



NATTER 12.7

The remote-controlled NATTER 12.7 weapon station is a new member of the innovative Rheinmetall product line of the latest generation for self-protection, on tracked vehicles and wheeled vehicles, even under the most difficult operating conditions. The modular concept enables the integration of different upgrade kits for the installation of weapons in caliber 5.56 x 45 mm to 12.7 x 99 mm or GMW 40 mm.

The integrated vision system (FlexEye®) represents the latest day and night vision (IR) sensor technology and thus enables the simultaneous, weather-independent display of several targets.

Using the latest image processing algorithms, movements of the barrel axis, caused by ballistics, can be compensated and allow for a coaxial assembly on a 2-axis stabilized platform. In addition to manual target tracking, a powerful tracker also enables automatic target tracking.

All data relevant for fire control are processed in real time and provide the system with a high level of precision that is relevant to the application and performance.

The use of standard interfaces (e.g. NGVA) simplifies the system's integration into various vehicle classes.

The carbon-based mount technology enables a consequent reduction in weight and vibration, which, in conjunction with the shape and design, offers a significantly reduced signature.

The weapon station sets standards in the areas of protection class, operational capability and dynamic targeting of asymmetrical threats due to the cross-sectional use of innovative software modules within the latest Rheinmetall Remote Control Weapon Systems.

The combination of an intuitive operating concept and intelligent assistance systems represents a noticeable relief for the operator in combat situations. The NATTER 12.7 weapon system has the ability to integrate additional operating consoles and also meets the safety requirements of IEC 61508.

PERFORMANCE FEATURES

- High First-Hit Probability
- High angular precision and speed
- Ability to fight dynamically
- Automatic Target Tracking
- Self-stabilized platform
- Possibility of integration into a CMS
- Light weight, low signature
- Underwater ability after preparation
- Optronic cleaning system
- NGVA-Interface
- Fitted for ROSY, AGDUS, ballistic protection
- IEC 61508/MIL-STD-810H
- ITAR-free

TECHNICAL DATA AND DIMENSIONS	
Height	≈ 870 mm
Length	≈ 1,770 mm
Width	≈ 970 mm
Weight (empty, incl. Flex-Eye®-Sensor)	≈ 136 kg
Weight (empty, incl. weapon)	≈ 174 kg
Weight (total, incl. weapon/200 rounds)	≈ 200 kg
Azimuth	n x 360°
Elevation	-20° to +60°
Max. angular speed	120°/s
Max. angular acceleration	≥ 120°/s ²

WEAPON ADAPTIONS	
Cannon	M2-Browning HMG, caliber 12.7 mm x 99
Cannon	MG-5A1 (H&K), caliber 7.62 mm x 51
Grenade launcher	GMW (H&K), caliber 40 mm x 53

SENSOR DATA FLEX-EYE

IR CAMERA		
Type	SAPHIR/UC 5.9	
Spectral band	8 – 12 µm	
Detector	640 x 480	
FoV-1	5.9°	
FoV-2	25.3°	
Range within FoV-1		
i.a.w. STANAG 4347 $\sigma=0.2$	Identification	>1,500 m
	Recognition	>2,820 m
	Detection	>7,590 m

COLOR CAMERA 1		
Type	CMOS	
Spectral band	Visible	
Sensor	2,064 x 1,544	
FoV	6.7°	
Range within FoV VR=23 km	Identification	>2,700 m
	Recognition	>5,330 m
	Detection	>12,580 m

LASER RANGEFINDER	
Type	Diode laser
Range/wavelength	≥ 10,000 m/~ 1.55 µm
Frequency/accuracy (1 σ)	25 Hz/<1 m
Classification (IEC 60825-1 2014)	1

COLOR CAMERA 2	
Type	CMOS
Spectral band	Visible
Sensor	2,064 x 1,544
FoV	23.75°

Note: The scope of supply, appearance, performances, dimensions and weights of the system correspond to the knowledge available at the time of printing. Deviations from the illustrations in color and form, errors and misprints as well as changes are reserved.

MONITOR

- Infrared-Touchscreen
- Military hardening
- Suitable for night-time operations



JOYSTICK

- Ergonomic design
- Left- or right handed operable
- Individually configurable
- Complete operating redundancy

