

MRI Series Presentation

OPENMARK 5000

International sales & Marketing





OPENMARK 5000

Dual-pillar permanent MRI system









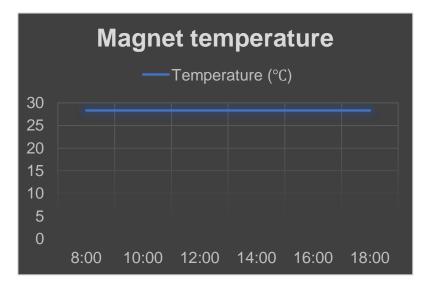
Perfect magnet



Unique A-shimming technology, ensure a high homogeneity of magnetic field.

1.6ppm@40cm DSV, VRMS

Intelligent temperature control system, keep magnet in constant temperature, which will ensure a high stability of magnetic field.





ANKE

Large openness structure, Increase the application range of patients.



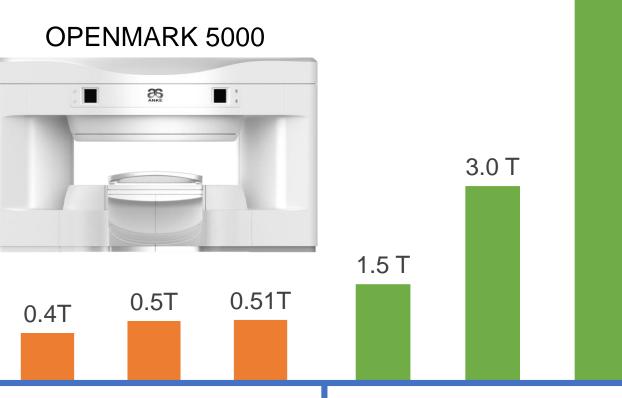
Perfect magnet



7.0 T



Highest magnetic field of permanent magnet, up to 0.51T



Permanent magnet

0.36T

0.35T

0.3T

0.38T

Superconducting magnet

0.2T



Advanced gradient system



RF & Gradient integration Coils

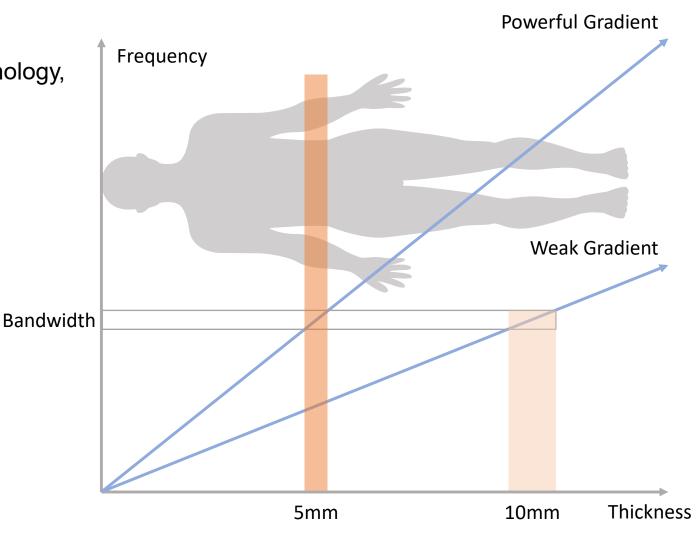
Combined with Self-shielding & Eddy-'0' technology, ensure a high image quality.

