

**PHILIPS**

Ultrasound

Affiniti

It understands  
your everyday

Philips Affiniti ultrasound system for musculoskeletal

# Ask for more in musculoskeletal (MSK)

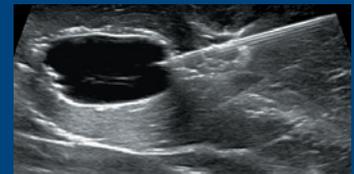
Designed to set you apart and help you stay ahead, the Philips Affiniti ultrasound system delivers innovation that responds to the musculoskeletal imaging needs of a busy orthopedic, sports medicine, rheumatology or ultrasound department. Affiniti combines outstanding performance and efficient workflow, and features innovative Philips technologies.



## Why ultrasound for MSK?

The reasons are simple. Ultrasound is widely available, easy to use, and more cost-effective than other imaging methods. Ultrasound scanning can give a clear picture of soft tissues that do not show up well on X-ray images. In addition, ultrasound for MSK:

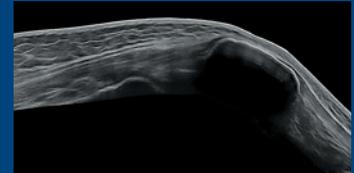
1



Transducer: eL18-4

**Provides** real-time imaging, making it an ideal tool to guide minimally invasive procedures such as needle biopsies and fluid aspiration.

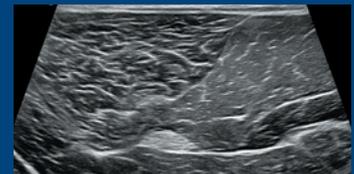
2



Transducer: eL18-4

**Allows** for a dynamic examination that can show the movement of soft tissue structures.

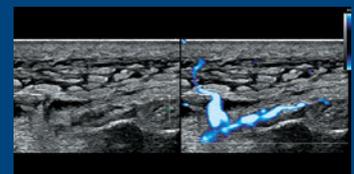
3



Transducer: eL18-4

**Offers** an excellent companion to MRI by providing a cost-effective first look.

4



Transducer: eL18-4 and MFI

**Supports** a wide a range of MSK anatomies thanks to specially designed transducers and features.

# Made for MSK

Ergonomic, innovative and lightweight, our broad range of transducers is available in multiple configurations for excellent superficial resolution and penetration.

The system's precision beamforming delivers superb spatial and contrast resolution, outstanding tissue uniformity, few artifacts, and reduced image clutter. Tissue Specific Presets (TSPs) automatically adjust over 7,500 parameters to optimize the transducer for the specific exam type, producing excellent image quality with little or no need for image adjustment.

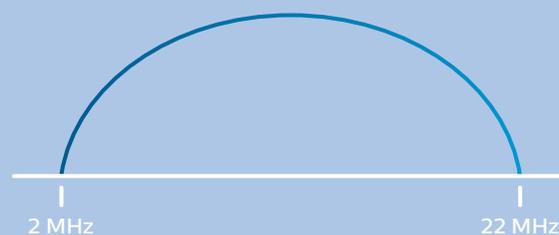
## Tissue aberration correction

Innovative tissue aberration correction technology compensates for changes in the speed of sound to display detailed images of MSK anatomy. Philips linear transducers are now optimized with tissue aberration correction to provide superb imaging performance across a variety of MSK applications.

## Ultra-broadband PureWave crystal technology for ultra-performance

PureWave crystal technology combined with elevation focusing offers ultra-broadband for extraordinary imaging. The innovative eL18-4 transducer features a multi-row array configuration to provide thin-slice imaging for exceptionally detailed resolution and tissue uniformity near to far depth of field.

## Ultra-broadband ultrasound comes to MSK



The eL18-4 transducer generates frequencies from 2 to 22 MHz



The Philips broad range of transducers offers excellent superficial resolution and penetration in MSK imaging.



# Redefining clinical expectations

## **SonoCT and XRES**

SonoCT and XRES work in tandem to display superb images. Real-time multiple lines-of-sight imaging increases tissue information and improves display of curved and irregular structures while reducing many angle-generated artifacts. Variable XRES uses expertise gained from MR, allowing Philips to bring XRES adaptive image processing to ultrasound.

Together, variable XRES imaging algorithms and spatial compounding reduce speckle noise and add a new level of refinement by improving conspicuity of existing tissue patterns and bringing margins and borders into even greater definition. Variable XRES allows the user to select progressive amounts of noise reduction, edge enhancement and textural smoothing.

## **MaxVue display**

With MaxVue, experience ultrasound imaging in 16:9 full high definition (FHD). The feature displays 1,179,648 more image pixels than standard format mode and enhances ultrasound viewing during interventional procedures by providing 38% more viewing area to optimize the display of dual, side-by-side, biplane and scrolling imaging formats.

