

SEASNAKE30

TAKING RESPONSIBILITY IN A CHANGING WORLD



The remote-controlled SeaSnake 30 weapon station is the first choice when it comes to fast, precise and effective response to asymmetric threats within near and nearest perimeter of naval surface vessels. As one of the most modern carbon-based weapon stations available on the market, with an aviation-derived, high-performance KCE-30 revolver cannon, it enables both – rapid response capability through high pointing dynamics and high assertiveness in combat through enormous firepower and intelligent assistance systems. The truly modular system approach allows for individual system combinations for a customized configuration even in harsh environmental conditions (IP56). The SeaSnake 30 weapon station is ideally suited for the main armament of smaller patrol boats and supply vessels or as a secondary caliber gun for corvettes or frigates and is certified according to IEC 61508 (“Functional Safety”), IEC 62443 (“Cyber Security”) and MIL-STD-882 (“System Safety”).

The integrated, self-stabilized sensor system (SeaVision®) consists of three (3) day vision sensors, a cooled infrared sensor for night vision and two redundant laser rangefinders. The sensor unit can be positioned independently of the gun, offering not only more flexible deployment options but also the simultaneous, all-weather display of multiple targets for acquisition, detection and identification. In addition to the standard types of ammunition, the KCE-30 revolver cannon can fire 30 x 173 mm Air Burst Munition (ABM), giving the weapon station a formidable anti-drone capability. The projectile of the KETF cartridge can alternatively be used as a non-programmed impact projectile with the corresponding penetrator effect. All data relevant for fire control is processed in real time, giving the system a high level of precision and a high first hit probability for mission relevance. The use of standard interfaces and a ring bus topology with secure data processing simplifies system integration into a wide range of ship classes. The combination of an intuitive operating concept and intelligent assistance systems significantly reduces the burden on the operator in combat situations.

The SeaSnake 30 can be operated either as an integrated system via the CMS or as a stand-alone concept with its own control panel. It can optionally be upgraded to protection class II (STANAG 4569) with additional armour.

PERFORMANCE FEATURES

- High pointing accuracy and speed
- High first-hit probability
- Capability for dynamic engagements
- Automatic target recognition (ATR)
- Multi-Mode-Tracker (MMT)
- Selectable engagement modes
 - SF – Single Fire
 - BF – Burst Fire (editable interval)
 - CF – Continuous Fire (fast & slow)
 - AF – Automatic Fire (computer aided release)
 - GF – GRID Firing (controlled dispersal)
 - ABM Mode (programmable sub-munition)
- Detachable, self-stabilized sensor platform, ≤0.5 mrad
- Low weight, low signature and radar cross section
- Highly expandable, modular system (AI)
- Can be integrated into a command and control system
- Capability of unmanned, wireless C²
- Increased seaworthiness (non-corrosive carbon fibre)
- Optional cleaning system for optronics
- Can be used in climate zones A1, A2, A3, A4, B1, B2, B3, C0, C1 and C2

STANDARDS & REGULATIONS COMPLIED WITH

- MIL-STD: 461, 810, 882, 1275, 1774
- STANAG: 4297, 4347, 4349, 4754
- AECTP: 400
- IEC: 27000, 61000, 61508, 61511, 60529, 60825, 61131, 62443
- VG: 95287, 95370, 95613, 95737
- ZDV: A-960
- RoHS – conformal
- REACH – conformal
- ITAR – free

DISPLAY & CONTROL UNIT



- Infrared – Touchscreen
- Military Hardening
- Night ops capable

CONTROL HANDLE



- Ergonomic Design
- Can be operated by either hand
- Individually configurable
- Redundant controls

TECHNICAL DATA & DIMENSIONS MOUNT

Height	1,284 mm
Length	3,388 mm
Width	1,852 mm
Diameter of base plate	760 mm
Azimuth	±170°
Elevation	-25° to +60°
Weapon: Rheinmetall KCE-30; 30 x 173 mm	TP-T/KETF
Firing modes	SF, CF, BF, AF, GRID, ABM
Max. angular speed	≤60°/s
Angular acceleration	≤120°/s ²
Stabilization quality (Mount)	≤0.5 mrad

