PHILIPS

SmartPath to dStream

MR systems

The Smart approach to digital MRI



From the very beginning, Philips has always had one thing at the heart of our company – our mission to improve people's lives through meaningful innovation. This mission inspires us to work with you to find the shortest path to the best care at the lowest cost. It drives us to create technology that makes a difference – to those who run our MR systems, those who read the images, and those patients who benefit from confident diagnoses.

Philips is dedicated to improving and saving lives through innovation. In radiology, we develop our solutions in partnership with clinicians and customers. Your patients can have better, more personalized care, while you make the best use of time and budget. We partner with you to drive clinical performance, enhance patient and user experience, and ensure economic value, within and beyond the walls of your enterprise.

Drive clinical performance

Our technical advances in image quality and anatomical intelligence are focused on clinical reality. We innovate to make a difference in people's health.

Enhance patient and user experience

We deliver patient comfort by reducing examination times and creating soothing environments. We provide patientcentric imaging to support first-time-right imaging results.

Ensure economic value

To help you maximize your MR investment, we design our systems to pay off quickly and return dividends for a long time, through upgrade programs, extensive service offerings, and low operating costs.

Drive clinical **performance**

Launch your MR system into the digital era

Key Benefits

- Enhanced image quality
- Cost-effective
- Improved workflow and patient comfort

SmartPath to dStream offers all the benefits of digital broadband architecture, without the cost and hassle of installing a completely new system.

Ingenia owners enjoy enhanced image quality, outstanding clinical capabilities, an excellent patient experience, and exceptional workflow from dStream, Ingenia's broadband digital architecture. Now you can launch your MR system into the digital era, benefitting from dStream and all its advantages – on your existing magnet.

dStream delivers

- Image clarity: You will benefit from fully digital coils that boost image quality by capturing the MR signal as close as possible to the patient.
- Speed: iPatient streamlines workflow and reduces exam time, by enabling imaging with fewer, lighter coils and faster patient set up.
- Expandability: You will never again have to upgrade your RF receive channels. Channel independence means you can expand your coil family without channel conflicts.



Imaging 2.0

Imaging 2.0, Philips revolutionary imaging approach signals our endless quest to raise the bar on clinical excellence – by working with you to develop innovations that enable you to collaborate freely, diagnose confidently, and care passionately.

More for less

SmartPath to dStream brings you:

- dStream image quality with up to 40% more SNR*
- dStream iPatient patient management: up to 30% improvement in your throughput** in a variety of routine exams
- Increased patient space in routine applications like spine and body, due to integrated posterior coil
- Higher return on investment than with a new system purchase
- Faster installation, minimal disruption: no magnet removal

ed upon the unique FlexCoverage Posterior coil that provides neck-to-toe coverage without the need for ng, iPatient enables imaging with fewer coils and reduces coil positioning and patient setup time.