High level linearity & Powerful output

Max amplitude = 30mT/m

Max slew rate = 100T/m/s

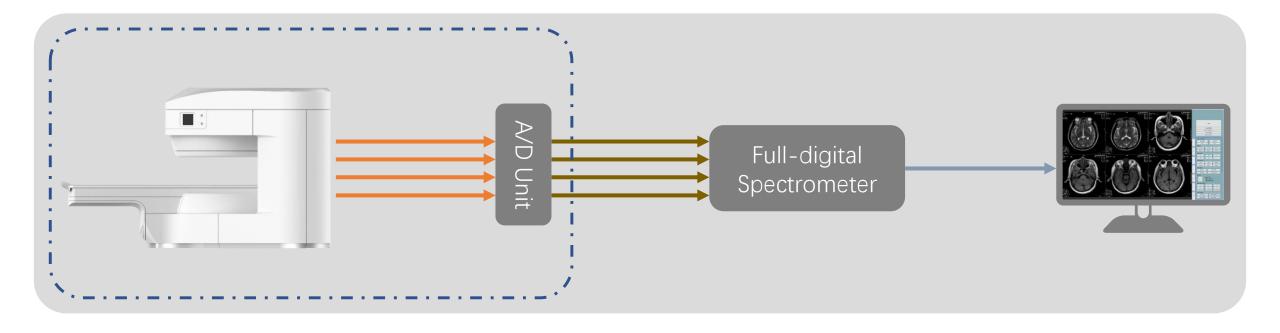






Digital 4-channels RF system





- 4 channels PA receiving coils
- 4 channels A/D Unit
- 4 channels full-digital spectrometer
- Powerful RF output 6KW



Greatly improve SNR of images



Outstanding PA receiving coils



PA Head coil



4 channels

- Head examination
- MR Head Angiography
- TMJ (temporomandibular joint) imaging

PA Neck coil



2 channels

- Neck examination
- Cervical spine examination
- MR Neck Angiography

PA Body coil



4 channels, 3 size*

- Thoracic region examination
- Thoracic & Lumbar spine examination
- Abdomen examination
- Pelvis & Hip examination

PA Knee coil



2 channels

- High resolution knee imaging
- Lower limb joints examination

Marked with '*' means it's not a standard offer.



Outstanding PA receiving coils



PA Shoulder coil



2 channels

High resolution shoulder imaging





2 channels

- High resolution hand imaging
- High resolution wrist imaging

PA Ankle coil*



2 channels

- High resolution ankle imaging
- High resolution foot imaging

PA Breast coil*



4 channels

High resolution breast imaging

Marked with "" means it's not a standard offer.



Humanization design



Advocating the combination of technology and humanities, provide a comfortable operation experience to you.









Touched LCD screen



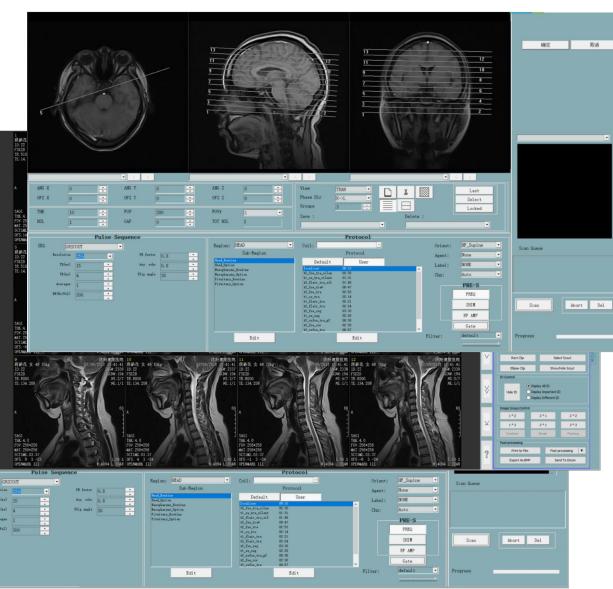
Integrated electric patient table



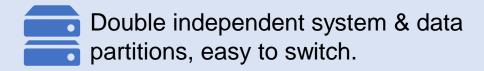


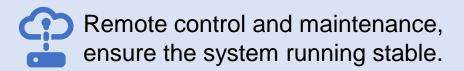
Professional APEX operation platform



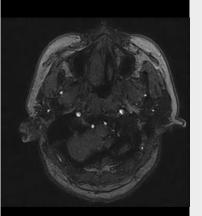


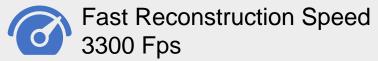
◆ DIS (Data integrity & security) system





Protect patient and system data, save your time and maintenance cost.







