

7 T Multi-Channel Dual Tuned Head Coil *

MR Coils Made-to-Measure

Proton and non proton MRI/MRS is still challenging due to the low SNR of non proton images. The SNR can be increased both by increasing the field strength at 7 T and using dual tuned coils with receive array technology. RAPID Biomedical has developed an integrated 7 T dual tuned quadrature Tx/Rx resonator and a 30-channel non-proton Rx Array for detection.

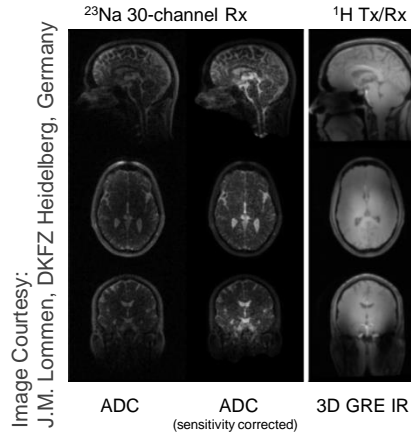


Image Courtesy:
J.M. Lommen, DKFZ Heidelberg, Germany

The in-vivo example shows: ^{23}Na MRI data from 30-channel array data reconstructed using ADC (1st column) and B_1^- corrected ADC (2nd column). Anatomical details become clearly visible. The ^1H data displays good field homogeneity (3rd column).

- composed dual tuned volume resonator and 30 channel non-proton Rx-array for human head applications
- transmit / receive quadrature polarization for dual tuned volume resonator
- high SNR performance using 30 channel non-proton Rx-array
- sliding mounting mechanism for easy access
- open design for fMRI studies
- other nuclei combinations on demand

Important Note: For Siemens Terra MR systems a 32-channel version of this product is available exclusively through SIEMENS Healthcare.

Please contact us for availability on your MR system.

Specifications

B_0 -field strength	7 T
housing dimensions	dual tuned volume resonator: ID: 27 cm, OD: 36.5 cm 30 channel non-proton Rx-array: ID: 19.5 cm x 22x4 cm (oval), OD: 26.4 cm
weight	ca. 12.5 kg

* Regulatory requirements for medical products will vary by country and MR system. Please contact us at info@rapidbiomed.de or info@rapidmri.com (USA, Canada, and South America) to determine approval status for products mentioned on this product sheet.