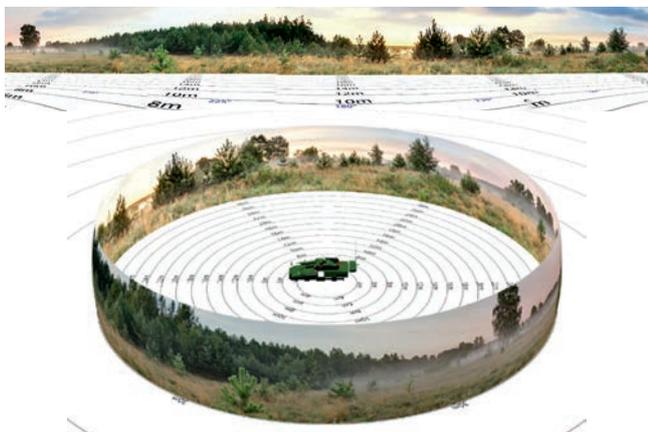


SURVEILLANCE CAMERA MODULE (SCM300H)

KM8000A302

SCM300H (SCM60-II) is the enhanced version of the vehicle mounted version of Rheinmetall's Surveillance Camera Module family.

In combat environments, military personnel and vehicles are exposed to a constant threat through enemy fire. Therefore, a Situational Awareness System which allows for driver vision and 360° surveillance vision without exposing personnel to enemy fire, is essential. The vehicle crew can get separate day and night vision. This allows the driver or commander a situational awareness without looking directly out of the vehicle hatch. Therefore, the system ensures that the crew can remain in the protected area of the vehicle.



HOW IT WORKS

The Surveillance Camera Module (SCM300) supplies image data to external displays. The main components of the SCM300 are a thermal and daylight cameras, as well as the associated signal processing and signal conditioning.

The system of six SCM300H provides a 360° visibility. In combination with the Rheinmetall Generic Modular Computing Unit (GMCU) and associated displays the individual images can be displayed as an borderless 360° panorama. On request, a fused infrared and daylight vision image can also be provided, which significantly improves target recognition for the operator.

Operation of the SCM300 is simple and intuitive. Minimal training is needed in order for the user to operate the system. The SCM300 is designed for multiple tracked and wheeled vehicle platforms.

TECHNICAL DATA

Parameter	Specification
Daysight camera	
Wavelength	400 – 700 nm
Resolution	4096 x 3072 px
Frame rate	typ. 60 Hz
FoV (horizontal)	60°
Target detection range	>1200 m ¹⁾
Thermal imager	
Wavelength	8 – 14 μm
Resolution	1280 x 1024 px
Frame rate	typ. 60 Hz
FoV (horizontal)	60°
Target detection range	>500 m ¹⁾

Interfaces

Voltage range	16 V – 32 VDC (nominal 28 VDC)
Power consumption	<50 W ²⁾
External sensor interface	1G Ethernet
External sensor power supply	28 VDC
Communication	CAN, Ethernet 1000Base-SX, 3G-SDI
Video compression	H.265 and YCbCr 4:2:2

Physical characteristics

Colour	RAL6031 Bronze green
Weight	<6 kg
Dimensions (LxWxH)	<245 mm x 202 mm x 102 mm

Qualification

Temperature (storage)	-46°C to +69°C ³⁾
Temperature (operating)	-32°C to +44°C ³⁾
Water protection	IP68 ⁴⁾

The product is still being finalized. Accordingly, the details are to be considered as preliminary.

¹⁾ acc. to Johnson-Criteria 1-3-6 line pairs with TRM4v3 analytical model of the Fraunhofer Institute (Target: Height 1.8 m x Width 0.5 m)

²⁾ normal operation without external sensor

³⁾ acc. to MIL-STD-810E

⁴⁾ acc. to IEC 60529