## **MicroFlow Imaging**

With remarkable sensitivity, the Philips eL18-4 transducer supports MicroFlow Imaging, which is the Philips proprietary method for assessment of slow and weak blood flow. MicroFlow Imaging overcomes many of the barriers associated with conventional methods to detect weak and slow blood flow with high resolution and minimal artifacts. MicroFlow Imaging maintains high frame rate and image quality and applies advanced artifact reduction techniques.

## **Panoramic view**

Use panoramic imaging to capture the entire landscape in a single view. It's easy to perform, and the extended view allows a global representation of MSK anatomical structures.

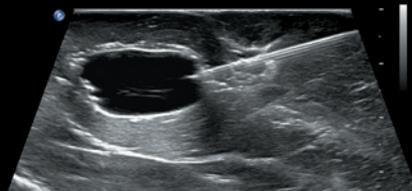
## **Precision interventional guidance**

For a wider field of view, the eL18-4 transducer supports trapezoidal imaging. In addition, needle visualization software optimizes display of the needle reflection. The combination of the eL18-4 transducer, MicroFlow Imaging, needle visualization and high-definition MaxVue display provides enhanced confidence and precision for interventional guidance.

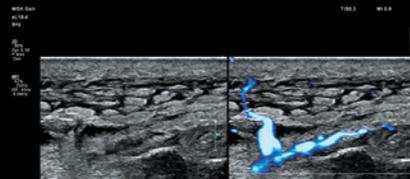
# Performance you can see



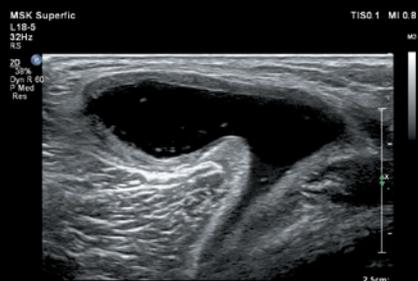
**Achilles tendon**



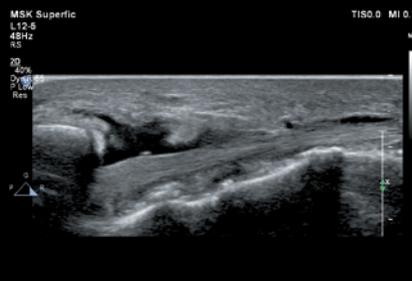
**Needle aspiration**



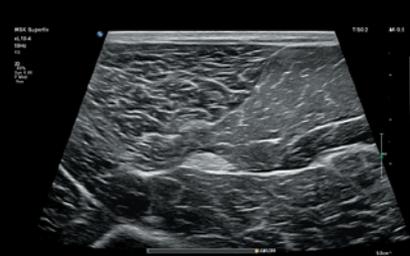
**Ankle edema**



**Baker's cyst**



**Lateral malleolus**



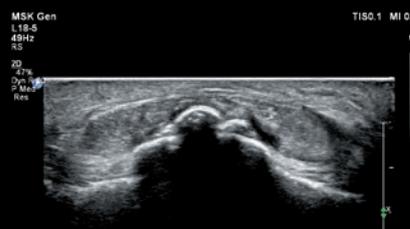
**Sciatic nerve**



**Biceps tendon tear**



**Patellar tendon**



**Post-surgical tibial tuberosity**



# Workflow meets wow

With the Affiniti ultrasound system, workflow meets wow. The system addresses the everyday need to scan quickly and deliver results efficiently, while incorporating those innovations that make Philips ultrasound the choice of those who demand quality images and proven clinical applications.

## **Real-time iSCAN (AutoSCAN)**

AutoSCAN automatically and continuously optimizes gain and TGC to provide excellent images.

## **SmartExam protocols**

System-guided SmartExam protocols facilitate exams, with an onscreen menu that guides the user through required views by exam type, automatically enters annotation, and builds your report. These protocols have been clinically proven to reduce exam time by up to 50% by reducing keystrokes and alerting the user to any missed views.<sup>1</sup>

## **Query retrieve**

Use multimodality query retrieve to view DICOM images such as MR and ultrasound. Easily compare past and current studies without the use of an external reading station and even review these multimodality images while live imaging.

## **Set-up Wizard**

Set-up Wizard allows users to step up to the system, easily establish user configurations, and get running quickly.

## **Active native data**

Active native data allows for post-processing of many exam parameters.

# Comfort meets competence

## Advanced workflow

Affiniti was designed for walk-up usability and is so intuitive that it requires minimal training on system use to be able to complete an exam.<sup>2</sup> The system reduces repetitive button pushes and steps so you can focus on what really matters – providing excellent care for your patients.

## Ready when you need it

At just 83.5 kg (184 lb), Affiniti is one of the lightest in its class and is 16% lighter than its predecessor. With its small footprint and fold-down monitor, pushing the system down hallways and in tight spaces is easy. Affiniti can be placed in sleep mode within two seconds and boot up to full functionality in just seconds. Wireless DICOM further aids workflow.



With image replication and TGCs on its tablet touchscreen, Affiniti is designed to reduce reach and button pushes.

