

Supernova 1.5T

Fiber superconducting magnetic resonance



Beyond Boundaries in Healthcare:
Pioneering the future with Medical Imaging

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* The actual product shall prevail. All pictures in this manual are for reference only. *

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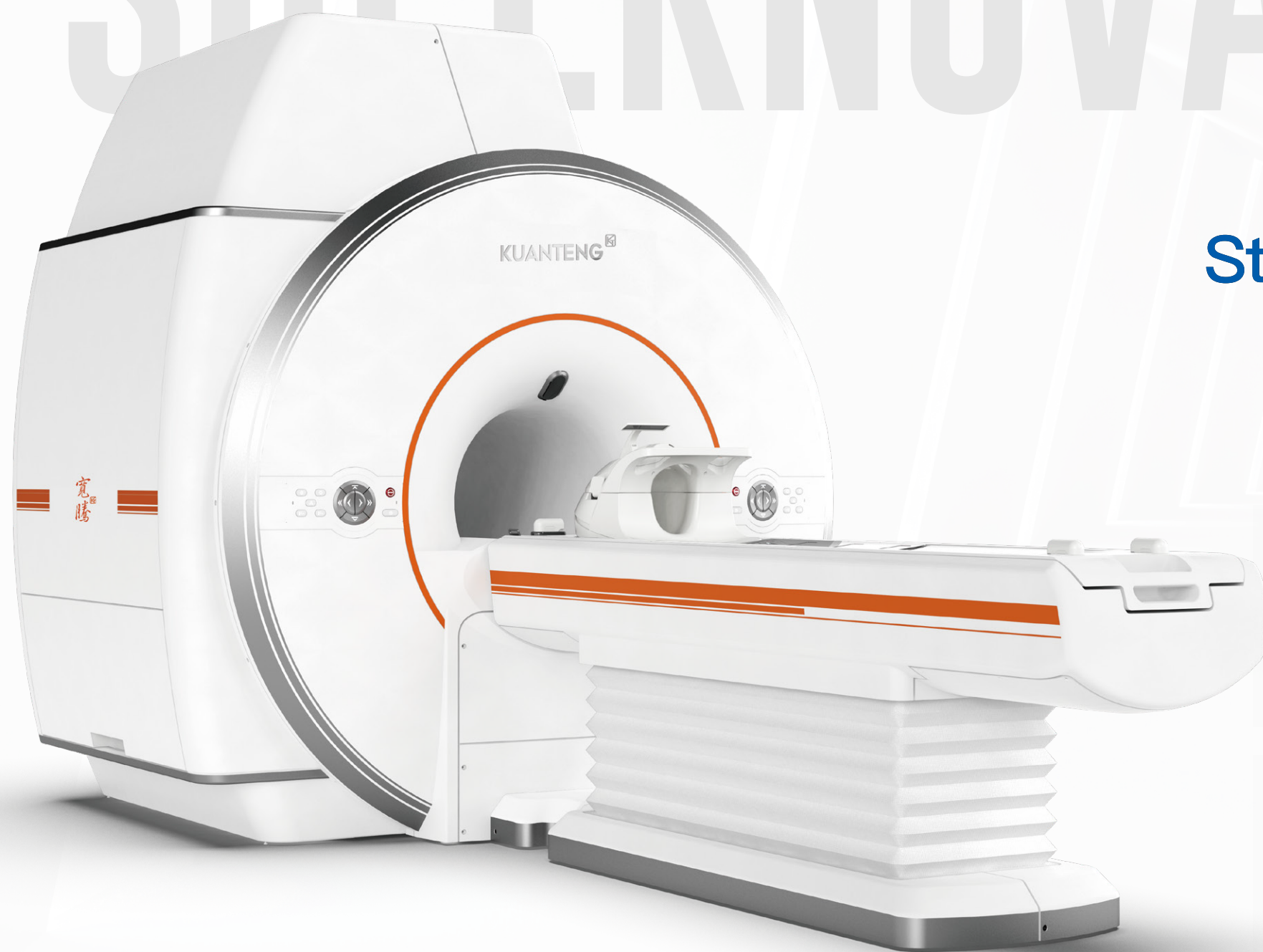
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SUPERNOVA 1.5T



**Strive for excellence &
focus on details**



Supernova 1.5T, adopting the first high signal-to-noise ratio optical fiber transmission technology in China, comprehensively improves signal transmission speed, reduces signal transmission loss, deeply explores the potential of 1.5T superconductivity and optimizes the overall performance of magnetic resonance.



