

# NOVA SIM MR

simulation | immersion | training



## NOVA SIM MR DA42

The worlds first and only Mixed Reality FNPT II



# NOVASIM MR DA42

## HIGHLIGHTS

- Full haptic DA42 Cockpit Replica
- 360° Mixed Reality Environment
- 6DOF Motion Platform

## FEATURES

- Flight Safety Vital 1150 IG
- Sophisticated DA42 Flight Model
- Dynamic Control Loading
- VARJO XR-4 Focal Edition HMD
- Instructor Station

## QUALIFICATION

FNPT II Qualification under EASA standards.



## IN A NUTSHELL

The BRUNNER NOVASIM MR DA42 is the worlds first qualified mixed reality flight simulator. It combines a highly realistic cockpit environment with integrated mixed reality visuals and certified force feedback controls to deliver an immersive, efficient, and scalable training experience. Built with Swiss engineering precision, NOVASIM MR offers a reliable and compact solution that aligns with the evolving demands of modern flight training.

## TRAINING CAPABILITIES

The NOVASIM MR DA42 is an FNPT II and supports the full spectrum of flight training objectives, including IFR. Student pilots can practice normal, abnormal, and emergency procedures in a highly realistic environment that builds reliable habits transferable to the real aircraft. Accurate flight dynamics, true “feeling of flying,” depth perception, and high-resolution visuals enable realistic training of take-offs, landings, circle approaches, and decision-making under diverse weather and reduced visibility. The integrated instructor station provides real-time performance tracking, while features like eye-tracking offer insights to detect and correct weaknesses early.



VE ENDURING SUSTAINABLE FAIR ATTENTIVE OBJECITVE HOLISTIC INNOVATIVE ENDURING SUSTAINABLE FAIR ATTENTIVE OBJECITVE

# NOVASIM MR DA42

## INSTRUCTOR OPERATION STATION

The instructor station provides real-time insight into the trainee's actions, including precise eye tracking to monitor attention and scanning behavior. Instructors can highlight specific cockpit elements directly from the station to guide students during flight. All sessions can be recorded and replayed for in-depth debriefings, allowing detailed analysis of mistakes and decision-making processes – making every training session more effective and traceable.

- Real Time Eye Tracking
- Co-Active Pointer
- Debriefing Replay
- Live Headset view
- Intuitive control of weather & wind condition
- Flight map view

With the NOVASIM MR DA42, instructors can react in real time, adjusting complexity and difficulty based on trainee performance. The simulator supports CBT, EBT, and SBT, while fully customizable scenarios enable training tailored to individual needs, including pilot selection and assessment of workload or motor skill limitations. Human factors are at the core: improved spatial awareness, memory retention (e.g., single-engine failure), and safe simulation of emergencies or UPRT. Eye-tracking provides insights into view patterns, heat maps, and situational awareness, supporting competence-based training, detailed briefing and debriefing, and future data-driven instructor support. This makes training more realistic, personalized, and outcome-focused—accelerating learning curves and building confident, resilient pilots.

## MIXED REALITY - VARJO XR-4

Mixed Reality flight training isn't just a new tool. It's a breakthrough. It gives you unprecedented clarity, control, and instructional precision, all while making your job easier, more intuitive, and more impactful. This system is designed to let you focus on what matters most: building capable pilots faster and smarter. Powered by the Varjo XR-4 renowned for its ultra-sharp passthrough, wide field of view, and depth, students see and interact with the real cockpit while a virtual world is anchored around it. That's what mixed reality is: the seamless blend of physical controls and digital environments, synchronized in real time.

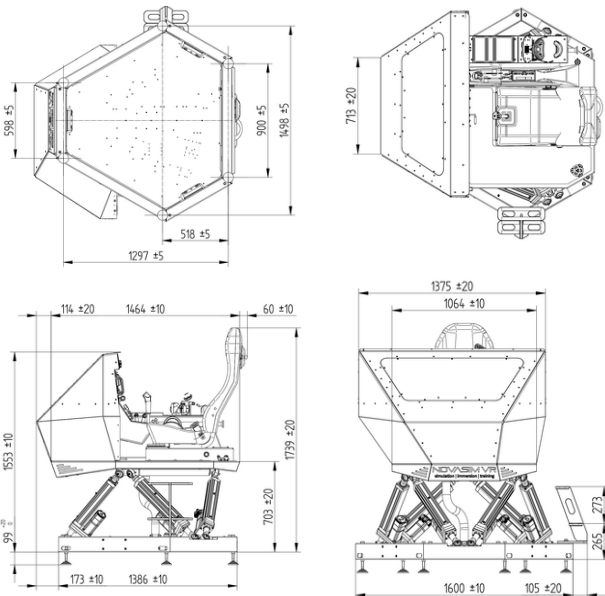
**BOOK YOUR TEST FLIGHT**





# NOVASIM MR DA42

## DIMENSIONS



## STEP INTO THE FUTURE OF PILOT TRAINING

NOVASIM MR DA42 is the world's first mixed-reality FNPT II simulator qualified to EASA standards, delivering uncompromising realism in a compact, installation-friendly design. Its intuitive, simple Instructor Station featuring one-click scenario control, real-time eye tracking, and many more new features and streamlines every session so you can train capable pilots faster.

## CONTACT MARIO ACKERMANN

+41 44 953 10 10

[SALES@BRUNNER-INNOVATION.SWISS](mailto:SALES@BRUNNER-INNOVATION.SWISS)

**ALSO DISCOVER THE  
NOVASIM MR F35**

