

NE2581 Robust Farmer 0.6 cc Ionization Chamber

The 0.6 cm³ NE2581A is a robust Shonka Plastic version of the Graphite-based NE2571A with similar applications, but using a tissue equivalent inner electrode and thimble. This is particularly suitable for routine output checks of X-ray, 60Co and Linacs. It is also possible to purchase the graphite thimble replacements and water proof sheaths.



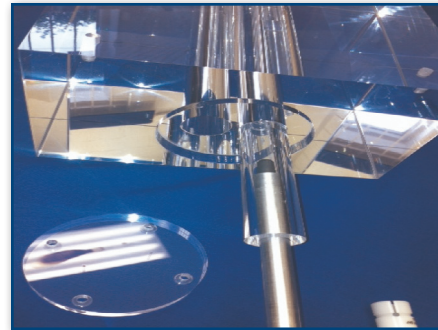
Associated & Peripheral equipment includes:

- ▶ Chamber repair kit
- ▶ **NPL2611** Secondary Standard Chamber
- ▶ **NE2566A** Intercomparison Phantom (*see picture on right*)
- ▶ **NE2528/3** Small Water Phantom for NE2571
- ▶ **PEP** small Photon Electron Water Phantom
- ▶ Dosimetry Extension Cables
- ▶ Solid Water

The NE2581A is delivered as standard with a detachable build-up cap, 10 metre cable, TNC plug; carry case — variations available upon request.

Physical Characteristics

Sensitive volume	0.56 cm ³
Sensitive length	24.1 mm
Thimble materials	Shonka A-150
Inner diameter	6.3 mm
Wall thickness	0.36 mm
Inner electrode	Shonka A-150
Length	20.6 mm
Outer diameter	3.0 mm
Build-up cap	Lucentine CH
Wall thickness	5.61 mm
Outside diameter	18.6 mm
Density	1.06 gm cm ⁻³
Stem outside diameter	8.62 mm
Length of connecting cable	10 m



NE2566A
Secondary Standard
Intercomparison
Phantom

Specifications

Sensitive volume	0.56 cm ³
Sensitivity for X-rays of 1 mm Cu HVL	5.9 R.nC ⁻¹
	350 R.min ⁻¹ .nA ⁻¹
	59 Gy.µC ⁻¹
	3.5 Gy.min ⁻¹ .nA ⁻¹

Energy range for X and gamma radiation

Without build-up cap (measures exposure)	100 kV to 300 kV
With build-up cap (measures exposure)	0.3 MV to 2 MV
In suitable phantom (measures absorbed dose to water)	2 MV to 35 MV

Energy range for electrons

In suitable phantom (measures absorbed dose to water)	5 MeV to 35 MeV
--	-----------------

Leakage current

Typical	5 x 10 ⁻¹⁵ A
Maximum	1.5 x 10 ⁻¹⁴ A

Maximum exposure rate (approx.)

or 99% collection efficiency	50 kR.min ⁻¹ , continuous
	100 mR/Pulse, pulsed
Polarizing potential—250V	50 Gy.min ⁻¹ , continuous
	1 mGy/Pulse, pulsed
Polarizing potential—400V	130 kR.min ⁻¹ , continuous
	150 mR/Pulse, pulsed
	1.3 kGy.min ⁻¹ , continuous
	1.5 mGy/Pulse, pulsed

CNMC/DS NE2581-RF TIC (1) v.10.2018

CNMC 865 Easthagan Drive, Nashville, Tennessee 37217 USA

phone 615 391 3076 800 635 2662 fax 615 885 0285 www.cnmcco.com

AFRICA | ASIA | EUROPE | LATIN AMERICA | MIDDLE EAST | NORTH AMERICA