The digital advantage

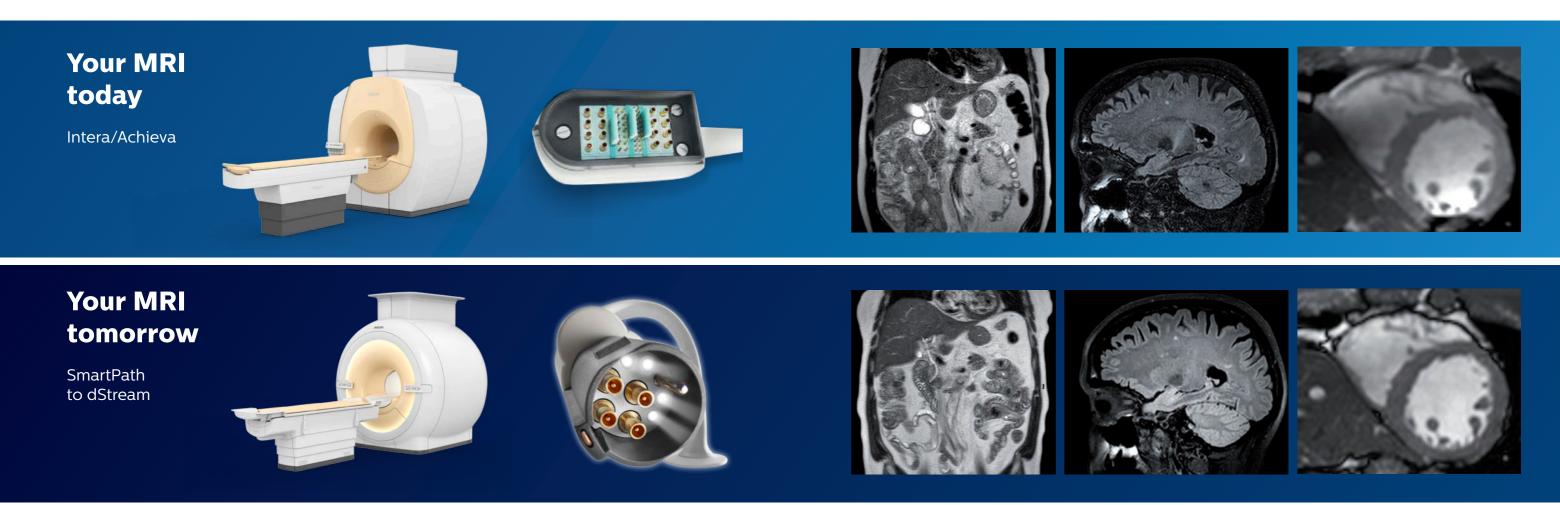
A technological breakthrough, dStream elevates clinical performance, accelerates patient management, and improves economic value.

Digital clarity and speed

dStream captures a high quality MR signal - directly in the coil on the patient. It then sends the signal to the reconstructor via fiber-optic cable, for lossless broadband data transmission. With SmartPath to dStream, you'll benefit from an SNR that equals that of Ingenia, as well as dS SENSE parallel imaging, for outstanding image quality and speed.

Fast, consistent RF transmission

For 3.0T systems, dStream delivers consistency and speed with MultiTransmit 4D parallel RF transmit technology, which allows for excellent RF transmission even during real-time applications. MultiTransmit reduces dielectric shading, helps manage local Specific Absorption Rate (SAR), and takes advantage of superb RF management.



Enhanced SNR and speed T2W, TSE done on Achieva 1.5T with SENSE XL Torso coil: 30 seconds versus SmartPath to dStream with dS Torso coil:

Enhanced volumetric imaging VISTA FLAIR in 8:16 min. versus BrainView FLAIR in MPR 4:53 min.

* compared to Achieva

14 seconds

6

Improved economic value

With dStream you never have to worry about upgrading your RF receive channels to keep up with advantages in coil technology. Because digitization occurs in the RF coil, the channels available are determined by the coil, rather than the system. This enables plug-and-play expansion of clinical capabilities without major hardware upgrades, resulting in lower lifecycle costs and improved economic value.

Enhanced uniformity and contrast Cine balanced TFE done on conventional* 3.0T versus SmartPath to dStream with MultiTransmit 4D

Enhance patient and user experience

Accelerate patient management

SmartAssist and iPatient workflow - as part of the dStream architecture - accelerate patient management to match that of Ingenia. SmartAssist is the next generation of Philips powerful combination of SmartExam and ExamCards. It can decrease the number of repetitive tasks supporting greater efficiency, consistency, and reproducibility.

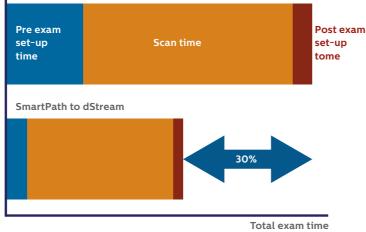
SmartAssist efficiency assistance includes:

- SmartStart: Moves the table to isocenter and starts the exam at the touch of a button.
- SmartSelect: Automatically determines which coils and elements should be activated to produce the highest SNR for the selected area.
- SmartExam: Positions slices on the target anatomy, reducing operator input to as little as a single mouse click. It is optionally available for brain, spine, shoulder, knee, and breast imaging.
- SmartLink: Simplifies the planning, viewing and processing of multi-sequence, multi-station exams, treating multi-station exams as one volume.
- SmartLine: Performs intelligent background processing (such as volume view, diffusion, perfusion, etc.) of multiple image datasets in parallel with image acquisition which saves time.

