See further.
Go beyond.
See what you’ve been missing with the world’s only digital PET/CT

The Vereos PET/CT takes a leap forward by giving you improved contrast and superb SUV quantitation. It positions you to go beyond the current limitations in PET/CT imaging and improve patient care.

* GEMINI TF 16
Sample images acquired in a clinical study of the Vereos PET/CT system at University Hospitals Cleveland. Investigational device limited by law to investigational use.
See more with a faster Time-of-Flight

Seeing further requires faster Time-of-Flight (TOF) performance. Vereos PET/CT has it, providing you greater sensitivity gain than analog systems.* This data, which is a result of the improved sensitivity gain, enables you to achieve improved image quality. Our faster TOF performance can also help you manage examination time, giving you quick exams and fast results.

[Images of Analog and Digital PET scans]

Digital Photon Counting

At the core of the Vereos revolution is our proprietary Digital Photon Counting (DPC) technology. Compared to analog*, our DPC technology improves performance in three key parameters:

- 2x volumetric resolution
- 2x sensitivity gain
- 2x quantitative accuracy

Digital PET volumetric resolution up to ~2x greater than analog.*

* GEMINI TF 16
Sample images acquired in a clinical study of the Vereos PET/CT system at University Hospitals Cleveland. Investigational device limited by law to investigational use.
Philips supports your clinical excellence and your role as a partner with other clinicians in improving patient care. Vereos PET/CT can help you take your diagnostic confidence to the next level.

**Digital PET**

Accurate quantitation using Vereos PET/CT can enhance your position as a preferred site for clinical referrals by offering:
- Enhanced collaboration
- Enhanced treatment planning
- Increased diagnostic confidence

Vereos PET/CT can also help you improve workflow efficiency and patient management through:
- Fast workflows
- Fast scans using shortest bore in the industry
- High image quality at low dose (with iDose® Premium Package)

**Vereos* specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of detectors</td>
<td>23,040</td>
</tr>
<tr>
<td>System spatial resolution</td>
<td>4.1 mm</td>
</tr>
<tr>
<td>Effective system sensitivity</td>
<td>22.0 kcps/MBq</td>
</tr>
<tr>
<td>Effective system sensitivity/cm</td>
<td>&gt;1,304 cps/MBq</td>
</tr>
<tr>
<td>Effective peak NECR</td>
<td>650 kcps @ 50 kBq/mL</td>
</tr>
<tr>
<td>Maximum trues</td>
<td>&gt;675 kcps</td>
</tr>
<tr>
<td>System timing resolution</td>
<td>325 ps</td>
</tr>
<tr>
<td>Quantitative accuracy</td>
<td>+/- 5%</td>
</tr>
</tbody>
</table>

* Preliminary performance data subject to change.
Sample images acquired in a clinical study of the Vereos PET/CT system at University Hospitals Cleveland. Investigational device limited by law to investigational use.
Philips **exclusive** Digital Photon Counting (DPC) technology

Our revolutionary digital breakthrough in PET imaging

**DPC** converts scintillation light directly to a digital signal, with zero analog noise.

**DPC** reduces the traditional tradeoffs between sensitivity gains and resolution gains.

**DPC** compared to analog* enables:
- Faster TOF
- Faster timing resolution
- Faster post-processing and image fusion
- Faster throughput and workflow

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**Resolution gains**

Our DPC technology is the only true digital detection technology available in the industry. The system uses 1:1 coupling of scintillators to digital detectors. That means spatial, timing, and energy resolution is improved throughout the entire multi-dimensional field of view, for improved volumetric resolution.

≈ 2x volumetric resolution

**Sensitivity gains**

Our DPC technology converts light directly to a digital signal. Because there is virtually no noise introduced in this conversion, the system improves the signal-to-noise ratio which enables improved sensitivity. Coupled with fast timing resolution, image contrast improves leading to potentially enhanced lesion detectability.

≈ 2x sensitivity gain

**Quantitative gains**

Our DPC technology provides a linear count rate performance, which makes the peak count rate higher. An increased rate plus fast timing resolution capabilities gives an improvement in quantitative accuracy. The imaging chain maintains digital data integrity through the entire imaging chain. Add to that our reconstruction, and you get outstanding images with fast post-processing.

≈ 2x quantitative accuracy

* GEMINI TF 16
See how your patients benefit

Your patients can benefit from the revolutionary Vereos PET/CT system.

- **iPatient**: iPatient offers personalized patient-centric workflow built for iterative reconstruction techniques and high image quality at low dose levels to drive confidence and consistency 24/7.
- **iDose4 Premium Package**: iDose4 improves image quality* through artifact prevention and increased spatial resolution at low dose. O-MAR reduces artifacts caused by large orthopedic implants. Together they produce high image quality with reduced artifacts.
- **Fast scanning**: Patients spend less time in scanner.
- **Short bore length**: Less time in bore may enhance patient comfort.
- **Gentle lighting**: An improved industrial design contributes to your patients’ peace of mind.

![Without O-MAR](image1.png)  ![With O-MAR](image2.png)

O-MAR improves visualization in the presence of large metal orthopedic implants. Superb diagnostic CT detail, fast scanning, low radiation dose.

**Patient-centric workflow**

iPatient ExamCards provide easy PET/CT acquisition setup. Customized ExamCards may be created to suit your preference.

* Improved image quality is defined by improvements in spatial resolution and/or noise reduction as measured in phantom studies.
Go beyond in your practice

Expand your leadership as far as your vision takes you in molecular imaging and personalized medicine.

Vereos PET/CT positions you to expand your PET imaging capabilities beyond FDG in areas such as:
- Shorter half-life tracers
- Neurodegenerative disorders
- Targeted radiotherapy
- Personalized molecular medicine
The images and descriptions contained herein provide technical specifications and optional features which may not be included with the standard system configuration. Contact your local Philips Representative for complete specific system details.

Some or all of the products, features, and accessories shown or described herein may not be available in your market. Please contact your local Philips Representative for availability.