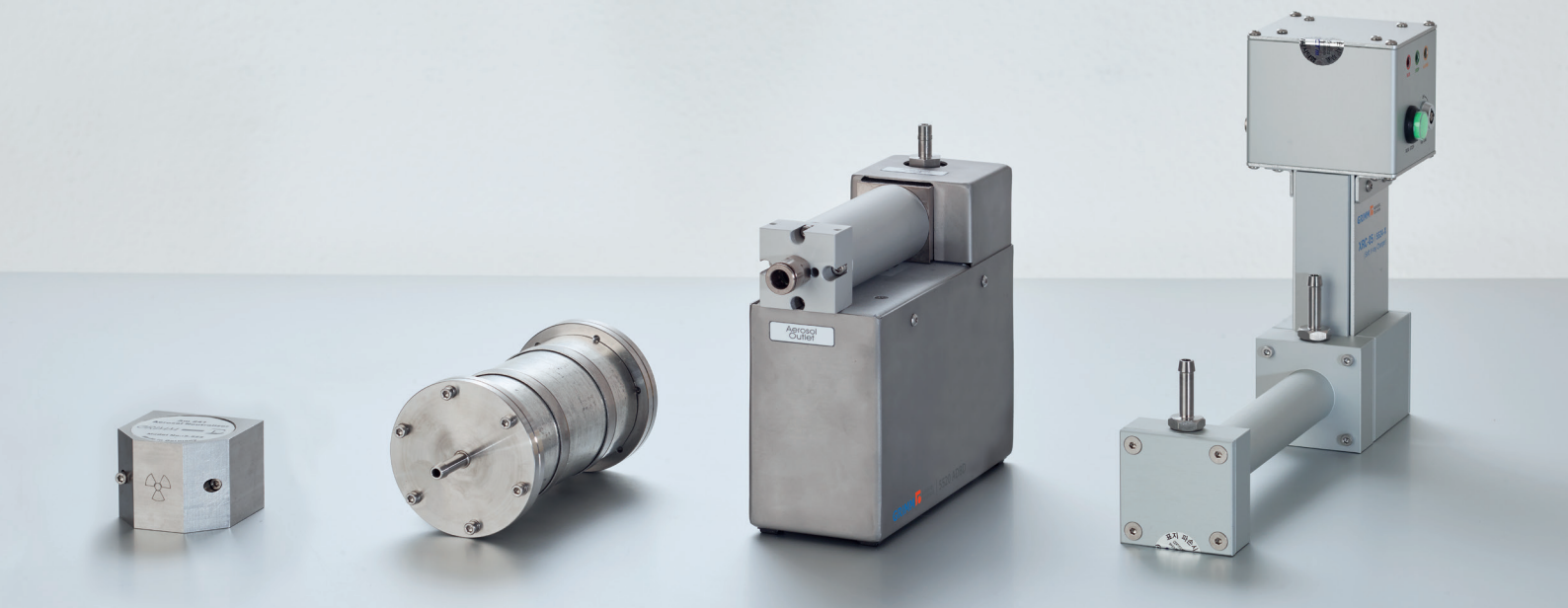
DURAG GROUP

Aerosol Neutralizers

Bipolar ion production with various ionization sources, ensuring a well-defined charging state of the aerosol

- Low maintenance and easy to use
- The right solution for any application
- Radioactive and non-radioactive ionization sources



GRIMM AEROSOL TECHNIK
DURAG GROUP

5522-A | AMERICIUM-241 AEROSOL NEUTRALIZER

FEATURES

- Am-241 α radioactive source
- Nominal activity 3.7 MBq
- Maximum energy 5.6 MeV
- Aerosol flow rate up to 5 l/min

BENEFITS

- Optimized to be directly connected to GRIMM DMAs
- Compatible with GRIMM SMPS+C and SMPS+E systems
- Low maintenance
- Easy and safe to operate

TECHNICAL DATA

Ion generation method	Alpha (α) radiation, maximum energy 5.6 MeV
Aerosol flow rate	Up to 5 l/min
Maximum particle concentration	Up to 10^7 particle/cm^3
Aerosol medium	Air or N_2
Source type	Am-241; sealed radioactive source; covered with gold layer
Nominal activity	3.7 MBq
Half-life	433 y

