



BlastShield Security and Cloaking for Drones

Growth of Commercial and Civil Drone Applications

The use of unmanned aerial vehicles (UAVs), such as drones, is rapidly expanding, with the commercial drone market expected to grow from \$8.2 billion in 2022 to \$47.4 billion in 2029, a 28.6% CAGR.¹ Drones are being used for:

- Aerial surveying and inspection
- Package delivery and logistics
- Healthcare equipment and drug delivery
- Crop monitoring and inspection
- Power line and pipeline inspection
- Surveillance and physical security
- Filmmaking
- Disaster management

UAVs are critical to industries that operate in difficult-to-reach areas or require immediate response to situations.

Unmanned Aerial System Cybersecurity Risks

The U.S. Federal Aviation Agency (FAA), Eurocontrol, ICAO, and European Safety Agency (EASA) are responsible for ensuring the safe operation of UAVs in their jurisdictions. **Cyber attacks and drone hijacking are the result of weak security and a lack of encryption used in unmanned aircraft systems (UAS).**

Many commercial drones are designed to be customized using software development kits (SDKs) that leave the implementation of security controls as an option. The entire UAS is often vulnerable with minimal security controls. Implementing and managing digital certificates, public key infrastructure (PKI), authentication, and encryption are either too complex or an afterthought. Complicating matters, because UAVs operate in public space, they broadcast IP addresses that are easy to scan and target.

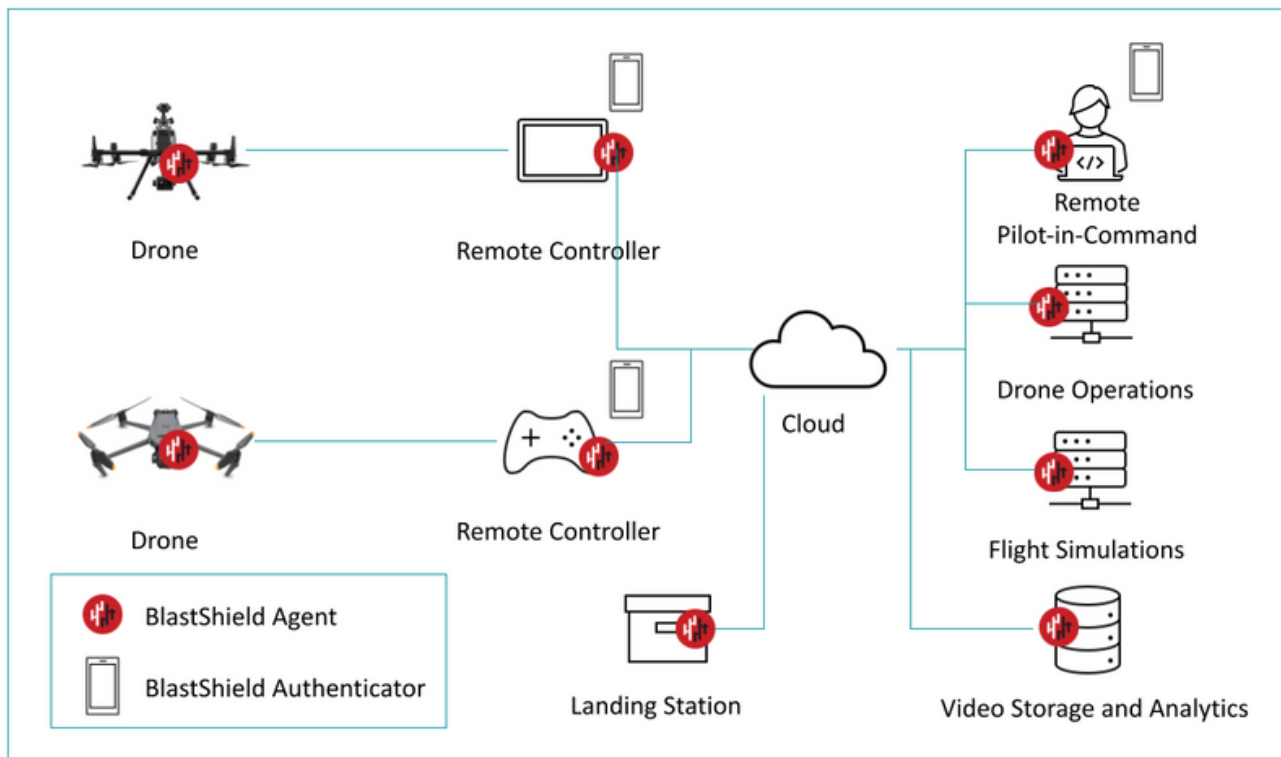
BlastShield™

BlastShield is a zero-trust network access (ZTNA) solution that provides a highly-secure and easy-to-implement solution that protects the UAS end-to-end. BlastShield software agents are easily deployed on aircrafts, control stations, mobile devices, and cloud applications to create a software-defined-perimeter (SDP) that includes phishing-resistant MFA for users, granular access controls, encrypted communications links, and a security orchestration system that can operate in the cloud or on-premise.

BlastShield replaces hardware-based VPNs and complex, certificate-based PKI management to dramatically simplify UAS security. **BlastShield's patented cloaking mechanism makes UAVs invisible to external attackers.**

¹ Commercial Drone Market 2022-2029. Fortune Business Insights

BlastShield ZTNA Solution for Unmanned Aircraft Systems



BlastShield Solution

BlastShield Authenticator

The BlastShield™ Authenticator is a downloadable software image for iOS and Android mobile devices for user phishing-resistant, password-less authentication.

BlastShield Client

The BlastShield Client provides user access into the BlastShield network. The Client is downloadable software for Microsoft Windows, macOS, iPhone iOS, and Android.

BlastShield Host and Gateway Agents

The BlastShield Host Agent is software that is easily deployed on any aircraft, control station, physical or virtual machine running Linux, including Yocto, Microsoft Windows, and macOS servers.

BlastShield Orchestrator

The BlastShield Orchestrator is a cloud-based or on-prem application that provides a single-pane of glass to manage Users, Agents, Groups, and Policies. The Orchestrator can also be hosted by the customer on-prem.

BlastShield Features

- Phishing-resistant MFA authenticates the remote pilot-in-command before connection
- Device cloaking that hides the public IP address and web services of the aircraft, control stations and cloud servers
- Simple orchestration replaces complex PKI and firewall management
- On-prem Orchestrator for air-gapped networks

About BlastWave

BlastWave helps companies simplify the security stack without sacrificing performance. With BlastWave BlastShield, businesses of all sizes create a software-defined perimeter (SDP) that protects connected applications, machines, and users - making them invisible to internal and external attackers. BlastShield was rated as the fastest ZTNA solution by the Tolly Group, performing up to 34x faster than other vendors. www.blastwave.com