PHILIPS

NeuroScience

MR software

Conduct your NeuroScience
studies with confidence

Philips NeuroScience package for 1.5T & 3.0T MR systems

Key benefits

- High-end diffusion imaging (up to 128 directions, up to 32 b-values, multi-shell and user-defined directions)

- For BOLD fMRI: Enhanced ghost stability and extended data storage, quality assurance tool integrated on your scanner, B0 mapping

- Export tools allowing off-line postprocessing with third party software

Our NeuroScience package supports both clinical and neuroscience imaging activities through advanced functionality that is fully integrated into your MR system's user interface. It supports high definition brain fiber tracking – including crossing fibers – as well as diffusion-weighted multi-shell acquisitions with multiple b-values and up to 128 diffusion directions. To make diffusion imaging efficient for your specific demands, you can define your own matrix of diffusion directions for each b-value.

fMRI capabilities
This package extends data storage to hold up to 64k images, accommodating long fMRI sessions. Advanced software enhances Nyquist ghost stability and makes it possible to obtain B0 maps for off-line data correction. The MR console user interface includes a quality assurance tool that follows fBRIN standards, enabling monitoring of consistency in longitudinal fMRI studies. In addition, integrated and easy to use export tools in different formats (including NIfTI) allow off-line processing using your favorite investigation tools.

A comprehensive package
By leveraging our balanced gradients and dS SENSE parallel imaging, this package delivers excellent image quality and stability in neurofunctional imaging, even for challenging image procotols such as high b-value diffusion or long fMRI studies. It can be used with our dS Head 32 element* digital head coil, which has been designed for neuroscience and neurofunctional studies. Our broad neuroscience offerings also include real-time BOLD fMRI* assessment tools on the console, SensaVue* paradigm generation workstations, and dedicated post-processing through IntelliSpace Portal*.

*dS-Head 32element, fMRI BOLD, Intellispace Portal, and SensaVue workstations are optional items. A separate purchase is necessary.

NeuroScience package

| Imaging	NeuroScience package
Diffusion	Up to 128 directions
	Up to 32 b-values
	Total of 2048 diffusion volumes
	Data storage 64k images
	Flexible sampling schemes: including multi-shell and user-defined directions per b-value
	Export in DICOM and XML-REC format
	Export of the diffusion direction matrix in MPS coordinates
BOLD fMRI	Data storage 64k images
	B0 mapping
	Enhanced ghost stability
	Quality Assurance tool
	Export in NIfTI
Field strength	1.5T and 3.0T
System type	Achieva, Ingenia, and Ingenia CX

Philips comprehensive NeuroScience solution extends your system capabilities from clinical practice to clinical science.
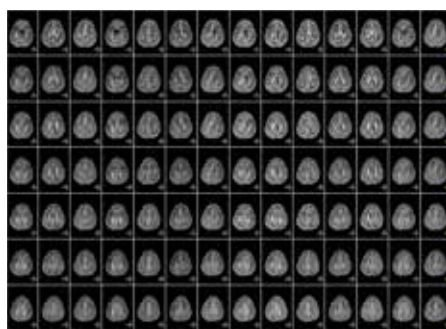
Ingenia 3.0T CX diffusion-weighted images at 128 different diffusion directions
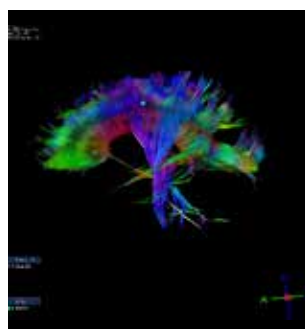
White matter fibers passing through the corpus callosum and the spinal tract, as extracted from 128 direction diffusion-weighted images
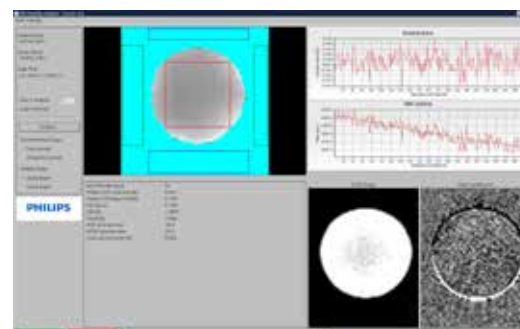
The Quality Assurance user interface tool delivers consistency

Contact Philips for a trial key[1]

[1] Only for systems with release 5 onwards

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