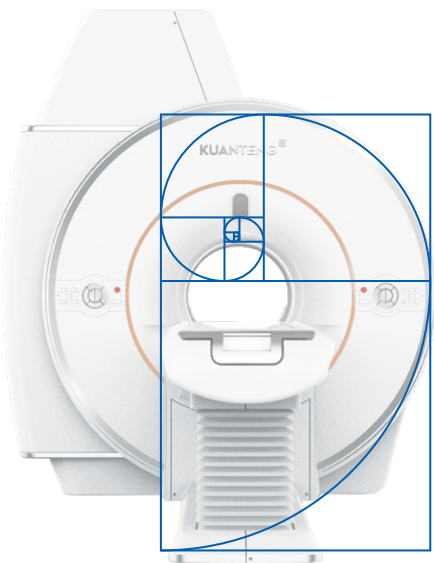
Supernova 1.5T, adopting an all-round intelligent operating platform, optimizes the scanning process, comprehensively improves scanning speed, substantially improves clinical image quality, and truly achieves zero liquid helium consumption to significantly reduce operating costs.

Strength comes from steady accumulation

Supernova 1.5T independently developed & made in China

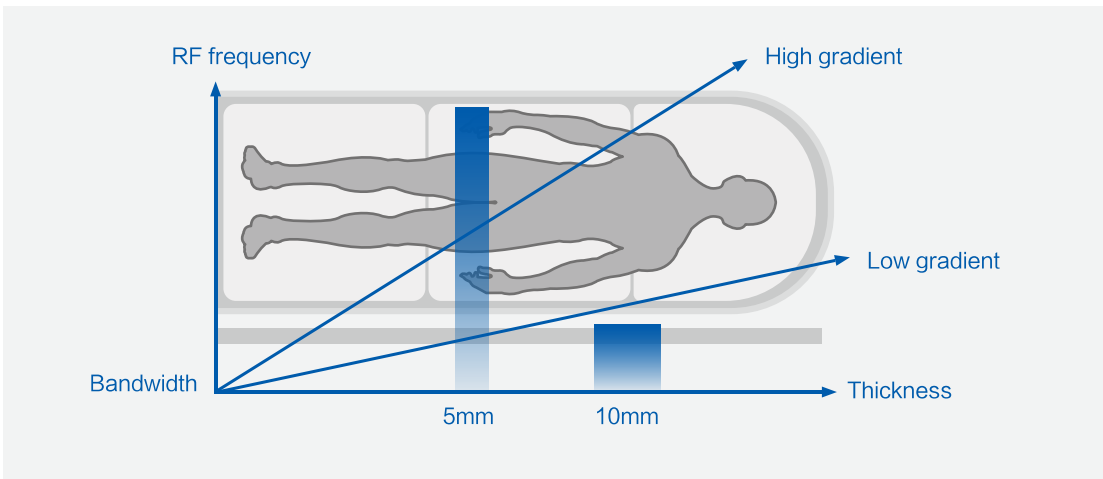
Supernova magnet system

- The use of “golden ratio” magnet reaches a perfect balance between comfortable examination and high quality images
- The uniformity of ultra-high main magnetic field, superior hardware configuration and real-time dynamic field uniformity achieve ultra-high fat suppression uniformity within the image coverage.



Supernova K-power gradient system

- National patent technologies and self-developed ultra-fast gradient systems achieve ultra-fast scanning
- Powerful gradient systems provide hardware platform guarantee for ultra-fast scanning and high-resolution imaging