Increase your throughput

iPatient is a concept in exam management designed to streamline workflow by allowing imaging with fewer coils. It significantly shortens set-up times by strongly reducing the number of repetitive tasks. This can bring up to 30% improvement in your throughput in a variety of routine exams.

Achieva 1.5T



FlexCoverage Posterior coil Integrated underneath the tabletop, the FlexCoverage Posterior coil is the answer for about 60% of your routine applications, providing neckto-toe coverage, head-or-feet first, without coil handling or positioning. The posterior coil combines effortlesly with other dStream coils for large coverage, and fast and easy patient setup.

FlexCoverage Anterior coil* By combining the lightweight FlexCoverage Anterior coil with the Posterior coil, you can image anatomies from above the shoulder to the toe. Due to its unique design, it conforms comfortably to the patient's body shape, allowing fast and easy positioning.





FlexCaddy coil storage cart*

If other dStream coils are required, you can choose from a variety of coil solutions. Additional coils can be stored in the optional FlexCaddy coil storage cart, readily available at the table-side.

FlexConnect connection FlexConnect enables singlehanded coil connections as well as auto-eject for easy table undocking.





dS HeadNeckSpine

The integrated dS HeadNeckSpine coil solution expands the field of view to 200 cm. It simply clicks to the digital table, allowing fewer steps in patient set up and less connectors.





FlexTrak Patient Transport System FlexTrak dockable patient transport system provides simplified patient preparation, handling, and transportation from the preparation room to the MR scanner, as well as

easy exam set up.

Imaging excellence

SmartPath to dStream architecture and dS coil solutions result in high SNR that benefit every application. You no longer have to trade resolution for speed: now you can perform routine exams for brain, spine, knee, ankle, and liver within less than 8 minutes with excellent image quality.



Enhanced SNR and coverage PDW TSE SmartPath to dStream with Flex M plus dSPosterior

Extended coverage dSTorso, 500 mm field of view T2W TSE

Fast routine imaging

Fast routine imaging is enabled by dStream (dS) coil solutions tailored to your clinical needs and addressing a full range of clinical situations. They are designed to provide exceptional:

- Intrinsic signal-to-noise ratio.
- Imaging coverage.

Minutes

8

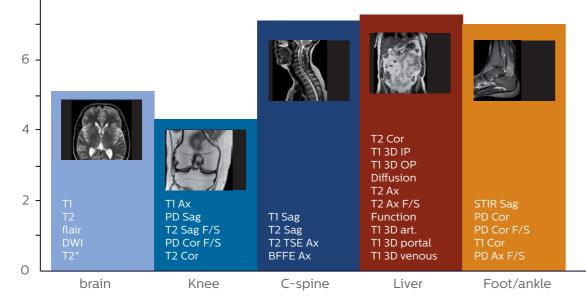
• Parallel imaging performance.

dS-SENSE parallel imaging

Powered by dStream architecture, dS-SENSE enables higher parallel imaging factors for more speed and resolution. It includes quick, fully integrated reference scans which are planned automatically.

"SmartPath to dStream is a phenomenal opportunity for us: not only to keep us contemporary, but to maintain our lead over our competition"

Dr. Chip Truwit MD, Chief of Radiology, Hennepin County Medical Center, Minneapolis, USA.

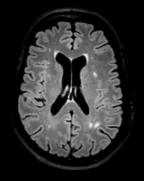


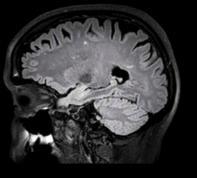
Routine exams for brain, spine, knee, ankle, and liver all within less than 8 min with excellent image quality.



