



# VINCORION STABILIZED CARRIER PLATFORMS.

# FOR ADVANCED TARGET TRACKING.

Perfect accuracy through stabilization in spite of vehicle movement.

VINCORION has over 40 years of experience in the field of weapon system stabilization and civil tilting technology. We develop and produce compact, stabilized carrier platforms for sensors and weapon systems. Our advanced stabilization technology ensures that the sensor or the weapon mounted on the platform remains perfectly aimed at the target, even if there are significant movements. This makes our devices ideal for ground vehicles used to travel over uneven terrain.

Stabilization technology from VINCORION is used both in the military and in the civilian sectors: our stabilized carrier platform is optimized for your specific requirements and vehicles. In addition, our team of specialists can offer you outstanding application expertise across all system boundaries. You receive a complete system offering maximum stabilization performance that will make an optimum contribution to your security. Our family of stabilized carrier platforms includes the ANTPack, the ANTPack Mini, and the Antenna Rotation Pedestal: for continuous, accurate tracking of targets under extreme conditions.

# MAXIMUM STABILIZATION PERFORMANCE FOR OPTIMUM SAFETY. NEW STANDARDS AND WEIGHT-SAVING TECHNOLOGY.

Thanks to the use of new materials like composites and innovative technical solutions, our extremely compact universal carrier platforms set completely new industry standards. VINCORION platforms fulfill every requirement for both current and future systems in terms of weight-sav- - **High level of efficiency, precise aiming:** Excellent ing, have extremely low silhouette levels, and offer high ballistic protection. The exceptionally light weight of the platforms opens up completely new fields of applications on lightweight vehicles that until now could not be realized with platforms of this performance class.

## FIELDS OF APPLICATION:

- **Defense and security technology:** Platforms provide optimum compensation for movements
- **Military ground vehicles:** Keep a target in sight despite your vehicle's own movement

# THE BENEFITS SPEAK FOR THEMSELVES:

- Can be mounted on vehicles with low load capacities: Exceptionally light with a very low silhouette
- stabilization properties even when the load is mounted
- **Precise:** Keep sensor and weapon systems precisely aimed at a target even when your vehicle is moving
- **Integrated:** Use with existing systems without any problems
- Technologically sophisticated: 45 years of experience in the field of mechatronics
- Customized: Standard products perfectly tailored to meet your requirements



## ANTPACK: OUTSTANDING STABILITY IN EXTREME CONDITIONS.

The ANTPack is a universal carrier platform for rocket launchers, automatic cannons, laser guns, and observation units that sets completely new standards in the class of loads to be stabilized.

# ANTPack main features at a glance:

- Can be used for loads of up to 350 kg
- Especially developed for stabilizing rocket launchers, barrel guns, or laser weapons, as well as sensor components
- Exceptionally light with a very low silhouette
- Ideal for mounting on vehicles with a low net weight, which only allow
- Excellent stabilization can still be achieved even when the load is mounted eccentrically, ensuring a very high level of efficiency



# ANTPACK MINI: FOR THE FASTEST POSITION REQUIREMENTS.

The ANTPack Mini is a weapons stabilization system for fast position requirements. Extremely fast positioning is a particularly important feature of the carrier platform and the ANTPack Mini sets completely new standards in the compact class of load stabilization.

# ANTPack Mini main features at a glance:

- Small and compact
- For small loads of up to 20 kg
- Used on very light vehicles
- The platform is powered directly by the engine (direct torque motor)
- Incredibly fast 360° per second stabilized rotation

## ANTPACK AND ANTPACK MINI - THE DIFFERENCE IS IN THE DETAILS.

Technical Specifications	ANTPack	ANTPack Mini
Operating modes	Alignment, stabilization, index position march, weapon deployment system test, fault localization, adjustment, loading/unloading, off, on (standby)	Alignment, stabilization, index position march, system test, fault localization, adjustment, loading/unloading, off, on (standby)
Load Weight Unbalance Measurements	Max.: 350 kg, even in the case of eccentric mounting! Max.: 2,000 Nm Largely flexible depending on customer requirements (an adapter ring can be mounted under the station in	Max.: 20 kg
Mechanical interface Electrical interface	the case of mounting of the platform directly on the roof of the vehicle and a very long load) Flange with bolt circle 28 V DC, and freely configurable signals via slip ring	Self-centering 28 V DC, Ethernet, LWL (optional)
Speed	Horizontal: 60°/s, vertical: 60°/s	Horizontal: up to 360°/s, vertical: up to 360°/s
Weight	200 kg 200 kg	18 kg
Supply voltage	from 18 V DC to 32 V DC	18V DC - 32V DC, nominal 24V / 5 A depending on speed and acceleration
Operating temperature range	from -46°C to +63°C according to STANAG 2895 (cycle A2, B1, C2)	from -46°C to +63°C according to STANAG 2895 (cycle A2, B1, C2)
Dimensions (W × D × H)	580 mm × 790 mm × 520 mm	323 mm × 323 mm × 397 mm
Data interface	CAN or custom-tailored discrete	CAN, Ethernet, optional: RS422 and LWL
Azimuth range	n × 360°	n × 360°
Elevation range	from -20° to +180° horizontal axis	Approx. from -90° to +100° (depending on working weight)
Position indicator resolution		25 bit (33,554,432 steps/revolution)
Torque/acceleration		Azimuth: 60 Nm, elevation: 20 Nm
Protection	Retrofittable	

# ANTENNA ROTATION PEDESTAL: COPING WITH EXTREME ENVIRONMENTAL CONDITIONS.



The Antenna Rotation Pedestal is a lightweight unit for rotating radar antennas installed in all types of aircraft. It is designed to support military and civil applications under extreme environmental conditions.

# Antenna Rotation Pedestal main features at a glance

- Lightweight unit to rotate radar antennas installed in helicopters as well as in airplanes and drones
- The pedestal can rotate a payload of up to 48 kg at a maximum speed of 200°/s
- Operation in inverted position is also supported
- High power density

## **Technical Specifications**

Payload	48 kg at 4.25 kg m² moment of inertia	
Rotation rate	±200°/s	
Acceleration	±40°/S²	
Rotation rate accuracy	better than 1% at 40200°/s and inclination of 30 degrees	
Angle resolution	15 bit corresponding 0.011 degrees	
Weight	< 16 kg	
Rotating joint	g joint 3 RF channels 8 LVDS channels for up to 100 MHz data rate 5 power supply channels for up to 116 A at 48 V supply voltage 3 signal channels	

