

# Product brief: PRISMA-ASD

## Air situation display

The safe and efficient management of flights around aerodromes and en-route is dependent on a real-time air traffic picture. PRISMA-ASD is an essential module of the PRISMA ATM automation suite. As a cost-efficient display system, it contains the basic features needed for situational awareness, and offers the scalability to incorporate more components and capabilities on demand. PRISMA-ASD has a high-performance, flexible and configurable HMI providing seamless air/ground awareness for air traffic controllers and aerodrome flight information service officers.

## Key features

### Modular system design

The modular system design enables optional functionality such as short term conflict alerts (STCA), area proximity warnings (APW) and minimum safe altitude warnings (MSAW) to be added according to our buy-as-you grow strategy.

### Tools and applications

By using native ASTERIX-standard interfaces PRISMA-ASD can serve as an awareness display within towers, either as a stand-alone application or in combination with other tower products (e.g. Frequentis smartVISION). For Approach (APP) and Area Control (ACC) PRISMA-ASD can be used as a “clear the sky” (CTS) solution in the event of an unforeseen outage of the main ATM system.

### Support information

Permanent display of critical and important information, intuitive access to ancillary information when required, highly customisable display (air situation display, labels, flight data display, flight lists), multiple PRISMA-ASD views: zoomed-in, tracking, are also available.

### Connectivity

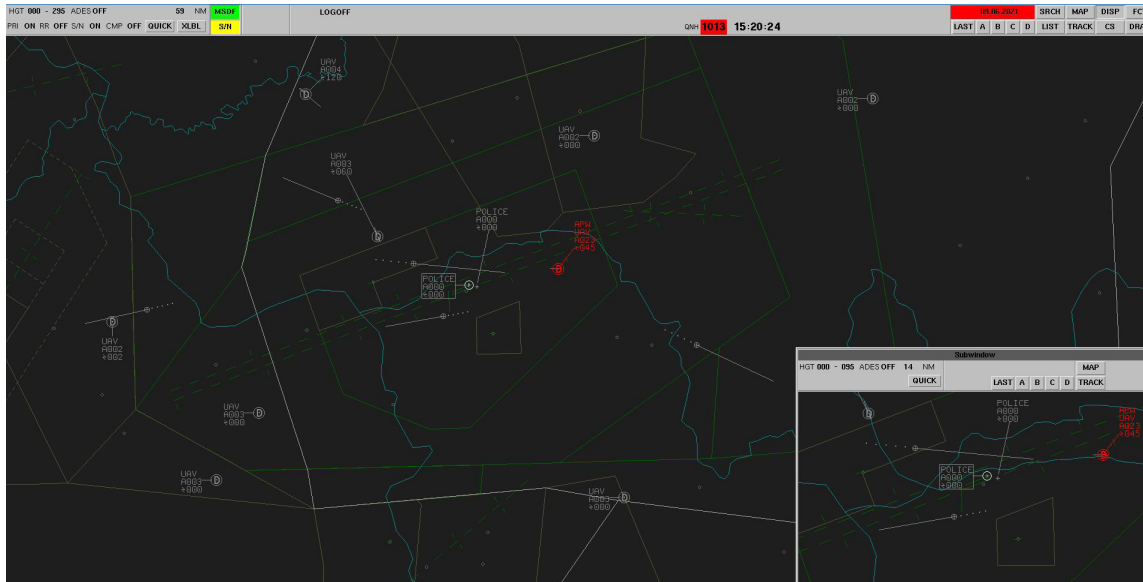
PRISMA-ASD is able to directly connect to and display raw sensor data (e.g. from an ADS-B ground station) as well as fused sensor information received from a surveillance data processing system (e.g. ARTAS or MSDF). In addition, ASTERIX Cat004 alarms, generated for example by PRISMA-SNET, are displayed as a prominent visual warning on the screen, for acknowledgement by the operator. The system also displays a graphical representation of conflicts while they persist.

Air Traffic Management



## PRISMA-ASD at a glance

- Cost efficient display for air and ground situational awareness
- Plug & play installation (early operational readiness)
- Based on extensive experience in advanced air traffic automation systems
- Fully expandable and modular system design to add functionality (buy-as-you-grow)
- Flexible configuration for tower-, approach- and en-route applications



PRISMA-ASD screen

## Benefits

### Optimised design

The optimised design of the heads-up-only display reduces the controller's workload. Additional support sub-windows provide the right information at the right time, to significantly reduce the controller's workload. PRISMA-ASD is designed by controllers for controllers, driven by ATC operational experts.

### Scalable solution

Taking into account both civil and military applications PRISMA-ASD has also extended its range of open, flexible software modules such as Safety Nets and Flight Data Processing. This enables scalability from the tower via approach to control centre applications.

### Rich Toolset

Tools available within the PRISMA-ASD portfolio allow the calculation and display of intercept vectors, and the drawing of rulers between several reference points or targets.

### Flight plan handling and flight plan database connectivity

Representing the entry level and the first step towards a full deployment of ATM Automation Suite, PRISMA-ASD contains a local database, allowing the ATCO to correlate local flight plans at display level and to annotate information on the target label. Where a connection to a flight plan database (e.g. PRISMA-FDPS) is available data is matched against current aircraft tracks, using aircraft call signs, Mode S addresses or Mode 3/A codes. Additional information can be displayed in the label of the corresponding track.

## Facts and figures

References	armasuisse (Switzerland), AirNav (Indonesia), GCAA (Abu Dhabi)
Use cases	Stand-alone, (remote digital) tower, approach centre, back-up for area control centres
Formats	ASTERIX local plot and track picture (Categories 1, 2, 16, 34, 48), local weather (Category 8), ADS-B (Category 21), ARTAS (Categories 62,65,) SNET (Category 4)

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