Clinical application (Permanent MRI VS Superconducting MRI)



Image quality:

Application	Image quality	
	Permanent (0.51T)	Superconducting (1.5T)
Head	Good (9)	Good (10)
Spine	Good (9)	Good (10)
Bone & joint	Good (9)	Good (10)
Chest	Good (8)	Good (10)
Breast	Good (8)	Good (10)
Abdomen	Good (8)	Good (10)
Pelvic	Good (8)	Good (10)
Blood Vessel	Good (8)	Good (10)
Diffusion	Good (7)	Good (9)
Perfusion, Cardiac, DTI, Spectroscopy	No (0)	Good (8)

Permanent MRI 28%

- Claustrophobic patients
- Obese patients
- A few metal implants
- MR guided interventional treatment, surgery
- Joint movement imaging

72% of clinical application

Superconducting MRI 28%

- Small lesion
- Functional Imaging
- MR spectroscopy



Clinical application



Comprehensive clinical application, Cover the whole body

Thin slices imaging, close to superconducting MRI

Routine scanning:

Head: 4.0mm - 6.0mm

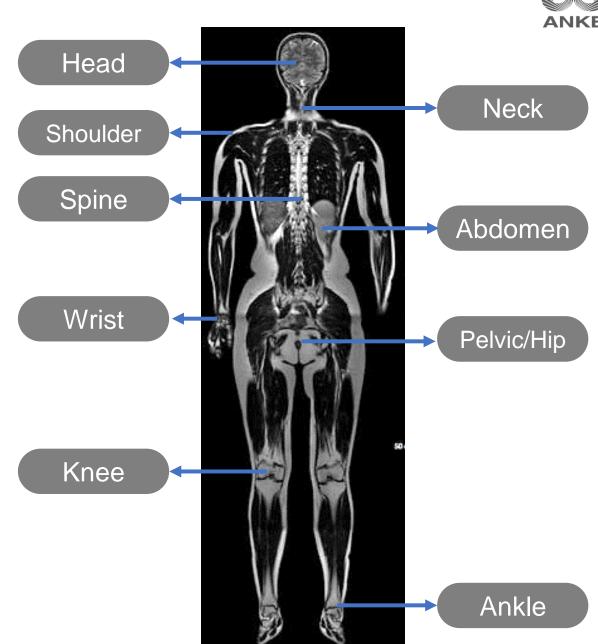
Neck: 3.0mm - 4.0mm

Spine: 3.0mm – 4.0mm

Abdomen & Pelvic: 5.0-7.0mm

Limbs: 3.0mm-4.0mm

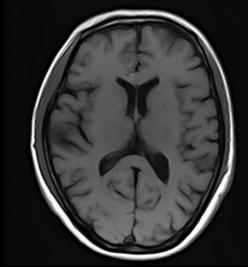
3D scanning:1.0mm – 2.0mm



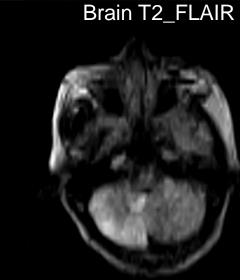


Clinical application-Head

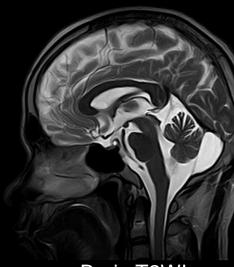




Brain T1WI



Brain DIXON* Brain DWI_b1000



Brain T2WI



MRA-TOF3D



High resolution head images



Comprehensive protocol

- T1WI, T2WI, T1 & T2 FLAIR,
 DWI
- 3D T1WI, T2WI for Inner ear & pituitary
- MR angiography
- DIXON*



Fast scan speed

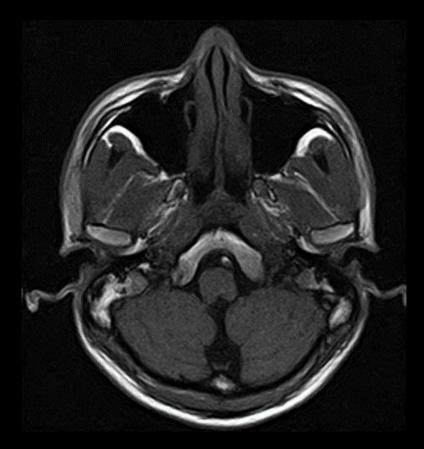
Routine scanning finish in 15-18 minutes

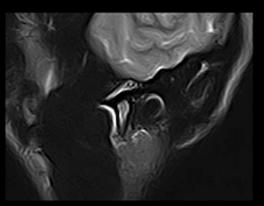
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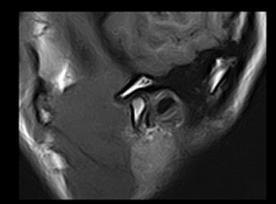