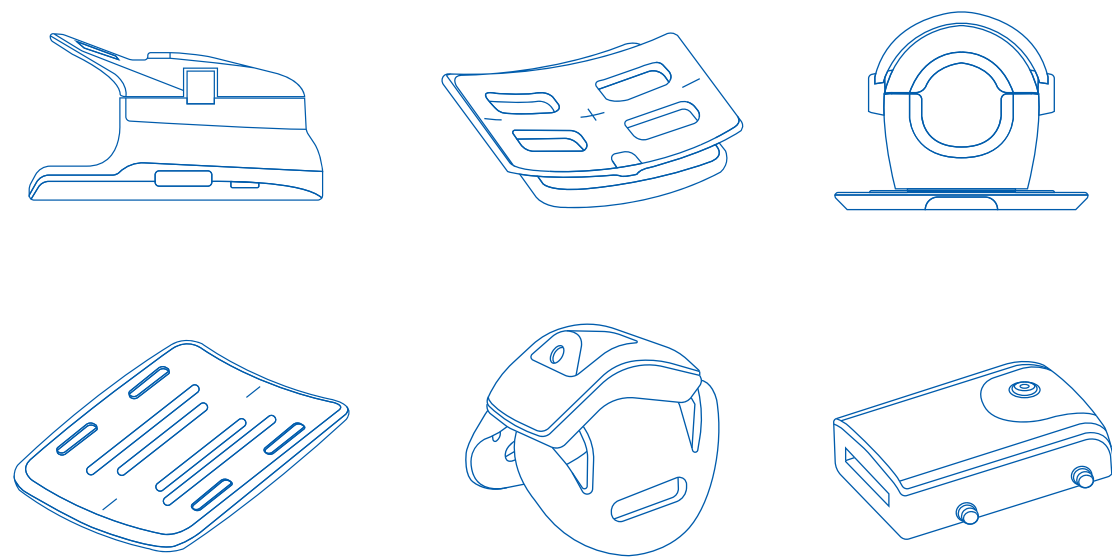


Supernova fiber optic RF system

- The receiving channel is perfectly matched with the coil channel, along with the fiber optic transmission technology, to ensure no loss of image data quality.

Supernova 16-channel fiber optic spectrometer

- PA phased-array localized high-density target coil
 - Ultra-fast sampling rate: Improved signal-to-noise ratio
 - Fiber optic path
 - Optical spectrometer
- Light energy transmission image chain
Overall 33% improvement of signal-to-noise ratio
- Provide the possibility of unlimited expansion of access



Comprehensive clinical solutions

Superb diagnostic capabilities for brain and cranial nerves

Diffusion, perfusion, magnetic sensitivity, non-drugged high-definition vessels, 3D TLC enhancement, and diversified functional imaging aids for routine anatomical imaging

Third generation powerful frozen scanning technology

Dual-engine frozen parallel acquisition technology, bringing forth 3 to 8 times faster scanning speed, is insensitive to motion and takes the shortest time to complete abdomen and heart diagnosis by ultra-fast scanning

Adaptive uniformity correction technique

Consistent signal uniformity and height in all directions of the image field within the scanned image coverage

New full anatomical sequence library

Refined anatomical sites, including inner ear, orbit, pituitary gland, and thyroid gland, and more considerate and thorough scanning sequence pre-setting ensure the highest quality of images within the shortest time and the clinical scanning in one step

Super software post-processing software

Automatic/manual original image optimization is available for users, and 3D MIP MPR and other powerful post-reconstruction processing functions also help complete the diagnosis with users

Supernova silent scanning technology



The optimized silent sequence design makes the Lorentz force on the gradient coils almost zero, achieving maximum noise reduction at the source.



Intelligent gradient operation and gradient noise reduction technologies further reduce noise transmission.

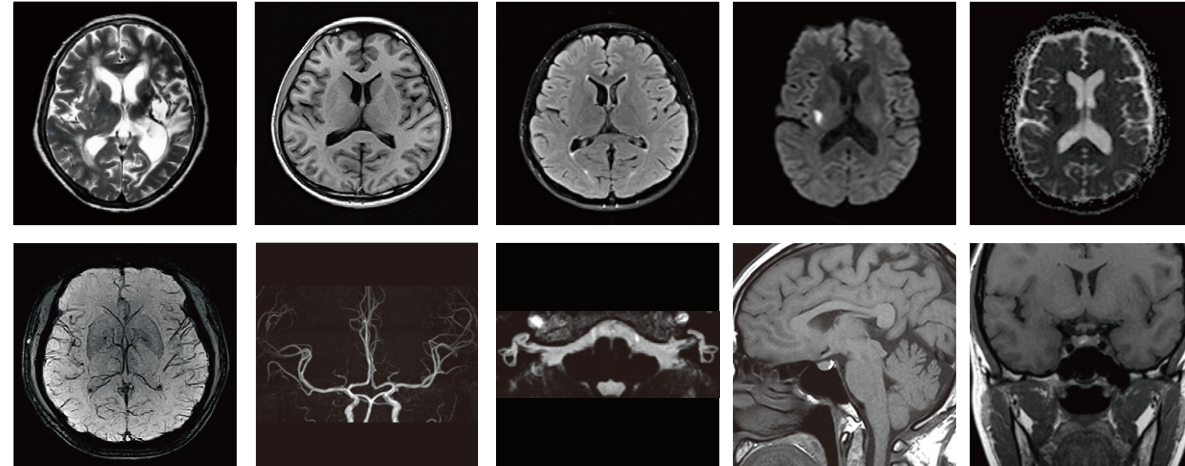


Noise is significantly reduced by 70-95%.



