

A green Oerlikon Skyguard 5 fire control unit is shown from a rear three-quarter view. It is a trailer-mounted vehicle with a large radar dome on top and various sensors. The unit is parked on a paved surface in a grassy field with trees in the background under a blue sky with clouds.

SUPERIOR FIRE CONTROL

OERLIKON SKYGUARD® 5

MODERN AIR DEFENCE FIRE CONTROL UNIT

The Oerlikon Skyguard® 5 is the latest evolution of the successful Skyguard family; a top-class fire control unit that has set the performance standard for low-level air defence for decades and which is in service in more than 30 countries. Built on a proven architecture, this latest iteration combines the most modern sensor and data processing technology for generating the air picture under the most trying conditions. The mobile fire control unit acts as a command post for short-range air defence. It can be operated independently or be integrated into a higher order command and control structure. The Oerlikon Skyguard® 5 is capable of detecting, tracking and classifying modern battlefield threats with a special focus on small unmanned aerial targets. It can control a wide range of effectors and its modular architecture allows for future improvements and upgrades.

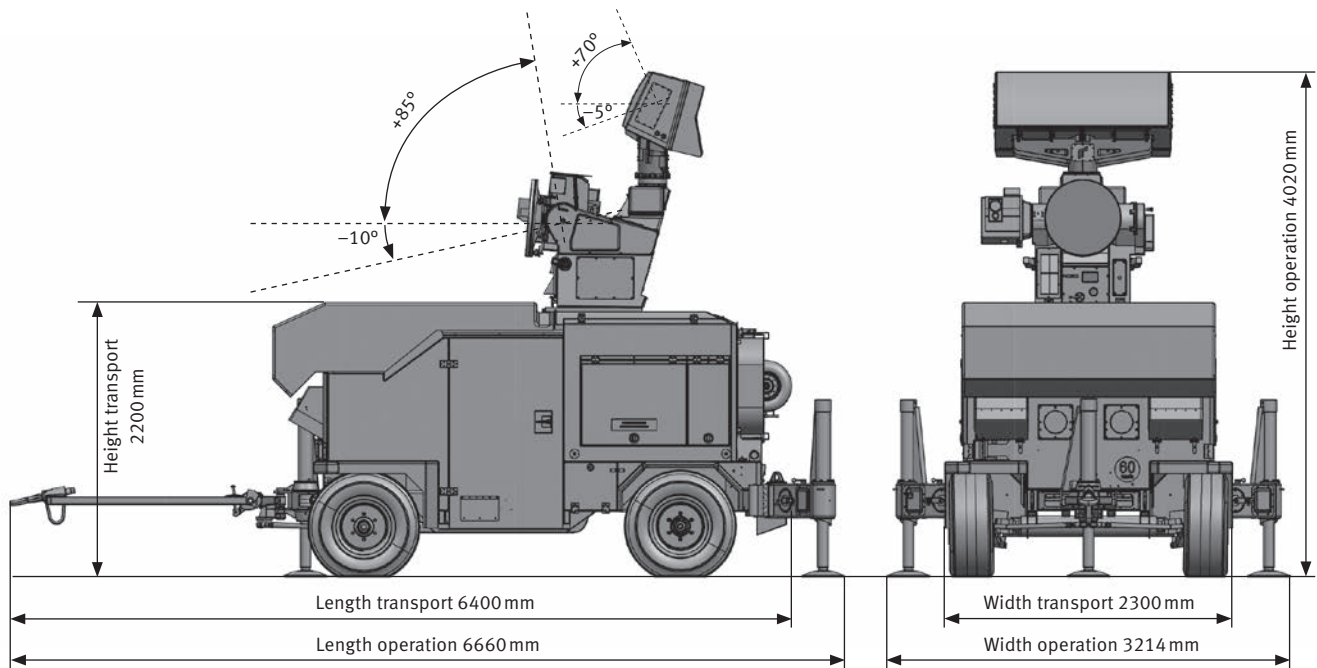
The Oerlikon Skyguard® 5 is equipped with a modern 3D AESA search radar. Depending on the required range, either an S-band or X-band version is available, both providing a continuous 360-degree search capability. The software defined radar allows highly specialized search patterns for different target types, a state-of-the-art clutter mapping and advanced ECCM capabilities. The independent tracking radar is also offered in two frequency bands (X-band or Ku-band). Together with the most modern high-definition electro-optical sensor package, even highly challenging threats can be acquired and precisely tracked.

The Skyguard 5 is offered as a new product or as an upgrade kit for all existing types of Skyguards, e.g. from Skyguard 1 up to Skyguard 4.

MAIN FEATURES

- Short-range air defence fire control unit and command post
- All-weather, day and night capability
- Modern S-band or X-band 3D AESA search radar
- Instrumented range up to 50 km
- Simultaneous detection of different target types
- State-of-the-art ECCM features and clutter mapping
- Automatic target detection, tracking and classification
- Identification friend foe (option)
- Solid state Ku-band or X-band tracking radar
- Active and passive tracking functions
- Electro-optical sensor group with high-definition IR and TV cameras and eye safe laser range finder
- Fire control for SHORAD missiles and VSHORAD effectors
- Flexible open architecture and modular design
- Standard interface to Oerlikon Skymaster® or other C2 systems
- Proven operation, maintenance and mobility concept

Main dimensions of Oerlikon Skyguard® 5 in transport and operation configuration



TECHNICAL CHARACTERISTICS

Overall system

Transport weight	6,000 kg
Length/width (transport)	6,400 mm x 2,300 mm
Max. height (transport/operation)	2,200/4,020 mm
Setup time	≤20 min (2 persons)
Startup time	≤10 min

Operation

Operation concept	2 – 3 operators (commander, target operator, effector operator)
Fully climatized operator cabin	
Number of multifunction consoles	3
Number of remote operation consoles (option)	2 – 3

Command & Control

Interface to C2	Fiber-optic link (max 1,500 m) or radio
C2 system	Oerlikon Skymaster® or other

Fire control

Effector interface	FO link (max 1,500 m) or field wire
Number of effectors	up to 4
Effector types	
	VSHORAD guns (e.g. Oerlikon Twin Gun®, etc.)
	VSHORAD missiles (e.g. Mistral, Chiron, etc.)
	SHORAD missiles (e.g. ASPIDE 2000, Sparrow)

Search radar module

Radar technology	3D AESA, rotating
Frequency band	S-band or X-band
Instrumented range	up to 50 km
Azimuth coverage	360°
Elevation coverage	-5°...+70°
Advanced ECCM and TWS functions	
IFF	Option

Tracking radar

Radar technology	Solid state
Frequency band	X-band or Ku-band
Instrumented range	35 km
Update rate	50 Hz
Azimuth coverage	n x 360°
Elevation coverage	-5°...+85°

EO tracking module

Mounting	2-axis tracking mount
IR camera	Cooled MW, HD, 1.3°/4.6°/21.8°
TV camera	B/W or colour, ≥HD, 1°... 30°
LRF	Class 1M, eye safe, 12.5 Hz, 20 km
Video tracker	Multi-mode tracker
Spatial coverage	Same as tracking radar

We reserve all rights in connection with this document. Data and descriptions have only an information value. Modifications are reserved. Oerlikon Skyguard®, Oerlikon Skymaster® and Oerlikon Twin Gun® are registered trademarks of Rheinmetall Air Defence AG.

Rheinmetall Air Defence AG

Birchstrasse 155 · 8050 Zurich · Switzerland · info@rheinmetall-defence.com · www.rheinmetall.com