phone: 800-222-7537
Phone: 1-973-439-0242
Fax: 1-973-439-0248
E-mail: sales@rtielectronics.com
www.rtielectronics.com

Invisible

Almost Not There

T20 – A Unique Invention

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.

T20 complements the R100B or Piranha Dose Probe, and together they can handle all applications related to installation, service, acceptance testing and QA/QC. It was developed mainly for measurements of the patient entrance dose (skin dose) and maximum dose rate in the radiographic and fluoroscopic field.

And can be placed anywhere in the X-ray field.

The Invisibility

How can a solid state detector made of a dense material be invisible to the X-ray system? Although the detector part itself is impenetrable, it has been made very small and hence it is possible to avoid detection of the X-ray system. The detector is separated from the cable attachment by a carbon fiber rod.

Specifications

T20 can connect to either Barracuda or Piranha 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.

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



Specifications:

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: ± 5 % (RQR 50–150 kV)



Supporting Barracuda and Piranha Electrometer: All electrometer models

Energy Dependence: Less than ± 5 % for RQR 50-150 kV

Angular Dependence: Less than ± 2 % for incident angles less than 10 degrees

Typical Sensitivity: 8 μ C/Gy

Connector alt. 1: Triaxial LEMO for Barracuda

Connector alt. 2: External Connector for Piranha

Size of detector house: 26 x 5 mm²

Length: 318 mm (rod 280 mm + detector 26 mm + back mount 12 mm)

Trig modes: After Exposure, Continuous, Timed and Free Run