TECHNICAL SPECIFICATION SEAVISION SENSOR SYSTEM

Diameter (without connector panel)	520 mm
Height (without connector panel)	709 mm
Weight	<116 kg
Positioning in Azimuth	n x 360°
Positioning in Elevation	n x 360°
Positioning accuracy	≤500 μrad
Angular acceleration	≤90°/s ²
Angular speed	Azimuth f >60°/s Elevation f >60°/s
Video	Via Ethernet
Power supply	24 VDC – 28 VDC, 260 W
Interface	Ethernet
Protocol	ProfiNET/ProfiSAFE
Temperature range operational	-32°C to +55°C
Temperature range storage	-32°C to +55°C

TECHNICAL SPECIFICATION DAYLIGHT CAMERA

Technology	CMOS	
Resolution	2464 x 2056	
Frame rate	60Hz	
Wave length	350 – 1,100 nm	
Field of view		
TV Camera 1	NFoV: 1.35°	WfoV: 2.7°
TV Camera 2	NFoV: 6.67°	WfoV: 13.43°
TV Camera 3	NFoV: 16.75°	WfoV: 32.81°
Range (VR = 23 km)		
Detection	>18,000 m	
Recognition	>9,000 m	
Identification	>5,000 m	

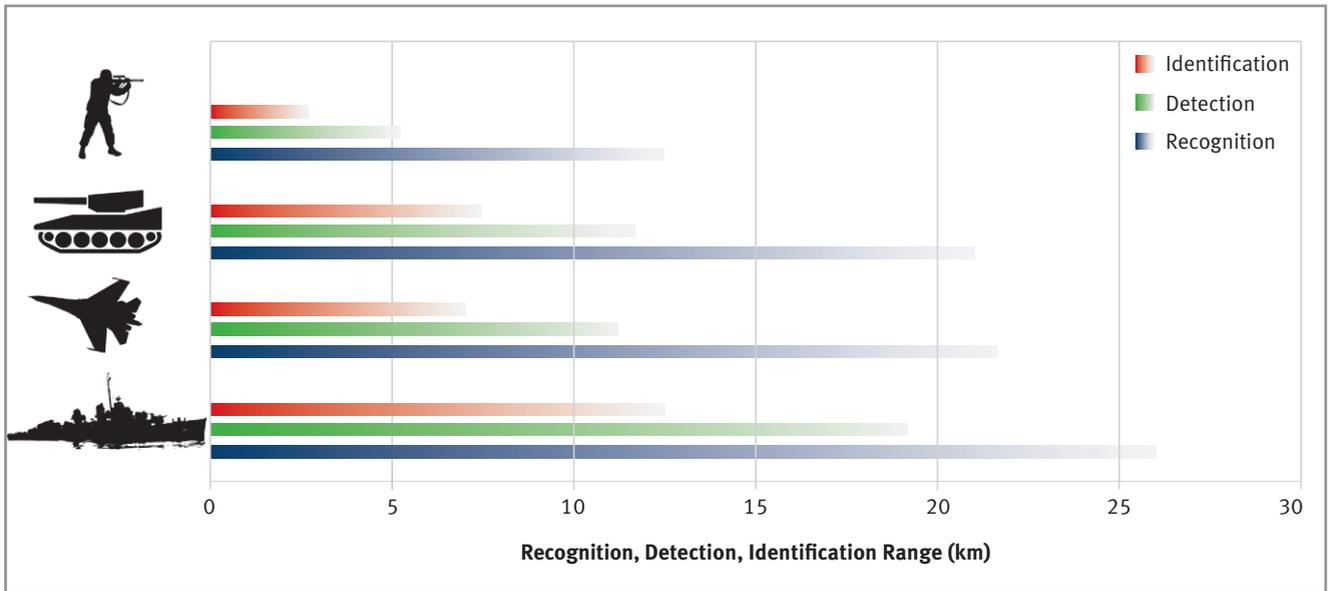
TECHNICAL SPECIFICATION IR SENSOR

Wave length	3.6 – 4.15 μ m	
Field of view	NFoV: 1.40°	WfoV: 6.60°
Range (within FoV according to STANAG 4347 $\sigma=0.2$)		
Detection	>18,000 m	
Recognition	>9,000 m	
Identification	>5,500 m	

