





# Advancing Precision in MRI Technology

Offering Highest Patient Comfort

# SETTING NEW MRI STANDARDS: PRECISION, SPEED, AND PATIENT CARE

Ushering in a new era of 1.5T superconductive MRI, it combines advanced technology with a patient-centric design. Our MRI system offers faster scan times and a quiet, calm scanning environment, significantly enhancing the patient experience. This allows for early detection and prompt treatment initiation, ensuring precise and effective healthcare.

Developed at the Andhra Pradesh MedTech Zone (AMTZ, Visakhapatnam), anamaya represents a significant advancement in medical imaging technology. Our commitment to innovation and quality ensures swift and accurate diagnostics, optimizing the entire diagnostic process.

### **KEY FEATURES**

Serenity 
Flow 
Green 
Flex 
Flex



Excellent Image Quality



Advanced Clinical Applications



Unparalleled Patient Experience

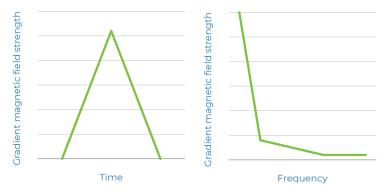


# Patient Comfort Redefined

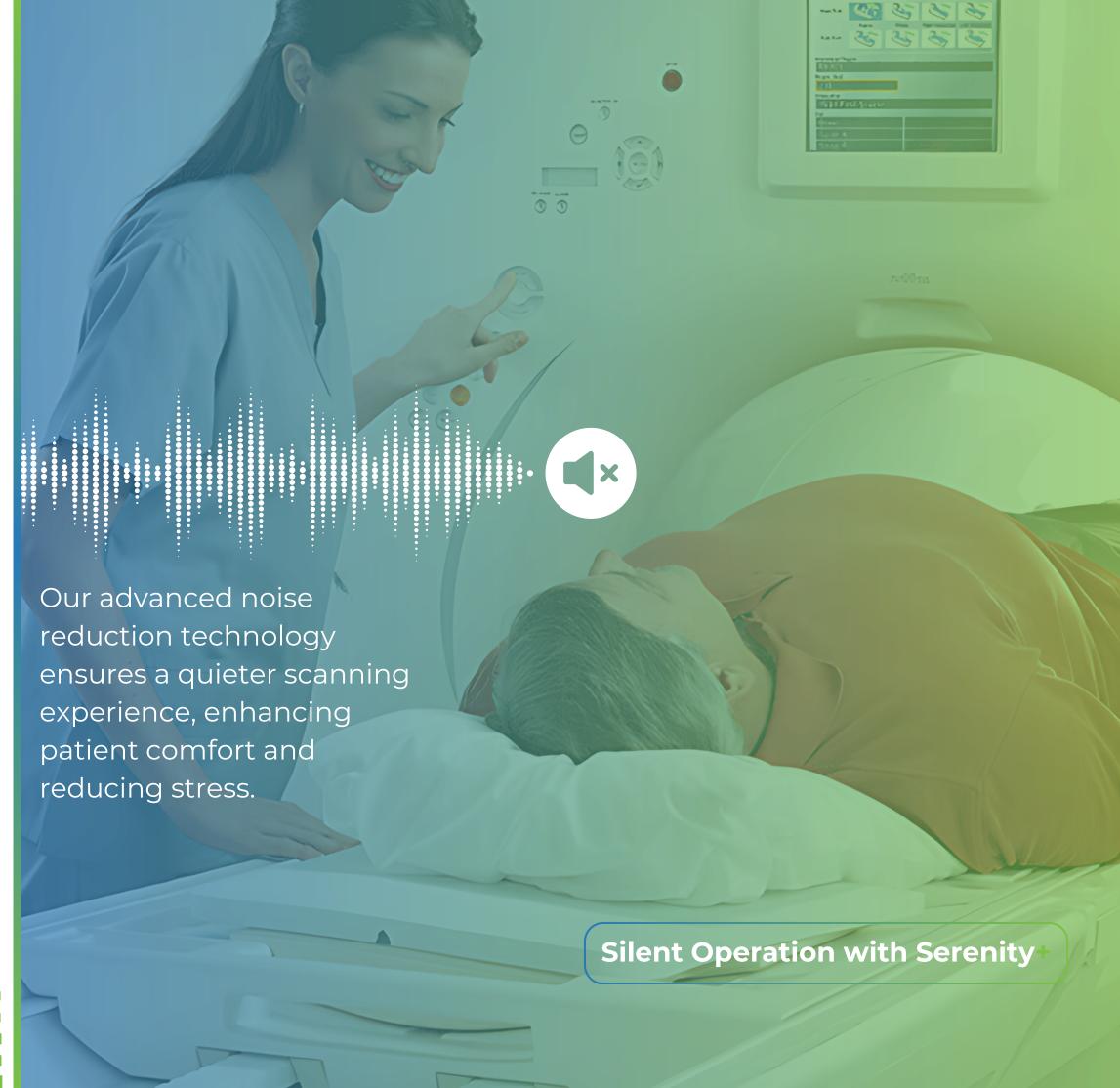
# A Breakthrough in Quiet, Stress-Free MRI Examinations