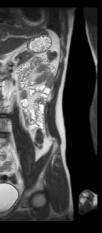
Enhanced workflow 2 station total Spine T2W TSE with integrated dSTotalSpine

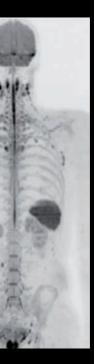
Enhanced workflow and SNR 3 station total Torso DWIBS with dSHeadNeck and dSTorso





Enhanced volumetric imaging 3D BrainView FLAIR with dS-SENSE 5; 1.1mm3 isotropic resolution in 4:53 minutes. Sagittal source image and axial MPR



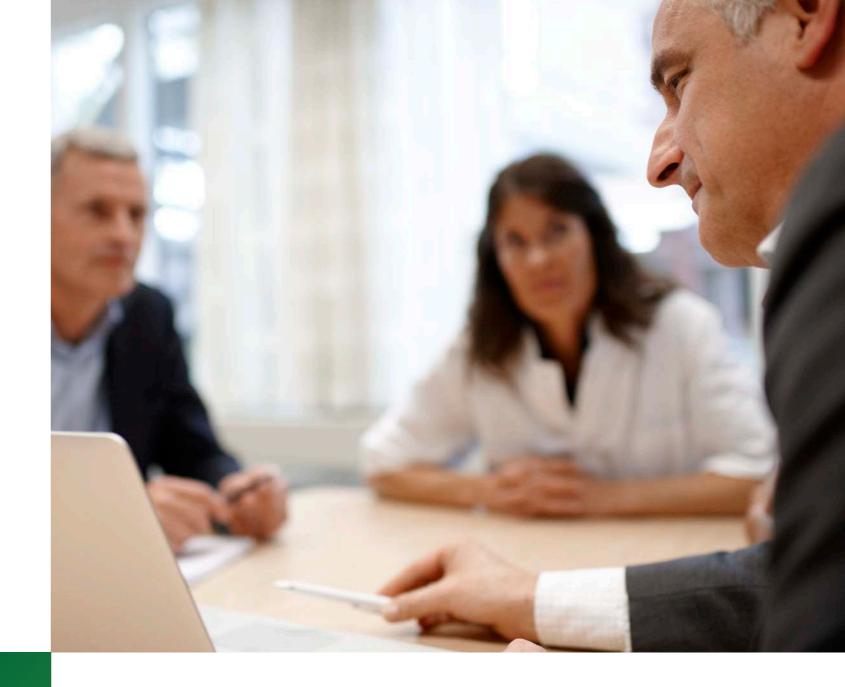


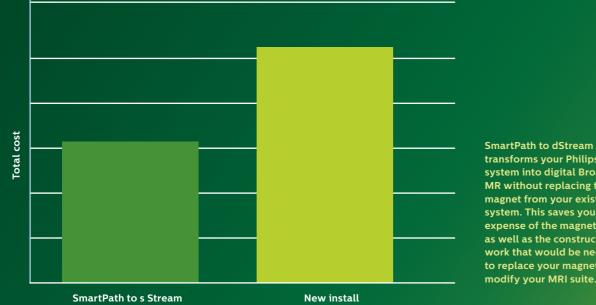


Fast whole body imaging T2W TSE in 5 minutes with dSTorso and dS-SENSE

Improve economic value

With the SmartPath to dStream program, Philips again demonstrates its commitment to enhancing long life for its systems. A costeffective path to digital broadband MR, the program essentially extends system lifetime, resulting in a system that is like new, at a substantially lower cost than a new system. There is no need to design a new MR suite, and significantly less downtime is involved. The magnet can even remain in the exam room while the makeover takes place resulting in much less disturbance to your facility. In addition, dStream's channel independence makes channel upgrades a thing of the past, giving you access to coils with any number of channels without upgrading your RF receive system.





transforms your Philips MR system into digital Broadband MR without replacing the magnet from your existing system. This saves you the expense of the magnet itself, as well as the construction work that would be necessary to replace your magnet and/or

Virtually a new system for a very affordable price

In addition to bringing full digital capabilities to your MR system, SmartPath to dStream also completely renews the system, just as if you had bought a new MR. It extends the lifetime of your MR system by 10 years from the moment of purchase.

The program includes:

- New digital table, with integrated FlexCoverage Posterior coil and FlexConnect connectors.
- New magnet covers, with Philips unique light ring and dual-sided control.
- New digital backbone, with fiber-optics from the RF coil to the reconstructor.
- New PC, reconstructor, and latest software release.

