

June 17, 2021

Press Release

DC motors from maxon take surveillance to the next level.

A revolution in concealed threat detection - making the world a safer place.

Radio Physics Solutions (RPS) is a small technology company based on the outskirts of Cambridge in the UK. This small, modest company works on leading-edge surveillance technology and has won several awards.

Threat detection at public venues is a serious issue. Current technology methods rely on scanners screening individuals in high traffic areas and shepherded in sections. This requires people to physically walk through scanning areas, in turn creating bottlenecks. RPS launched its latest fully automated product, Optracon™, which uses multiple sensors mounted remotely, to detect concealed mass casualty threats, hidden weapons, explosives and other dangerous objects, at distances of up to 30m. A true sensor fusion solution, Optracon™ collects data from radar, video analytics, LiDAR, machine learning algorithms, and artificial intelligence to provide a digital understanding of how people group and flow. The technology is small and automatically scans uncontrolled crowded public spaces beyond just an area or building. With an extended perimeter, responders have more time to act.

DC motors from maxon supported RPS to take surveillance to the next level. The motor housing in Optracon™ is custom made to the technology. A brushless maxon EC frameless 45mm flat DC motor drives the barrel and the shaft connected to a mirror. A brushless EC 32mm flat DC motor with hall sensors rotates the mirror. The barrel creates the essential scanning pattern. The mirror moves in a spiralling motion with varying diameter, and the frameless DC motor allows the mechanism to move this way without needing a personalised product.

David Leonard, head of engineering at Radio Physics Solutions, said “maxon was the only supplier offering frameless DC motors in such a convenient way, where a small company like ours, who are really designing from the ground up, can engage directly with the manufacturer. This is invaluable. maxon products come supplied with all required documentation, which is exceptional. You get excellent technical support on the assembly, even sharing the pitfalls. maxon really wanted to make sure we had the right product to achieve what we wanted to achieve. This outstanding customer support, coupled with the performance and accuracy of the product, is exactly what we at Radio Physics were looking for.”

The Optracon™ technology is unique to security screening infrastructure and represents a paradigm shift in understanding and responding to concealed threat detection.

Radio Physics Solutions have numerous deployments globally, for applications such as border control and security at governmental and royal facilities.

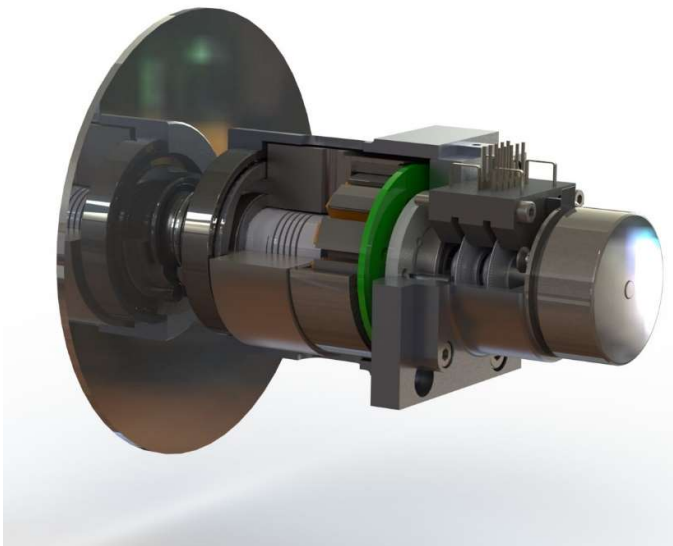
For more information please call maxon motor Australia tel. +61 2 9457 7477.

Length of this update: 439 words

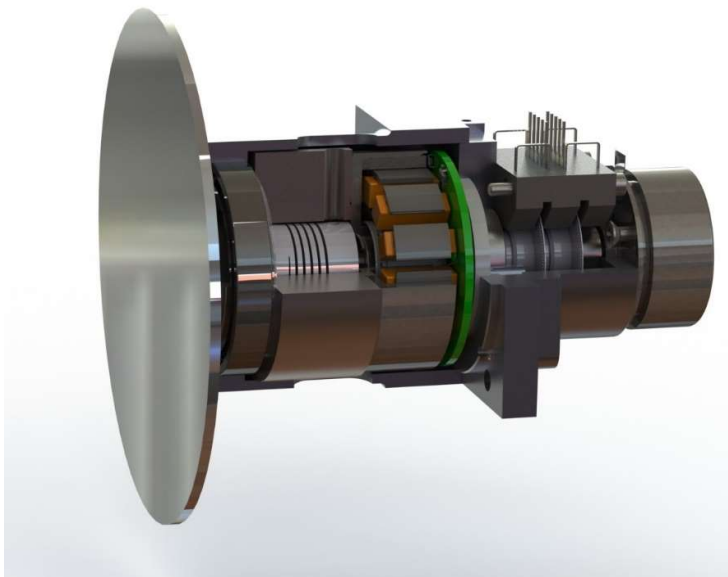
The press release is available on the internet at: www.maxongroup.net.au



David Leonard head of engineering Radio Physics Solutions. © maxon motor



A brushless maxon EC 32mm flat motor with hall sensors rotates the mirror © maxon motor



A brushless maxon EC frameless 45mm flat motor drives the barrel and the shaft © maxon motor

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The Swiss specialist for quality drives

maxon is a developer and manufacturer of brushed and brushless DC motors, as well as gearheads, encoders, controllers, and entire mechatronic systems. maxon drives are used wherever the requirements are particularly high: in NASA's Mars rovers, in surgical power tools, in humanoid robots and in precision industrial applications, for example. To maintain its leadership in this demanding market, the company invests a considerable share of its annual revenue in research and development. Worldwide, maxon has more than 3000 employees at nine production sites and is represented by sales companies in more than 30 countries.