Introducing a paradigm shift in MRI examinations by significantly reducing acoustic noise, a common source of discomfort for patients. Leveraging advanced sound dampening technology, it offers a quieter scanning environment, reducing noise.



Principle of Imaging Noise Reduction: anamaya noise reduction strategy involves tailoring waveform to optimize acoustic characteristics without sacrificing image integrity.



# Transforming Diagnostic Imaging with Smart Applications

#### **Innovative Technologies for Precision and Efficiency**

#### All Around RADAR

**Mitigating Motion Artifacts:** RADAR technology significantly reduces motion artifacts, enhancing the ease of use across multiple sequences and receiver coils. It supports high-speed imaging, including TOF and GrE sequences, essential for routine head examinations, ensuring clear and accurate results even in challenging conditions.

#### Effects of RADAR in TOF MRA and GrE T2\*WI

**High-Precision Signal Correction:** RADAR is integrated into GrE sequences using high-precision signal correction technology, making it compatible with all sequences required for routine head examinations. This integration ensures consistent image quality and reduced motion artifacts.

#### **IsoFSE**

**High-Speed 3D Imaging:** IsoFSE delivers high-speed 3D imaging with isovoxels by varying the flip angles of refocus pulses. This technique suppresses signal strength fluctuations and enables high-definition imaging with TIWI, T2WI, and FLAIR sequences. The high spatial resolution volume data acquired can be reconstructed into any cross-section using MPR processing, providing versatile diagnostic capabilities.

#### **BeamSat TOF**

**Enhanced Hemodynamic Visualization:** BeamSat TOF utilizes pencil-beam type pre-saturation pulses for TOF imaging, selectively suppressing specific blood flow signals. This technique enhances the visibility of hemodynamics, allowing for precise identification of vascular conditions.

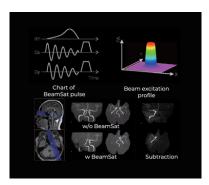
#### **VASC-ASL**

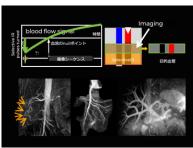
**Non-Contrast Blood Flow Imaging:** VASC-ASL is a non-contrast imaging method that visualizes fast blood flow in renal arteries and portal veins using IR pulses in the 3D BASG sequence. This technique does not require ECG/pulse wave synchronization, making it efficient and straightforward.

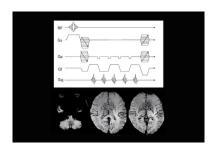
#### **BSI (Blood Sensitive Imaging)**

**Sensitive to Magnetic Susceptibility:** BSI employs high-speed, high-resolution 3D T2WI imaging to detect differences in magnetic susceptibility. This technique visualizes venous blood and hemorrhages, as BOLD effects cause signal loss in T2 images.