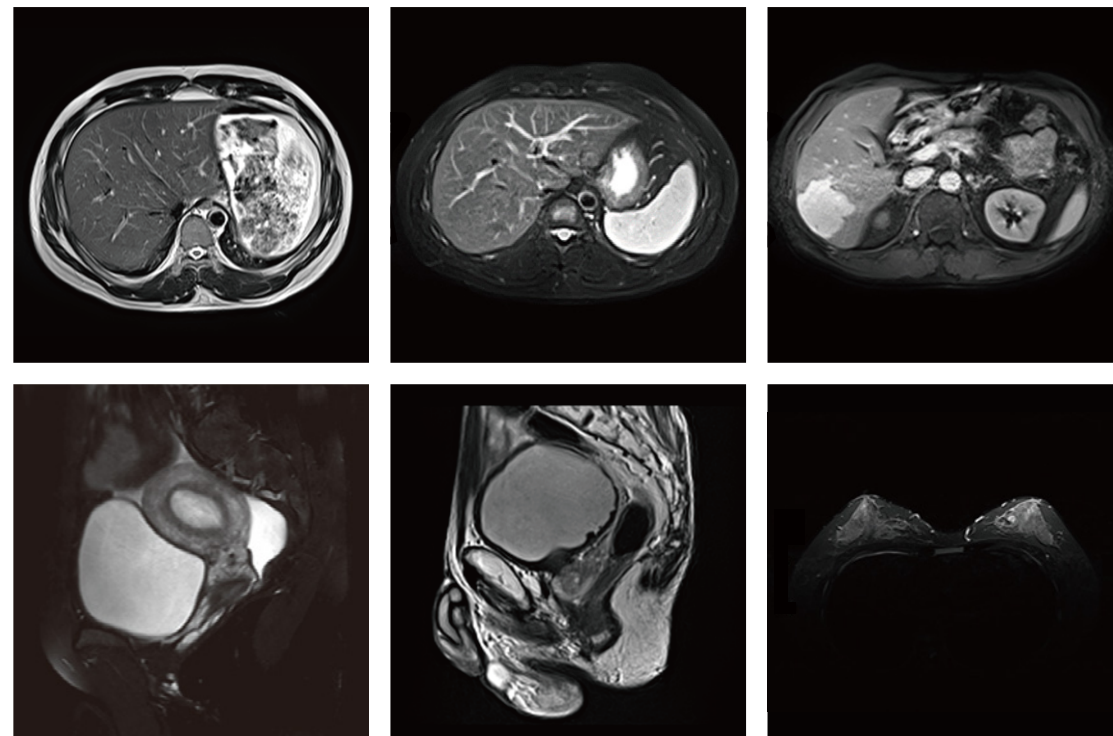
Image quality will not be compromised due to noise reduction.

Clinical applications of Supernova intelligent operating platform



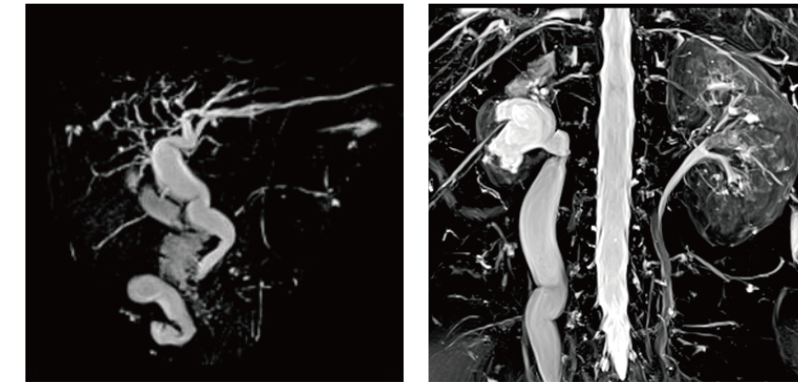
Nervous system imaging

Guided by clinical needs, multiple serial examinations are reasonably selected and effectively combined to provide comprehensive lesion information to clinical diagnosis more efficiently.



