EDGE Launches First UAE-Made Anti-Jam GPS System for Resilient Navigation



EDGE, an advanced technology company for defence and beyond, today announced the launch of GPS-Protect, an anti-jam system that covers air, land and sea applications. Developed by SIGN4L, a leading developer of electronic warfare and intelligence solutions (EW&I) and entity within EDGE Group, the UAE-made system provides significant immunity to jamming, thereby protecting mission critical systems that require assured position, navigation and timing information from GPS.

The state-of-the-art system uses a mutli-element controlled reception pattern array (CRPA) antenna and provides resistance against one or multiple jamming signals. Featuring the most advanced technology, GPS-Protect implements multiple mitigation methods and specialised digital signal processing algorithms to ensure continuous operation of systems that rely on satellite navigation when GPS jammers or other mechanisms are used to jam or disrupt satellite signals.

Designed to operate under highly dynamic conditions, GPS-Protect is lightweight and compact, making it ideal for SWaP (size, weight and power)-limited unmanned systems and guided weapons. Offering a single solution for multiple applications, the modular system can also be integrated into larger platforms such as vehicles, ships and aircraft.

Waleid Al Mesmari, Vice President of Program Management, EW&I – EDGE said: "Building on the success of our existing product portfolio, we are pleased to be launching GPS-Protect – the first anti-jam system to be developed entirely in the UAE and one of few available in the region."

He added: "Aligning with the growing trend towards powerful electronic warfare capabilities in smaller compact packages, GPS-Protect extends spectrum superiority to small-scale, unmanned systems, as well as to larger aircraft and ships. It maintains the platform's GPS signal throughout the presence of unintentional radio-frequency (RF) interference or jamming attacks, and we look forward to working with our partners and clients in deploying this cutting-edge product to market."

SIGN4L is part of the Electronic Warfare & Intelligence cluster at EDGE, an advanced technology group for defence that ranks among the top 25 military suppliers in the world.