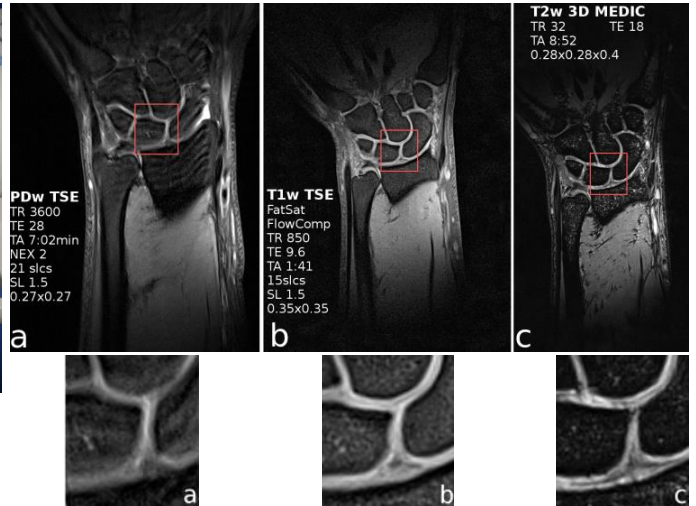


16-Channel Wrist Array @ 7 T *

MR Coils Made-to-Measure

7 T MRI scanners have the benefit of potentially higher SNR which can be used to increase the resolution of MR images. RAPID Biomedical has developed a combination of a transmit volume coil (Tx) and a 16 channel high density receive array (Rx) to effectively support the researchers to exploit the increased field strength in their investigation of the fine structures in the human wrist.



- array for ultra high resolution wrist imaging
- transmit quadrature birdcage
- optimized work flow by split receive array and separate transmit coil
- 16 receive channels, supporting parallel imaging
- split housing for patient comfort and easy positioning
- head rest for comfortable „Superman“-positioning
- slide frame supports fully flexible positioning for left or right wrist
- individually adaptable to most established MR systems

The current rules for medical devices prohibit a CE-approval for 7 T coils. To compensate for this RAPID Biomedical runs a medical device compatible testing of 7 T coils.

* Images show in-vivo (coronal) of the right wrist of a healthy volunteer. Apart from minor motion artifacts on the left the images are pristine and clearly depict the wrist anatomy and cartilage in high detail.

Specifications

| | |
|-----------------------|--|
| approvals | no Medical Device, CE according to Council Directive 93/42/EEC |
| B_0 -field strength | 7 T |
| housing dimensions | volume resonator: ID 171 mm, OD 208 mm, length: 290 mm Rx Array: ID 60mm x 80mm (patient access side) / 124 mm (wiring side), length: 755mm |
| weight | ca. 8.7 kg |

Image Courtesy: Stefan Alt, DKFZ Heidelberg, Germany