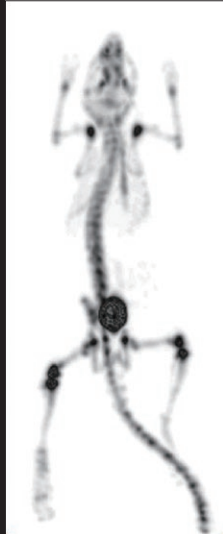


> Mirai-PET images

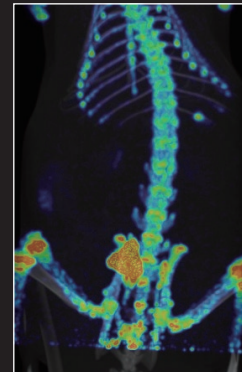
◆ Mouse

^{18}F -NaF PET image (60 min)



◆ Rat

^{18}F -NaF PET images (60 min)



Fusion (with CT)

◆ Macaque Monkey

^{18}F -FDG PET images (203.4 MBq, 60 min measurement)



※Image courtesy of QST

miraiimaging

Mirai Imaging Inc.

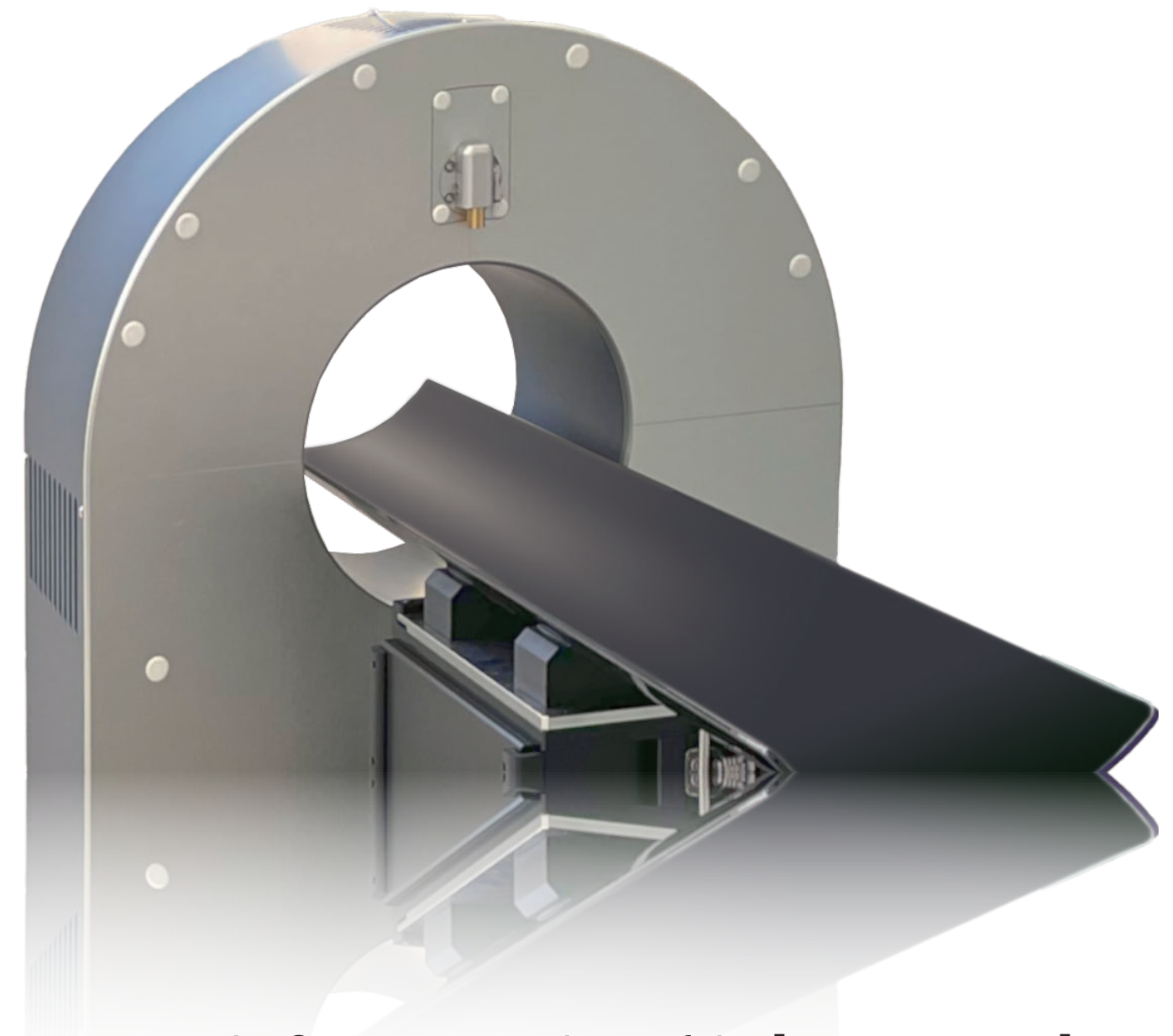
TEL: +81-50-3778-5962

URL: <http://www.mirai-imaging.com>

Contact: info@mirai-imaging.com

Total-body Animal PET

mirai-PET



- The first commercial use of the [CLS-Detector※]
- Long axial FOV allows for total-body imaging of a rat
- Compact and portable design

