

Video  
Surveillance

Information  
Overlay

Remote  
Tower



## smartVISION

smartVISION is a display module to enhance or replace the classical out of the window view in ATC tower environments by using cameras, video analytics and video presentation extended by augmented reality. smartVISION enables remote or contingency tower deployments or can be used to improve situation awareness for traditional towers in combination with other surveillance technologies.

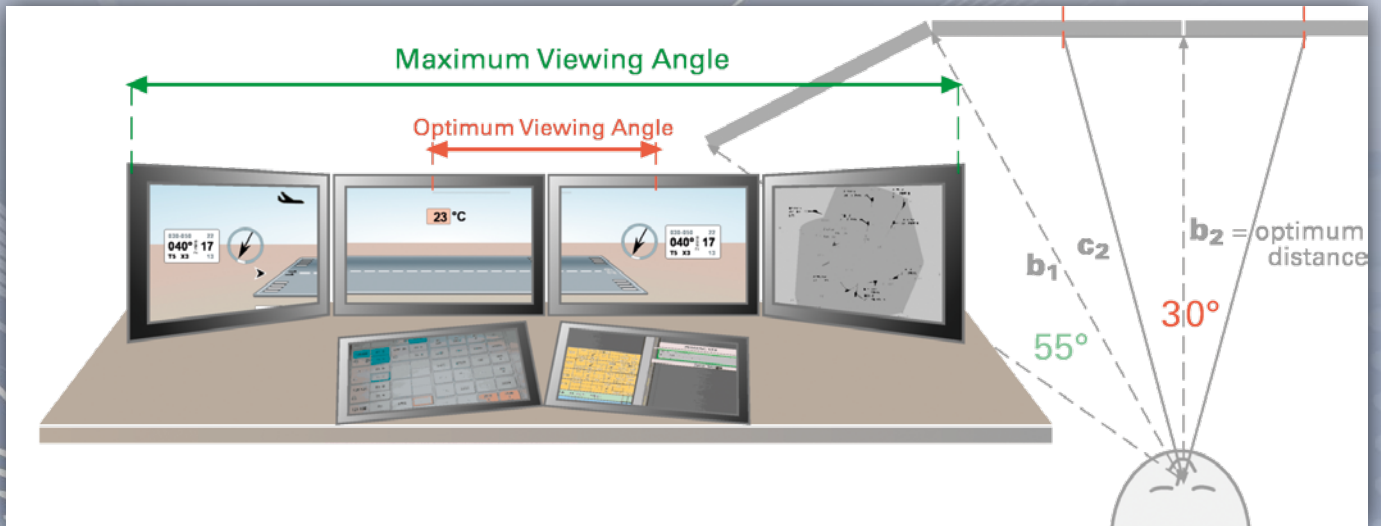
### FEATURE LIST

- Multi screen video presentation
- Enhance video display with overlay information (MET, Flight data)
- Video based tracking of aircrafts and vehicles
- Export of position information to surveillance system
- Automatic alerting in case of safety critical situations (stop bar overrun, runway incursions)
- Support of special camera technology (low light, high range, thermal imaging)
- Video recording & instant playback
- Integrated working position concept combined with smartStrips and smartTools
- Aligned with SESAR Remote Tower, compliant with open standards (ONVIF)

#### FREQUENTIS AG HEADQUARTERS

Innovationsstraße 1, 1100 Vienna, Austria  
Tel: +43/1/811 50-0, Fax: +43/1/811 50-5009  
www.frequentis.com

Working Position Concept:



**BENEFITS:**

→ **Human Factors**

smartVISION follows human factors design principles and guidelines for integration of video information into a controller working environment. By using an eye and head tracking system controller reactions are analysed and position and size of displays can be optimized.

→ **Reliability**

smartVISION offers robust algorithms for detection of objects and video based tracking under challenging weather condition. This is achieved by using special camera technology (thermal imaging) in combination with enhanced video pre-processing (rain / snow filters).

→ **Improved Safety**

smartVISION allows automatic monitoring of sensitive areas of the airfield and can raise alerts in case of safety critical situations. This function can be used as a basic safety net for airports without other surveillance infrastructure, or as improvement of existing A-SMGCS solutions.

→ **Communication**

Frequentis competence in design of voice and data solutions allows to integrate smartVISION in a reliable and robust communication infrastructure for transferring video and other control data within local area or wide area networks.

→ **Aligned with SESAR**

smartVISION is based on requirements and specifications defined in SESAR Remote Tower projects. Frequentis is actively contributing in these SESAR projects driving innovation and new technologies aligned with new operational concepts.



Technical specifications and requirements are correct at the time of going to press, but may change without prior notice as our products and services are continually updated. Frequentis has endeavoured to ensure that the information in this document is, to the best of its knowledge, correct, but does not accept any liability whatsoever for any error or omission.

**FREQUENTIS AG HEADQUARTERS**

Innovationsstraße 1, 1100 Vienna, Austria  
 Tel: +43/1/811 50-0, Fax: +43/1/811 50-5009  
 www.frequentis.com