Housing	Stainless steel
Dimensions (h x w x d)	4 x 5.5 x 5 cm (1.6 x 2.2 x 2 inch)
Weight	0.55 kg (1.2 lbs)

5523-NI | NICKEL-63 AEROSOL NEUTRALIZER

FEATURES

- Ni-63 β- radioactive source
- Nominal activity 95 MBq
- Maximum energy 66 keV
- Aerosol flow rate up to 1 l/min

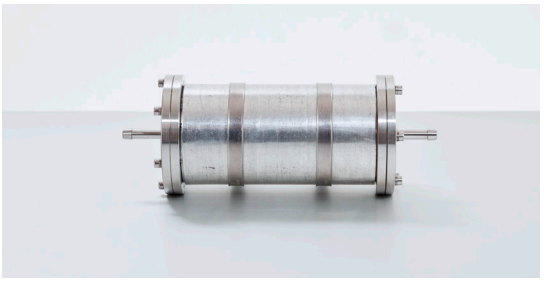
BENEFITS

- No handling license required* as activity below 100 MBq
- Compatible with GRIMM SMPS+C and SMPS+E systems
- Low maintenance
- Easy to operate and safe

TECHNICAL DATA

Ion generation method	Beta (β-) radiation, maximum energy 66 keV, no photons
Aerosol flow rate	Up to 1 l/min
Maximum particle concentration	Up to 10^7 particle/cm^3
Aerosol medium	Air or N^2
Source type	Ni-63; unsealed radioactive source; cleaning not permitted
Nominal activity	95 MBq (+0/–10%)
Half-life	96 y

Housing	Stainless steel with additional lead shielding
Dimensions (h x w x d)	18 x 6.9 x 6.9 cm (7.1 x 2.7 x 2.7 inch)
Weight	2.5 kg (5.5 lbs)



* One exemplar only allowed. Check local radiation protection directive.

FEATURES

- Non-radioactive source
- Dielectric barrier discharge plasma
- Aerosol flow rate 0.3 l/min
- Maximum particle concentration 10^6 particle/cm³

BENEFITS

- Available as mobile (5520) and 19“ version (5520-19“)
- Compatible with GRIMM SMPS+C systems
- No transport / storing restrictions
- Easy and safe to operate

TECHNICAL DATA

Ion generation method	Dielectric barrier discharge plasma
Aerosol flow rate	0.3 l/min
Maximum particle concentration	Up to 10^6 particle/cm³
Aerosol medium	Air (not useable with N_2, Ar or corrosive gases)
Ambient temperature	0 ... 40 °C (50 ... 104 °F)
Ambient humidity	20 ... 95 % RH
Absolute pressure range	700 ... 1 100 mbar

Power supply	100 ... 240 VAC, 50/60 Hz; 15 W
Dimensions (h x w x d)	18.0 x 6.9 x 6.9 cm (7.1 x 2.7 x 2.7 inch)
Weight	2.5 kg (5.5 lbs)

5524-X | 5525-X | SOFT X-RAY AEROSOL NEUTRALIZER

FEATURES

- Soft X-ray ion generation
- Non-radioactive source
- Maximum particle concentration 10^7 particle/cm³
- No particle, electromagnetic waves or ozone generation

BENEFITS

- Available with <11 keV or <4.99 keV energy
- Compatible with GRIMM SMPS+C and SMPS+E systems
- No transport / storing restrictions
- Easy and safe to operate

TECHNICAL DATA

Ion generation method	Soft X-ray
Energy level	5524-X <11 keV 5525-X <4.99 keV
Aerosol flow rate	5524-X: 0.3 ... 5 L/min 5525-X: 0.3 ... 1.5 L/min
Maximum particle concentration	Up to 10^7 particle/cm³
Aerosol medium	Air or N_2
Equivalent X-ray dose	<0.13 µSv/h at 10 cm distance
Cooling	Natural cooling with ambient air

Power supply	100 ... 240 VAC, 50/60 Hz; 7.2 W
Dimensions (h x w x d)	19.1 x 7.2 x 27.3 cm (7.5 x 2.8 x 10.8 inch)
Weight	11.1 kg (2.45 lbs)

DURAG GROUP

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