

Nanogan

NANOGAN is a compact ECR source (11kg) with magnetic field provided by permanent magnets which is adapted for multicharged ions at medium current, reaching about 40 μA for Ar^{8+} and 2 μA for Pb^{25} . NANOGAN can work with a 100 W, 10 GHz RF-generator. Metallic ions can also be produced with a micro-oven or by a sputtering system. Its chamber is water-cooled, which is not the case of the original Nanogan. The source is normally mounted on an insulated support for an extraction voltage of 25 kV, and includes the plasma chamber, the single extraction electrode, the UHF coupling with a manual fine tuner, and the ceramic insulator for the extraction exit (diameter 165 mm). The maximum extracting voltage is 25 kV. This ion source is also well suited for use in Van-de-Graaf or Tandem terminals.

Guaranteed intensities (μA):

Ions/Q

1+ 2+ 4+ 6+ 8+ 9+ 10+ 11+

12+

13+

14+ 15+ 16+ H 1000

He 1000 100

Ar 300 100 45 40 10 1

Xe

8 7 5 Ta

10 5 Au 10 9 8 6 6 5 2