# an@maya Core Technology: Advanced MRI Hardware

#### **Delivering Superior Imaging with Precision Engineering**

#### **HiSpeed Powerhouse**

**Enhanced Image Quality:** The high-speed Analog to Digital Converter (A/D) directly digitizes high-frequency signals, significantly reducing noise and enhancing image quality. This technology significantly improves the Signal-to-Noise Ratio (SNR), ensuring crisp and clear diagnostic images.

#### **High-Performance Gradient System**

Faster Imaging with High Slew Rate: anamaya's gradient system features a high slew rate of 130mT/m/s, shortening the gradient magnetic field stabilization time. This capability supports super-high-speed sequences like Echo Planar Imaging (EPI), enabling faster imaging without compromising quality.

#### **High-Performance RF System**

**Stable and Clear Imaging:** With an RF power output of 18 kW, it ensures stable and clear imaging, even in sequences requiring continuous refocus pulses. This high-power RF system maintains the integrity of the imaging process, providing consistent re ensures stable and clear imaging, even in sequences requiring continuous refocus pulses. This high-power RF system maintains the integrity of the imaging process, providing consistent results.sults.

#### **Superior Magnet Technology**

Comfortable Scanning Experience: anamoya's magnet depth of 165cm ensures that for scans of organs other than the brain and C-spine, the patient's head remains outside the bore. This reduces claustrophobia and, combined with noise reduction technology, enhances the overall scanning experience. Shielding coils at both ends minimize the effects of external material movement artifacts, ensuring high-quality imaging.

#### **Combined Power of RF and Gradient**

**Advanced Imaging Capabilities:** Utilizing the combined power of RF and gradient systems, it delivers high-quality imaging for large subjects and fat-suppressed images over a wide range. This synergy ensures exceptional diagnostic performance and reliability.



Head & Neck Coil





Body Coil



# anamaya Clarity: Precision and Efficiency in MRI

#### **Maximizing System Performance through Advanced Optimization**

**Enhanced Imaging:** anamaya Clarity optimizes the **Signal-to-Noise Ratio (SNR)** on multichannel receiver coils, improving overall image clarity and diagnostic accuracy. This optimization ensures that even the most subtle anatomical details are captured with precision.

**Energy Efficiency and Reliability:** anamaya Clarity includes an advanced cooling system that maintains optimal operating temperatures while reducing energy consumption. This system ensures reliable performance and longevity of the MRI hardware.

**Efficient Operations:** The dynamic power adjustment feature automatically modulates power usage based on the operational status of the MRI system. This intelligent power management ensures optimal energy efficiency during scans and idle times, reducing operational costs.



anamaya Clarity employs advanced imaging algorithms that enhance precision, supporting accurate and reliable diagnostic outcomes. These algorithms are designed to handle complex imaging tasks, ensuring high-quality results every time.

# Optimizing System Performance with Guardian Analytics

#### **Enhancing Reliability and Maintenance through Advanced Analytics**

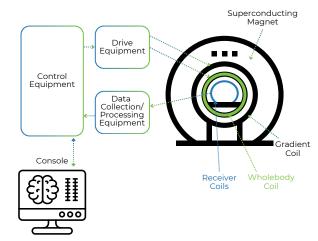
#### **Guardian Analytics**

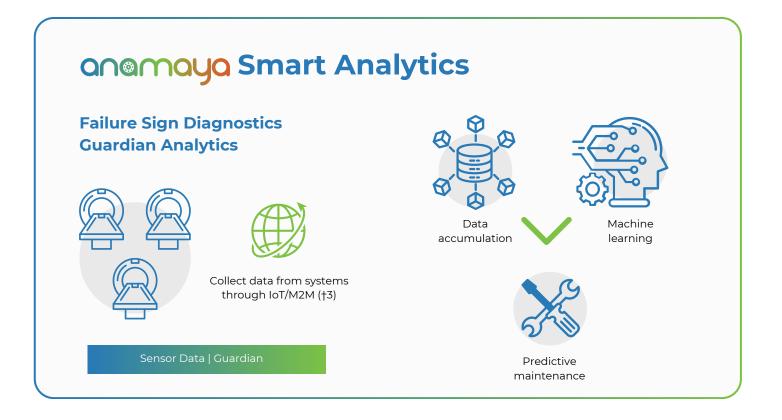
**Continuous Monitoring:** Guardian Analytics ensures 24/7 monitoring of system status through the Guardian server, providing real-time oversight and early detection of potential issues. This proactive approach helps maintain optimal system performance and uptime.