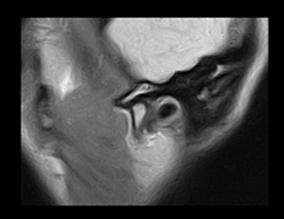
Clinical application-Head

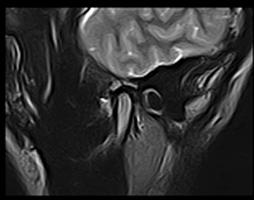


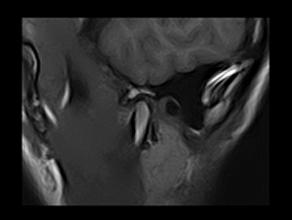


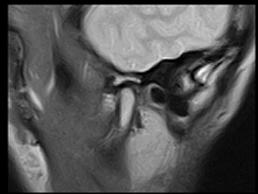










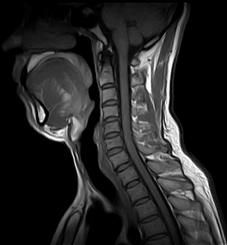


High resolution TMJ imaging, 2mm thickness

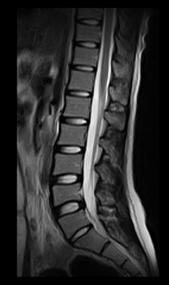


Clinical application-Spine





C-Spine T1WI



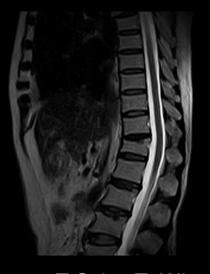
L-Spine T2WI



C-Spine STIR



L-Spine STIR



T-Spine T2WI



L-Spine T2WI_Tra



High resolution spine images



Comprehensive protocol

- T1WI, T2WI, PDWI, STIR
- T2*WI based on GRE
- MR myelography (MRM) 2D
 & 3D
- MR angiography
- DIXON*



Fast scan speed

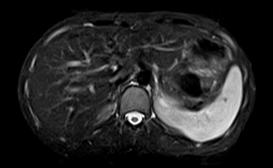
Routine scanning finish in 13-17 minutes

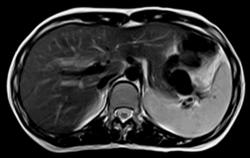
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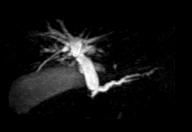


Clinical application-Body









4

High resolution body images



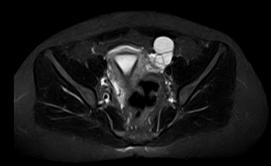
Comprehensive protocol

- T1WI, T2WI, STIR
- MRCP, MRU 2D & 3D
- DWI, DIXON*
- Propeller imaging*
- Breath hold and Respiratory gating functions

Abdomen STIR

Abdomen T2WI

MRCP







Fast scan speed

• Routine scan

Routine scanning finish in 17-20 minutes

Pelvic STIR Pelvic T2WI

Pelvic T2WI_Cor

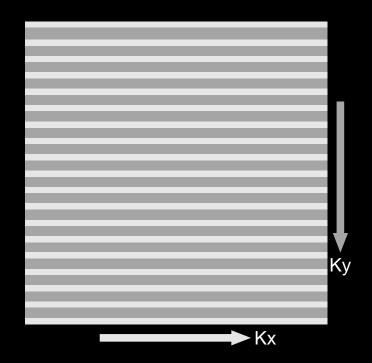
Marked with '*' means it's not a standard offer.



