PHILIPS

Dual tuned head coil

MR coils

MR imaging beyond proton

Multi-nuclei (MN) imaging and spectroscopy is a key area of leading-edge clinical investigation. Adding multi-nuclei to your Philips 3.0T MR system opens a window of research into other nuclei, in search of metabolic and functional information. Thanks to a seamless integration onto the 3.0T platform, multi-nuclei imaging and spectroscopy become part of your daily clinical workflow.

The dual tuned head coils from RAPID Biomedical are directly connecting to the Philips Multi Nuclei platform. The combination allows you to perform brain exams, including acquisition of proton and other nuclei (31P, 13C, 23Na), without switching coils. This allows you to schedule your multi-nuclei studies as part of your clinical exam time slots. E.g. a full brain study, including both proton (1H) and sodium (23Na) imaging can be completed in 30 minutes[1], all organized in one ExamCard without additional coil change. The sodium (23Na) brain scan can be completed in less than 15 minutes[2]. The 1H/13C and 1H/31P bring similar MN and proton based imaging- and spectroscopy possibilities, all with a single ExamCard.

Multi-nuclei imaging or spectroscopy can be run and reconstructed directly from the standard user interface. The ExamCard interface immediately recognizes the dual tuned head coil. And the nucleus is just a scan parameter like any other sequence parameter. Reconstruction and viewing of multi-nuclei images or spectra, as well as the process for sending the data to PACS is fully integrated, so workflow does not differ from proton imaging.

Combined with our Multi Nuclei specialist package, the dual tuned head coil delivers the confidence to explore new imaging pathways and the speed to integrate multi-nuclei studies in your day-to-day workflow.

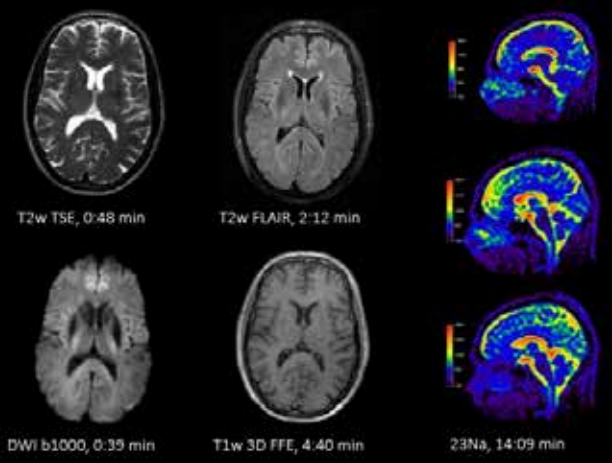
RAPID Biomedical

1 Measured from start of first scan to end of last reconstruction. Includes 1H (T2w TSE, T2w FLAIR, SSh DWI, and 3D T1w FFE pre&post) + 23Na (with a voxel size <= than 4mm isotropic).

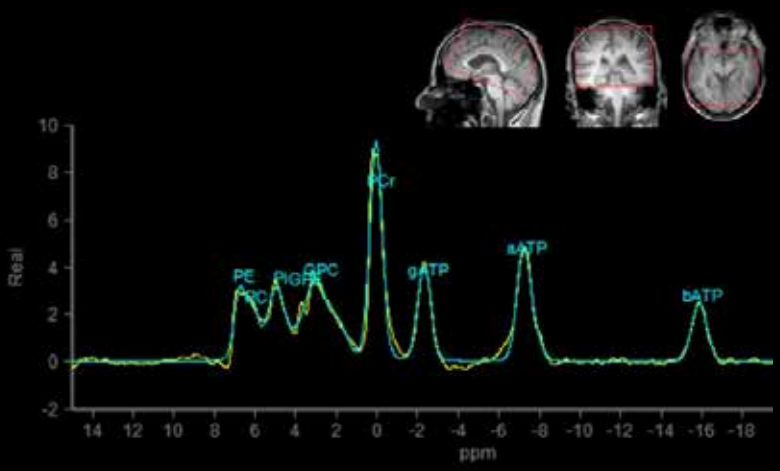
2 For 4 mm isotropic voxels.

Dual tuned head coil

Nuclei	1H, 31P, 13C, 23Na
Systems	3.0T dSync systems with Multi Nuclei
Inner diameter	26,5 cm
Length of resonator	24 cm
Coil solution type	Transmit-receive, single channel, circular polarisation
Applications	Brain
Coil connection	T/R interface



Routine Brain examination including 23Na imaging as well as pre and post contrast T1w scans in under 30-minutes using a dual-tuned 1H/23Na head coil.



31P phase acquired spectrum using decoupling and Nuclear Overhauser Enhancement (NOE), using a dual-tuned 1H/31P head coil.

4522 991 73331 * APR 2022

How to reach us
Please visit www.philips.com
healthcare@philips.com