MRI – Magnetic Resonance Imaging

Siemens`s coils

Technical specification:

Head / Neck (64 channels)

- 64-channels design
- Anthropomorphic geometry with full head/neck coverage
- Extremely high SNR for high-resolution, large FoV imaging
- Extreme iPAT performance for ultra-fast imaging with minimal SNR loss
- With full coverage of the head and neck and seamless integration with the spine and body coils
- Open, patient-friendly design
- Accessible design to facilitate fMRI visual stimulation and eye tracking experiments
- Rear port for EEG cables for simultaneous EEG/MR imaging for up to 128 electrodes
- Dimensions: 435 mm × 395 mm × 350 mm

Head / Neck (20 channels)

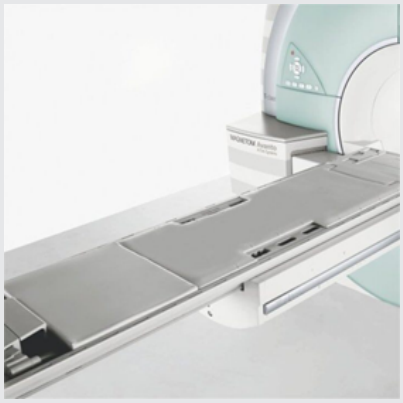
- 20-channel design with 20 integrated preamplifiers
- Spacious design
- Open patient-friendly design
- iPAT-compatible in all directions

Tx/Rx CP Head Coil

- CP Send/Receive head coil with integrated preamplifier
- Upper coil part removable
- Open patient-friendly design
- No coil tuning
- Cushions for patient comfort and stabilization of the head
- Applications: Head examinations; High resolution brain spectroscopy
- Dimensions: 315 mm × 475 mm × 360 mm (L×W×H)

Spine Matrix Coil

- 24-element design with 24 integrated preamplifiers, 8 clusters of 3 elements each
- Integrated into the patient table and streamlined with Head Matrix coil and Neck Matrix coil
- No coil tuning
- iPAT-compatible in all directions
- High resolution imaging of the whole spine
- Various applications in combination with additional coils
- Dimensions: 1185 mm × 485 mm × 33 mm (L×W×H)



Body (18 channels)

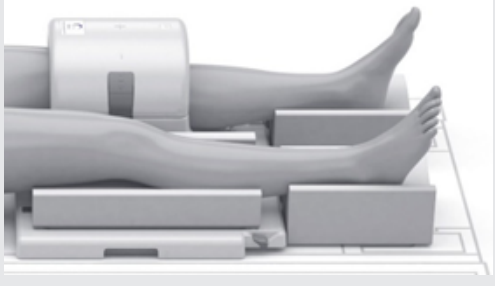
- 18-channel design with 18 integrated preamplifiers, with 3 rows of 6 elements each
- Operates in an integrated fashion with the Spine 32
- iPAT-compatible in all directions
- Dual-Density Signal Transfer enables ultra-high density coil design by integrating key RF components into the local coil
- Applications: Thorax; Heart; Abdomen; Pelvis; Hip; Vascular
- Dimensions: 385 mm × 590 mm × 65 mm (L×W×H

Wrist (16 channels)

- 16-channel coil with 16 integrated preamplifiers
- iPAT-compatible in all directions
- Hinged design of the upper part for quick and easy patient positioning with stabilization pads for comfort
- Holder allows off-center positioning to ensure a comfortable position for the patient
- Dual-Density Signal Transfer enables ultra-high density coil designs by integrating key RF components into the local coil
- Applications: High resolution hand and wrist imaging
- Dimensions: 332 mm × 215 mm × 115 mm (L×W×H)

Knee (15 channels) Tx/Rx Knee 15 Flare Coil

- Transmit / receive
- iPAT-compatible in all direction
- flared opening, upper coil part removable
- Inner coil diameter (center): 155mm
- Holder allows off-center positioning



Large Flexi (4 channels)

- Four integrated low-noise preamplifiers
- Allows flexible coil positioning
- Only one interface necessary for all Flex coils
- Several Flex Coil Interfaces can be used simultaneously
- Wrap-around coil made from soft and flexible material
- 4 linear polarized elements
- iPAT-compatible
- No coil tuning
- Imaging of large regions such as medium to large shoulders, hip and knee
- Dimensions: 516 mm × 224 mm

Small Flexi (4 channels)

- Four integrated low-noise preamplifiers
- Allows flexible coil positioning
- Only one interface necessary for all Flex coils
- Several Flex Coil Interfaces can be used simultaneously
- Wrap-around coil made from soft and flexible material
- 4 linear polarized elements
- iPAT-compatible
- No coil tuning
- Imaging of small regions such as small to medium shoulders, wrist, elbow and ankle
- Dimensions: 366 mm × 174 mm

Special-Purpose (4 channels)

- iPAT compatible
- No coil tuning
- Applications: Carotids; Examinations with small Field-of-Views; Small structures near the surface
- Dimensions: 477 mm × 143 mm × 35 mm (L×W×H)

Middle loop (1 channel)

- Examination of inner ear, structure of wrist and fingers, pediatrics examinations
- Diameter: 70 mm

Small loop (1 channel)

- Examination of small structures near the surface (e.g. joints of fingers and toes, wrist, skin, temporo mandibular joints
- Diameter: 40 mm

Producer's web: https://www.siemens-healthineers.com/magnetic-resonance-imaging

RAPID coils

Technical specification:

Dual Tuned Quadrature Head 1H/31P

- For 31P spectroscopy / imaging
- Dual tuned volume resonator for head applications
- Transmit / receive – quadrature polarization on both channels
- Enhanced sensitivity
- Optimum SNR and homogeneity
- Capable of performing 1H decoupled experiments when applicable
- Open design, maximum patient comfort
- Inner diameter 26,5cm; outer diameter 35cm
- Siemens Tim / MNO (Multi Nucleus Option) coil interface 3T

31P:
- Transmit / receive
- Quadrature polarization
- Resonance frequency 49.9MHz

1H:
- Transmit / receive
- Quadrature polarization
- Resonance frequency 123.2MHz

Dual Tuned Flex Surface Coil

- For 31P spectroscopy / imaging
- Multiple purpose application such as extremities and skeletal muscle
- Transmit/receive linear polarization for both nuclei
- Supports proton decoupled spectroscopy, if applicable
- Flexible housing provides maximum patient comfort

Producer's web: https://www.brainproducts.com/products_by_apps.php?aid=2

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