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Reliable hard-kill protection with a minimal radar signature – ADS sets the market standard for active protection technology

ADS Gesellschaft für aktive Schutzsysteme mbH, a global pioneer in reliable, high-precision hard-kill active protection systems, announced today that it has integrated the world's lowest-power radar for APS missile detection into its ADS-Gen3 APS, giving users a critical edge on the modern battlefield.

In symmetric conflicts the opposing forces have a sophisticated electronic warfare (EW) capability. Advanced APS defensive measures that utilize radar must respond by lowering their detection profile to the greatest extent possible. This can be done by making the missile detection distance requirement of the APS radar as small as possible, directly facilitating integration of the lowest-power radar.

In developing the radar sensor, ADS GmbH focused on high-precision detection of incoming threats, resulting in turn in extremely fast reaction times and thus assuring the shortest-possible engagement distance. The shortest possible distance in which an incoming projectile can be detected and successfully neutralized is known as the "minimal defeat distance", or MDD. The ADS-Gen3 has an MDD of less than ten metres. That's five to fifteen times less than with launcher-based systems.

Thanks to this lower detection range, friendly forces have a significant tactical advantage in that it takes longer to detect them and potentially much longer to jam them.

To put this into context, this means EW receivers have to be within 350 metres. Even with SIGINT airborne detection systems, ADS-Gen3 won't be detected unless it is within 6 kilometres. For opposing forces systems, these distances are at least two orders of magnitude greater.

In addition to being very difficult to detect, ADS sensors provide valuable threat data to the vehicle's battle management system or to other integrated systems. This not only increases overall situation awareness, but also lets the crew mount an immediate, well-targeted response.



ADS-Gen3 radiates even less power than standard vehicle-to-vehicle radio communications systems. “By designing the fastest next generation autonomous protection system, we provide armoured vehicles and tanks with reliable defence against missiles, while simultaneously giving them an EW advantage in potential symmetric warfare scenarios such as in northeast Europe”, explains Dr Ronald Meixner, pre-sales manager at ADS, adding that “the ADS-Gen3 system has the lowest radar signature on the market, minimizing the potential for APS EW detection and jamming.”

“Our investment in the world’s fastest active protection system offers innovation potential as well as tactical advantages,” declares Stefan Haase, chief executive of ADS: “We have succeeded in integrating an incredibly low-power radar into our APS, giving friendly forces a critical advantage on the battlefield.”

Further information to be found under <http://www.ads-protection.org/news/>.

About ADS

ADS Gesellschaft für aktive Schutzsysteme mbH, is a world-leading pioneer in reliable, high-precision hard-kill active protection systems, or APS. A member of the Rheinmetall Group, ADS combines the systematic approach to engineering of an automotive parts supplier with the exacting standards of the defence sector, particularly when it comes to active protection systems. A technology trailblazer, ADS developed the world’s first totally dependable, high-performance APS, incorporating the full range of technical safety criteria.

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