Attractive financial options

When your equipment is aging and reaching its "end of life", you make a decision about upgrading or replacing. SmartPath offers you attractive financial options when you make that choice. If you decide to upgrade, you can add the upgrade to your current lease/ financing contract or start a new one for the upgrade only. Alternately, we can buy your system and lease it back to you with the latest upgrades included. And if you want to replace your equipment with a new system, you can trade in your old system at attractive terms. Our local financing experts offer tailor-made financing solutions to meet your individual upgrade requirements. SmartPath gives you the choices you need to manage your "return on investment" and capital budgets.

What is **Philips SmartPath?**

We collaborate with you in the long-range planning of your medical imaging needs. With Philips SmartPath you can optimize, enhance, or transform your existing equipment so you have "like new" functionality throughout the whole lifecycle. You gain the most advanced enhancements in workflow, clinical capabilities and imaging quality with the equipment you already own.

Philips SmartPath is a program that also helps you extend the life of your equipment. You can get the latest technology for a fraction of the cost or disruption of buying and installing new. If you prefer to replace your equipment with a new system, you can choose to trade in your current system at attractive terms. And you can conserve capex budget by selecting a financing option that suits your business needs.

SmartPath enables you to...



Optimize

Maintain high quality performance over the long term through regular and ongoing updates and improvements.



Enhance

Enhance or expand your clinical capabilities and workflow efficiency, and adopt new ways of working, as you choose. Enabling you to attract more patients and qualified staff and to open doors to new service lines/revenue streams.



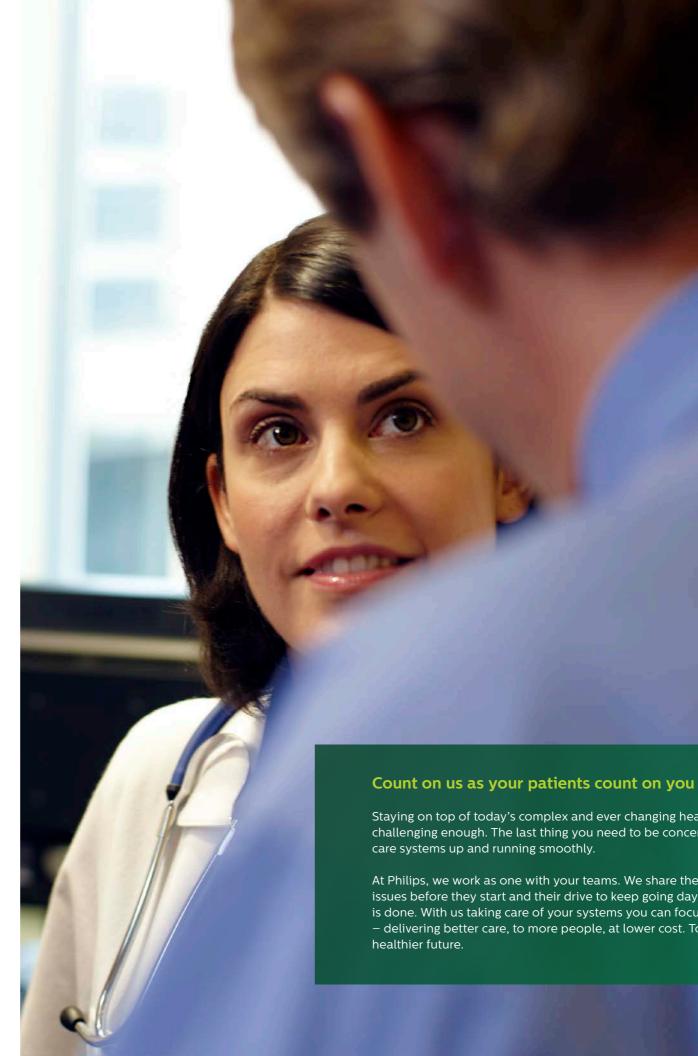
Transform

Transform your facility with next generation solutions that may reduce disruption through an easy and economical upgrade path.



Trade-in

Trade-in your current system at attractive financial terms when buying new equipment.





Staying on top of today's complex and ever changing healthcare environment is challenging enough. The last thing you need to be concerned with is keeping your

At Philips, we work as one with your teams. We share their dedication to solve issues before they start and their drive to keep going day and night until the job is done. With us taking care of your systems you can focus on what really matters - delivering better care, to more people, at lower cost. Together we can create a



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