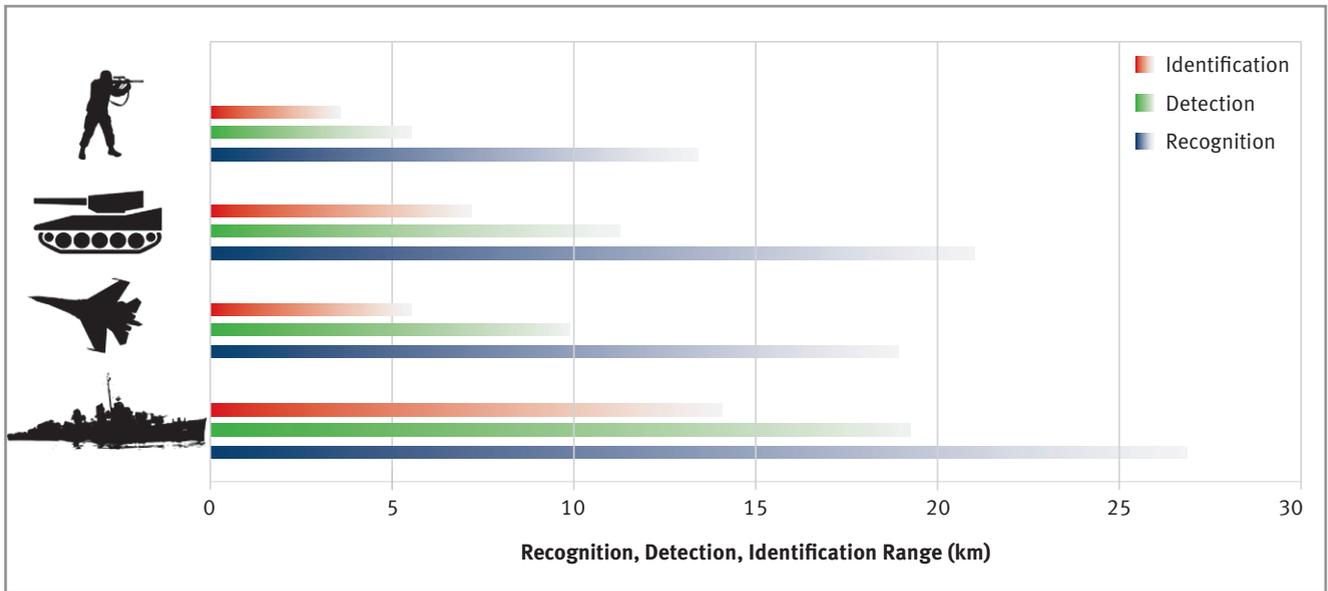
TECHNICAL SPECIFICATION LRF

Target size (2.3 x 2.3 m) std. day; CAVOK	Max. range up to 6,000 m	
Wave length	1,550 nm	
Frequency	1 Hz to 25 Hz	
Beam divergence (>50%)	<0.8 mrad	
Measurement accuracy	± 1 m	
Laser classification	Class 1 (eye-safe)	
NOHD	0 m	

DRI – DAYSIGHT CAMERA



DRI – THERMAL IMAGER



The information on the scope of delivery, appearance, performance, dimensions and weights of the system corresponds to the design status at the time of printing. We reserve the right to make changes and to accept no liability for deviations from the illustrations in color and form, errors and misprints.

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