Philips leverages the experiences of its customers, designing Affiniti to address the challenges of daily scanning. We understand the reality of tight spaces, high patient volume, technically difficult patients, and time constraints, and we've designed the system with thoughtful details to help lighten your workload.





# The right touch

54.6 cm (21.5 in) monitor articulates for easy viewing and folds down for transport

System goes to sleep in two seconds; back to full functionality in just seconds

Support request button for immediate access to Philips support

Four transducer ports and one-handed transducer access



# A smart investment

We understand your challenges – uncertain economic times, changing healthcare landscapes and the impact of healthcare reform. We know that efficient workflows and system uptime are critical success factors in running an effective healthcare business. While you'll find Affiniti a powerful tool to enhance patient and clinician satisfaction, the system itself consumes very little power.

Affiniti boasts a low total cost of ownership, making it a smart investment. Built to last, it is designed to withstand the rigors of high patient volume. Smart service options\* help reduce disruption to your everyday workflow.

## Library quiet

Silent as a library, with a smaller footprint than conventional ultrasound models, Affiniti will not distract you from the care you want to provide.

## Scanning comfort

The control panel with 180° of movement and generously sized articulating monitor of 54.6 cm (21.5 in) enhance scanning comfort, whether standing or sitting.



## Exceptional serviceability

The system features a superb modular design for rapid repair.

Affiniti offers a defense-in-depth strategy, implementing a suite of security features designed to help clinical IT professionals and healthcare facilities provide additional patient data privacy and virus protection, as well as protection from unauthorized access via the ultrasound systems on hospital networks.

Affiniti consumes nearly

# 40%

less power

than its predecessor.\*\*

It consumes less energy than a toaster and generates less heat, which can help you save on energy and cooling costs.



Support request button for immediate access to Philips support.

\* Not all services available in all geographies; contact your Philips representative for more information. May require service contract.

\*\* HD15



# Count on us as your patients count on you

The value of a Philips ultrasound system extends far beyond technology. With every Affiniti system, you get access to our award-winning service organization,\* competitive financing, and educational tools that help you get the most out of your system.\*\*

## **ISSL technology**

This industry-standard protocol meets global privacy standards and provides a safe and secure connection to the Philips remote services network using your existing Internet access point.

\* Philips is rated number one in overall service performance for ultrasound for 23 consecutive years in the annual IMV ServiceTrak survey in the USA.  
\*\* Optional. Not all services available in all geographies; contact your Philips representative for more information. May require service contract.

### Always there, always on

We work as one with your team to keep your Affiniti system running smoothly.

### Remote service capabilities maximize efficiency

Easy, rapid technical and clinical support through remote desktop enables a virtual visit with a Philips expert.

If you prefer to keep your know-how in-house, the OmniSphere Remote Technical Connect application\* allows your BioMed team remote access to Philips systems on your network so that you can have remote service capabilities your way.

### Remote software distribution boosts performance over the entire system lifecycle

Remote software distribution provides a simple, convenient, and safe process to seamlessly receive updates at a time that suits you, keeping your system at peak performance now and in the future.

### Proactive monitoring solutions maximize uptime

Philips proactive monitoring increases system availability by predicting potential system disruptions and proactively acting on them, letting you focus on what is most important – your patients.

### Immediate support request at your fingertips

The support request button allows you to enter a request directly from the control panel for a fast and convenient communication mechanism with Philips experts without leaving your patient, minimizing workflow interruption.

### On-cart transducer test provides confidence in your transducer quality

On-cart transducer test provides a non-phantom method to test Affiniti transducers at any time, giving you confidence in your diagnostic information.

### Sharing risk, increasing the return on your investment

Partner with us to maximize utilization and uptime of your Affiniti system.

### Utilization reports for confident decision-making

Data intelligence tools can help you make informed decisions to improve workflow, deliver quality patient care and decrease the total cost of ownership. The on-board utilization tool provides individual transducer usage data and the ability to sort by exam type. The OmniSphere Utilization Optimizer takes this a step further by providing easy-to-use charts and graphs for all of your applicable networked Philips systems.\*

### Understanding your needs, designed for you

Our flexible RightFit service agreements, education offerings and innovative financing solutions can be adapted to meet your needs and strategic priorities.

- **Technology Maximizer Program:** helps keep your system performing at its peak by continuously providing the latest software from Philips at a fraction of the cost of the same upgrades purchased individually over time.
- **Xtend Service Coverage:** lets you choose additional service coverage for your ultrasound equipment at the time of purchase to more easily calculate your total cost of ownership.
- **Clinical education solutions:** comprehensive, clinically relevant courses, programs, and learning paths designed to help you improve operational efficiency and enhance patient care.

Business optimization tools such as OmniSphere allow you to use the power of data and connectivity to generate actionable insights and enhance productivity to improve your return on investment.

\* Check with your Philips representative for system compatibility.



## References

1. University of Colorado, protocols study, April 2007.
2. 2014 internal workflow study comparing Affiniti to HD15.

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