

# PET

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# Overview



**Eckert & Ziegler**

Isotope Technologies Dresden

# PET - Overview

## Hot cell for the operation of automated synthesis modules

Our synthesis cell is especially designed for the operation of standard PET synthesis modules. The construction ensures GMP-compliant production under grade C conditions. There are three different types that differ in size. The standard model consists of a stainless steel cell and 75 mm lead shielding, with a shielded door and lead glass window at the front side for easy access to the synthesis module. We offer special solutions for the handling of Ga-68, with acid resistant coating of the inner cell with polyethylene and the shielded generator storage under the hot cell.



## Dimensions/Weight

	Inner Dimension (WxDxH)	Outer Dimension (WxD)	Height	Weight
Type 1	700x560x775mm	875x850 mm	3000 mm	3.500 kg
Type 2	700x640x775mm	875x930 mm	3000 mm	3.800 kg
Type 3	700x640x775mm	1025x930 mm	3000 mm	4.500 kg



## Hot cell for the research on PET-radiopharmaceuticals

Our research cell is flexibly designed, whether needed for fully or semi-automated synthesis of new radiopharmaceuticals based on short-lived positron-emitters. Offered as single hot cell or in combination with other hot cells as a functional array, our research cell is versatile; it can handle daily routine products like FDG in a traditional PET Center, or can support innovative research activities, like Ga-68 based formulations. We offer special solutions for the handling of Ga-68, which contains the acid resistant coating of the inner cell with polyethylene and shielded generator storage under the hot cell.

## Dimensions/Shielding

Outer dimensions (WxDxH) ca. 1400x1400x2600 (±30) mm

Inner dimensions (WxDxH) ca. 1000x 1000x800 mm

Weight ca. 9000 kg

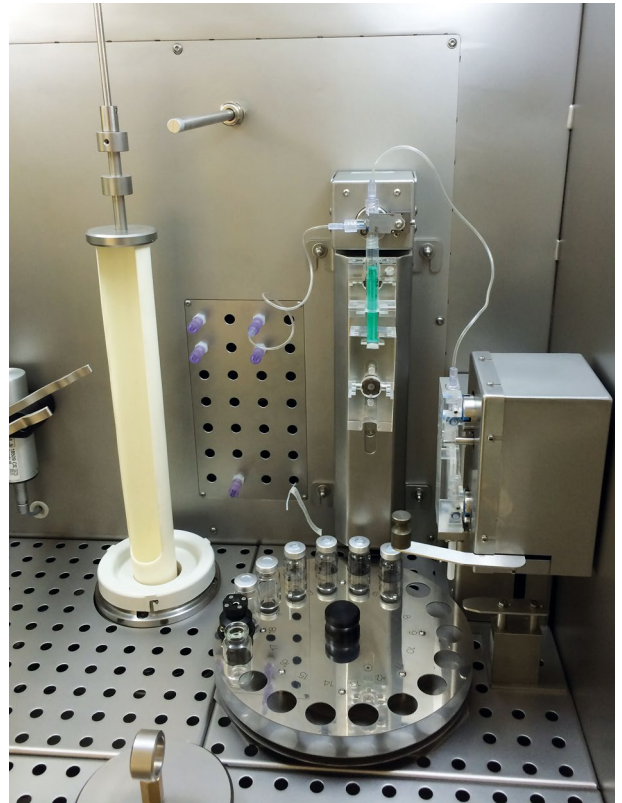
Sides, front and back 100 mm lead

Ceiling and bottom 70 mm lead

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## Hot cell with semi-automatic dispensing system for the dispensing and sterile filtration of radiopharmaceuticals

The dispensing cell with built-in semi-automatic dispensing system is especially set up for the dispensing of short-lived PET radiopharmaceuticals. The semi-automatic dispensing system allows fast dispensing of entered volume or activity into closed vials. The product is transported by a syringe pump which allows high precision filling through a sterile filter. Afterwards, the activity will be determined in a dose calibrator. The measured value is displayed in the software and can be used for further actions. The outward transfer of the filled vial is through a ventilated double lock in the bottom of the cell directly in the shielded container. The slider can be drawn out in the laboratory or at the back of the cell. Laminar air flow generates grade A to the whole dispensing area. The cell is conducted as an isolator which allows working in negative pressure that ensures protection of the operator and the product. All inactive disposables will be prepared under laminar air flow in a dedicated aseptic preparation box with glove ports. The transfer of the disposables into the dispensing cell is by a container (a double-lidded lock transfer system).



## Dimensions/Shielding

**Outer dimensions (WxDxH)** ca. 1400x1400x2600 (±30) mm

**Inner dimensions (WxDxH)** ca. 1000x 1000x800 mm

**Weight** ca. 9000 kg

**Sides, front and back** 100 mm lead

**Ceiling and bottom** 70 mm lead



## Additional Equipment for PET hot labs

Our complete line of accessories ensures you'll be able to completely outfit a GMP-compliant PET center, in addition to facilities for quality control, inactive preparation of disposables, shielding accessories, e.g.:

- Exhaust air compression
- Software controlled target distribution
- Radionuclide turne hood
- LAF work bench (with and without shielding)
- Shielded Safes
- Material locks
- Shielded box for O-15 module
- Semi-automated syringe filling device

# PET - Overview

**Isotope Technologies Dresden GmbH will be a leading global supplier and integrator of safe, reliable and economical systems to produce radiopharmaceuticals and to handle other radioactive materials.**

**Based on decades of experience and latest technologies, we contribute to saving lives with our solutions by protecting people, product and the environment.**

**We provide value to our customers with excellent consultancy service, high quality and life-long technical service.**

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