**Automated Alerts:** Upon detecting any system anomalies or performance issues, the Guardian server automatically sends alerts to the service site. This feature enables quick intervention to prevent major issues and maintain continuous operation.

**Direct Service Connection:** Guardian Analytics offers a direct connection for service and support, allowing remote diagnostics, artifact checks, and system tests. This feature ensures rapid problem resolution and minimizes downtime.

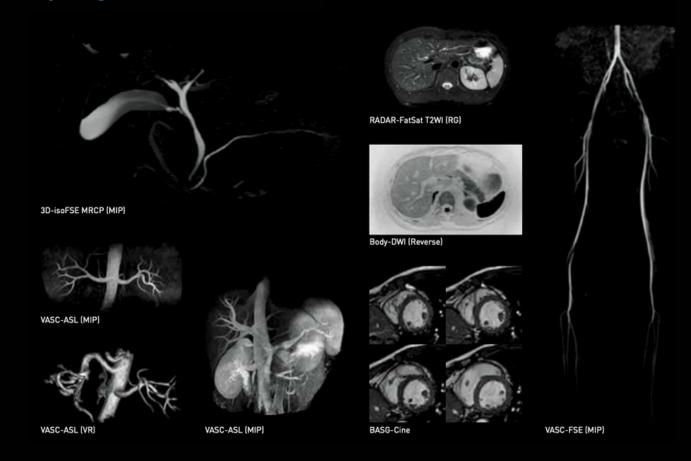
**Enhanced Security:** With robust encryption and mutual authentication protocols, Guardian Analytics ensures the protection of patient information and secure communication. The system is designed to prevent unauthorized access to sensitive data, maintaining patient confidentiality.



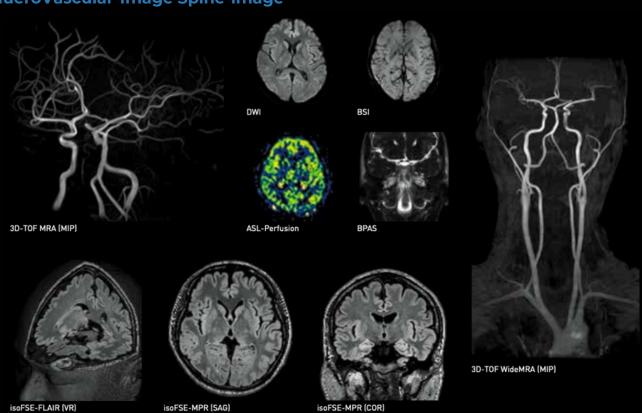


# anamaya Image Gallery

### **Body-image**



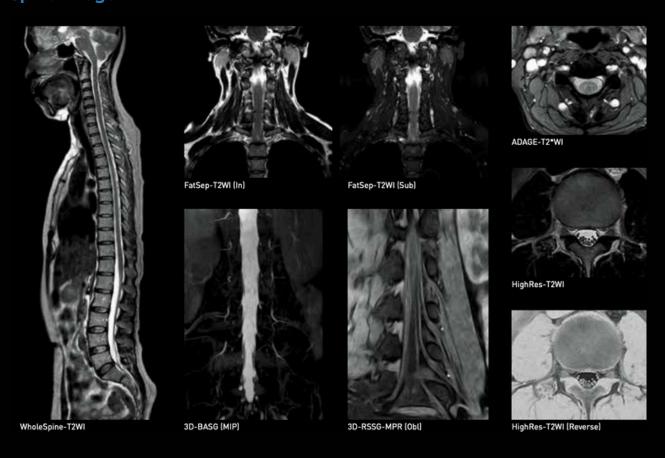
### NueroVascular-Image Spine-image



### Whole body diffusion MSK-images



# Spine-image





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#### SCAN TO SAVE DETAILS