Body imaging

Breast, abdomen, and uterus imaging with uniform fat suppression can improve the scanning speed while ensuring image quality.

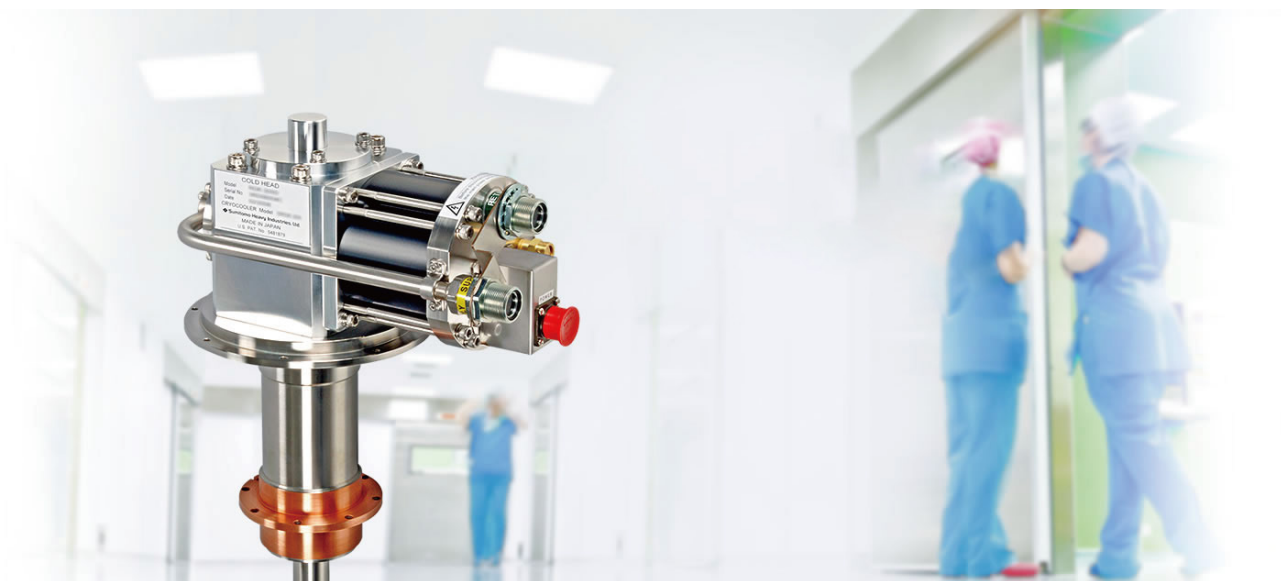


MRCP can clearly visualize the biliary and pancreatic ducts to identify the nature of obstruction; MRU contrast-free contrast media imaging can determine the site, nature, or congenital developmental abnormalities of lesion.



Bone and joint imaging

Excellent image signal-to-noise ratio and large coverage of anatomical structures.

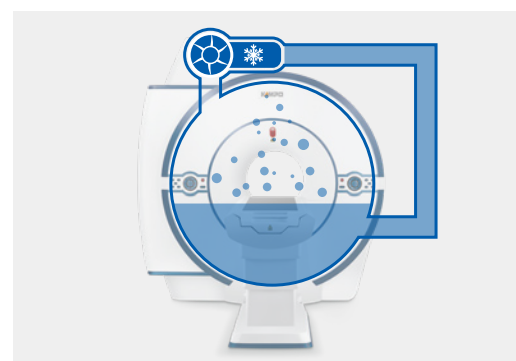


Supernova cares for everyone

Zero consumption technology for liquid helium

Supernova 1.5T MRI, using a 4K cold head, liquefies and recycles all of the helium to result in zero consumption of liquid helium and extended service life.

The continuous observation of hospitals using Supernova 1.5T for many years indicates that Supernova 1.5T truly achieves zero liquid helium consumption and maintains the liquid helium level since the installation of machine, significantly reducing operating costs.



Sound after-sales service

Installation service

Detailed site layout planning and on-site instruction of professional engineers on professional site installation ensure that the installation process is accurate, reliable and swift.

User training service

After installation, our senior experts for product application training will provide you with professional application training and technical support.

Long-term maintenance service

Regular on-site professional maintenance and regular remote detection ensure stable operation of equipment and the production of best images.

Continuous service upgrade

Software is subject to free upgrades over its service life.

- 24/7 services
- On-site service by professional engineers
- Remote technical support
- Online communication with senior experts