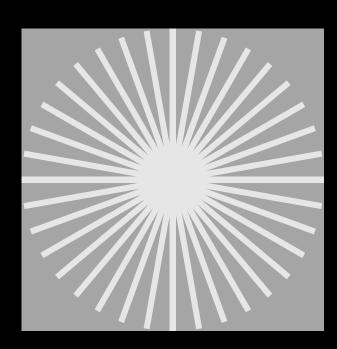
Clinical application-Body

ANKE

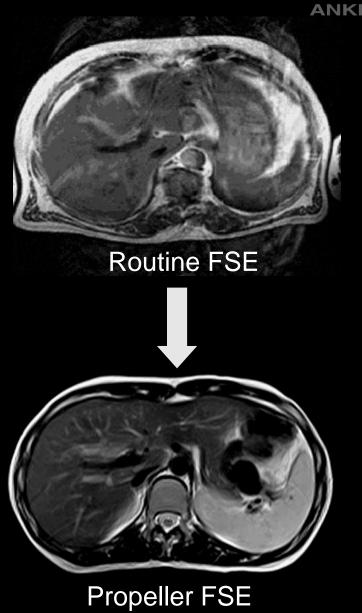
"Propeller" technology is a new method of MRI data collection and reconstruction, witch will reduce the motion artifact of images.



Basic K space filling



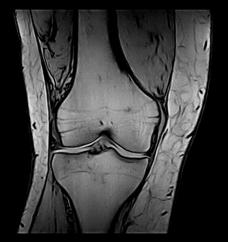
Propeller K space filling



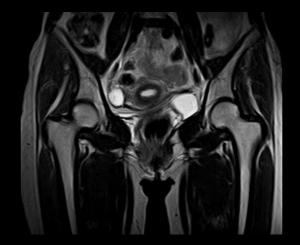


Clinical application-Limbs





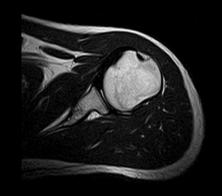
Knee GRE2D



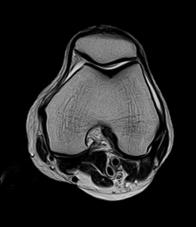
Hip T2WI



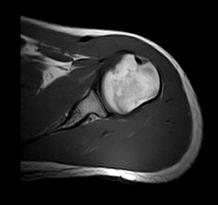
Knee STIR



Shoulder T2WI



Knee T2WI



Shoulder T1WI



High resolution limbs images



Comprehensive protocol

- T1WI, T2WI, PDWI, STIR
- T2*WI based on GRE
- 3D T1WI, T2WI for small joints
- DIXON



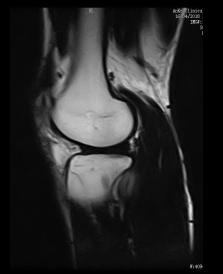
Fast scan speed

Routine scanning finish in 15-18 minutes



Clinical application-Limbs























DIXON_Fat

DIXON_Water

DIXON_T1WI

DIXON_in-phase

DIXON_out-phase



Low operating cost







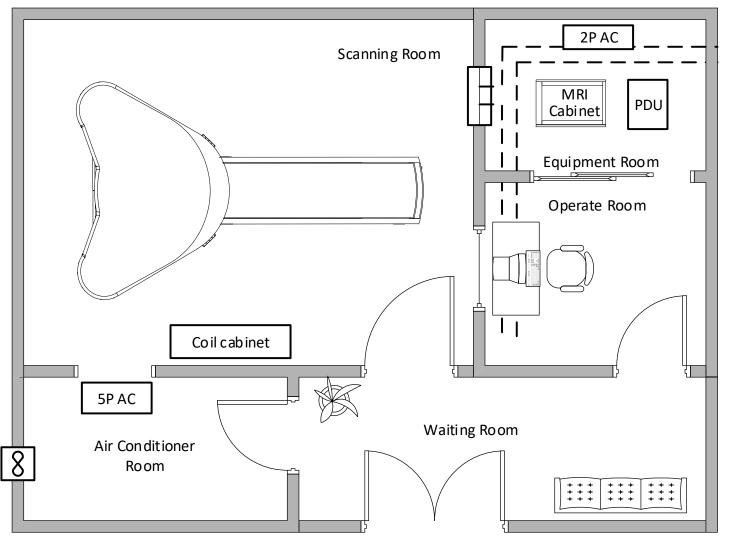
Meet you 72% clinical application with convenient operation experience, you pay only 20% compared to superconducting MRI

The sample data is for reference only, actual cost depends on the customer's operation and maintenance.



Flexible site design





- ◆ Scanning room size: >25m²
- **♦** System peak power: ≤10KW
- **♦** Supplied power: 15KVA

Comprehensive site planning services

- Professional site-planning team
- Full set shielding room provided
- Customized service

Thank you



ShenZhen Anke High-tech Co., Ltd.

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