

## Connectome Neonatal System

### MR Coils Made-to-Measure

The Connectome Neonatal System was developed as a joint project by Jo Hajnal, Centre for the Developing Brain & Department of Biomedical Engineering, St. Thomas Hospital, KCL London, U.K. and RAPID Biomedical. This system is being used for the European Research Council funded "Developing Human Connectome Project" (319456) (see [developingconnectome.org](http://developingconnectome.org)).

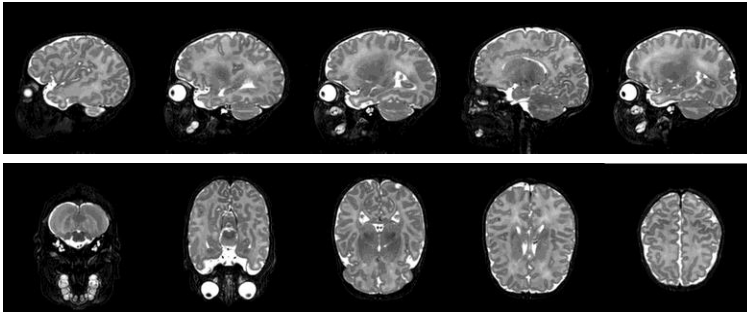


Image Courtesy: Dr. Emer Hughes  
Centre for the Developing Brain  
& Department of Biomedical Engineering  
KCL London, U.K.

The sequence is a T2 TSE with an acquired voxel resolution of  $0.8 \times 0.8 \times 1.6 \text{ mm}^3$  and a slice gap of  $-0.8 \text{ mm}$ . TR=12000 ms, TE=156 ms, SENSE =2. Time =3 mins 25 secs

## Specifications

- dedicated for examining babies up to 44 weeks gestational age at time of scan
- rigid but light shell with positioning holes to prepare the baby
- support frame to slide the head coil over the baby and shell
- close fitting 32-channel multi-coil receiver array
- three immobilization cushions (Pearltec AG) that conform to the shape of the baby's head
- baby transport trolley ①
- acoustic hood to protect baby from noise ②



- individually adaptable to different MR systems
- $B_0$ -field strength: 3 T
- housing dimensions: outer diameter coil 20 cm, inner diameter shell 13/15.2 cm  
coil housing length approx. 25 cm (shell ca. 69 cm, frame ca. 115.4 cm)
- approx. weight: coil 5.2 kg / shell 2.7 kg

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