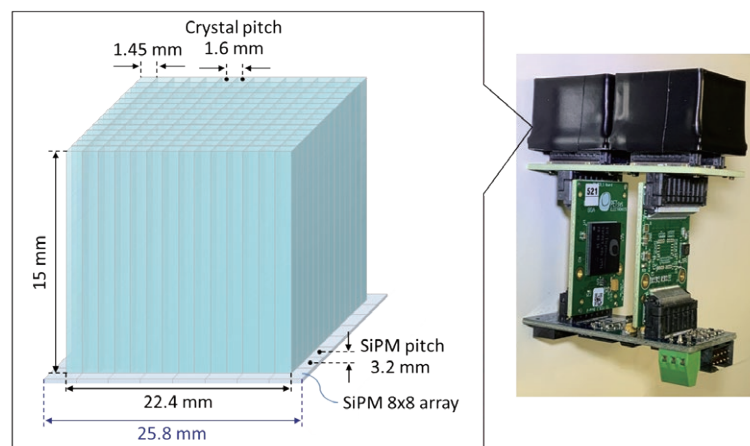
※The CLS Detector was developed by the National Institutes for Quantum Science and Technology (QST).

> Detector

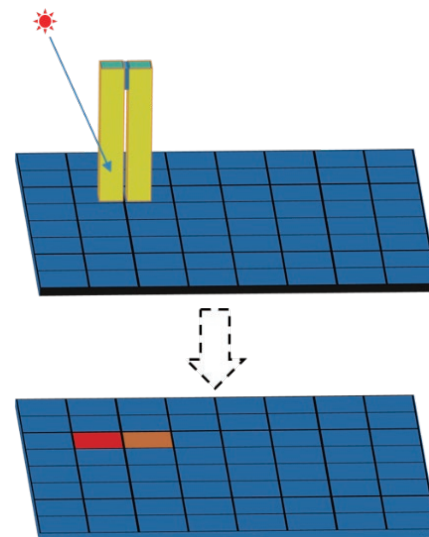
 The first commercial use of the [CLS-Detector※]

 DOI (Depth-of-interaction, 5mm×3segments)
TOF (~300ps)

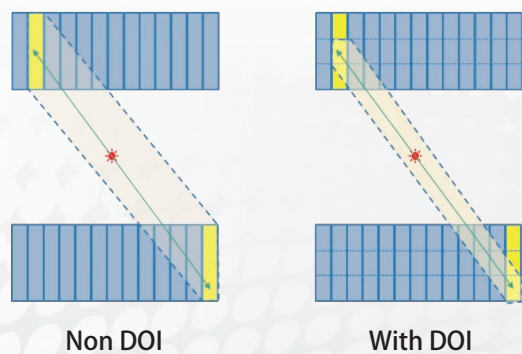
◆ CLS Detector※



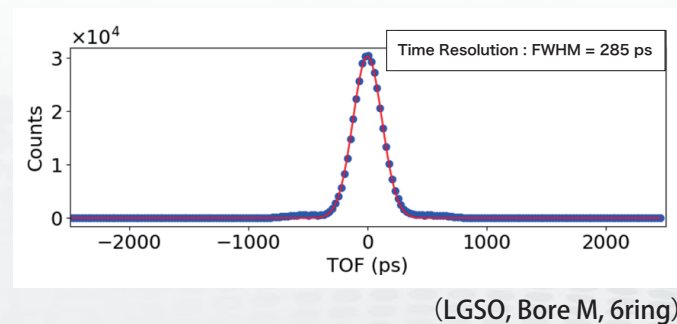
◆ DOI identification based on light-sharing pattern



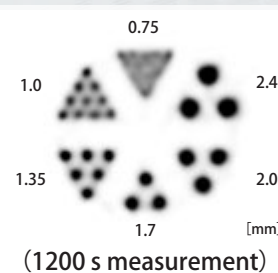
◆ Effect of DOI measurement



◆ TOF coincidence time resolution



<1 mm resolution
(²²Na rod phantom, ~0.5MBq)



> Product spec.

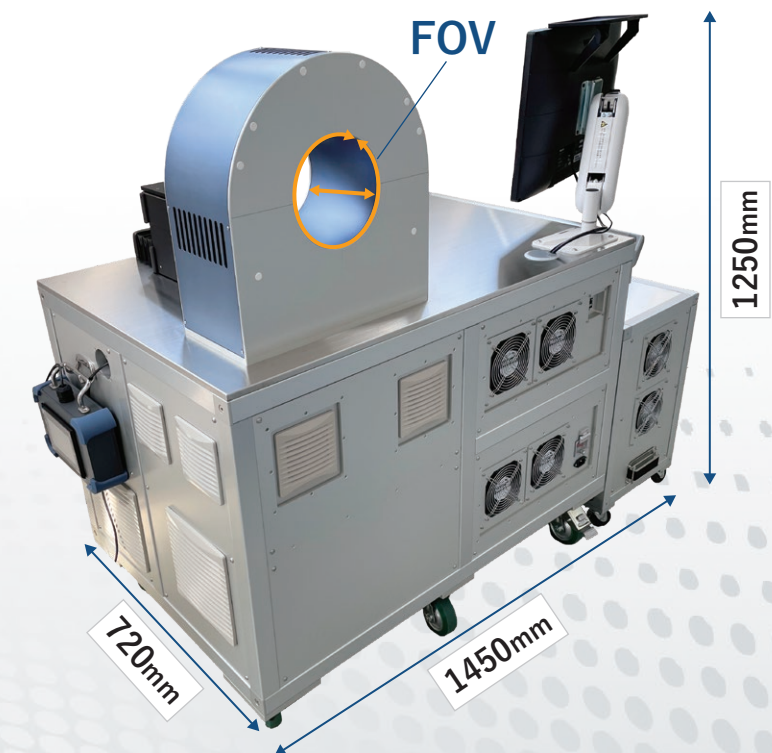
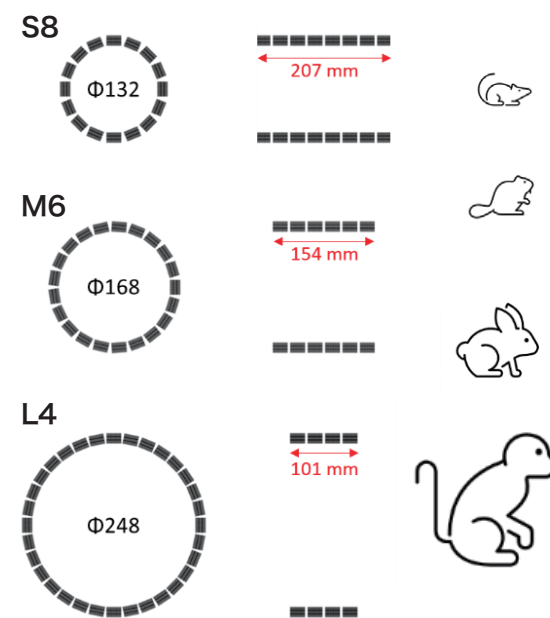
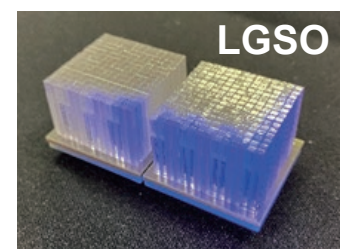
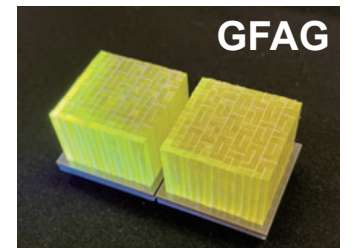
Customizable according to research purposes.

◆ Detectors

Size	Diameter
Bore S	132 mm
Bore M	168 mm
Bore L	248 mm
Number	Axial Length
8 ring	207 mm
6 ring	154 mm
4 ring	101 mm

◆ Scintillators

Crystal	Ce:GFAG (Gd ₃ (GaAl) ₅ O ₁₂)	Ce:LGSO (Lu _x Gd _{2-x} SiO ₅)
Density (g/cm ³)	6.7	7.3
Decay Time (ns)	≤40	42
Energy Resolution (% @ 662 keV, 10mm cubic size)	~15	~8
Hygroscopicity	No	No
Self-radiation	No	Yes



(example) Model: Bore M, 6
Bore size: Φ170mm
FOV: 150mm(Axial)、Φ150mm
Weight: ≒200kg
Total Size≒: 720mm×1450mm×1250mm

※The CLS Detector was developed by the National Institutes for Quantum Science and Technology (QST).
Yoshida, et al. First imaging demonstration of a crosshair light-sharing PET detector. Phys Med Biol. 2021.