



OTAC DRONE SOLUTIONS



swidch

swIDch is willing to be your Authentication Security Lab
We provide the highest quality authentication security service.
Enquire now.




DRONE Solutions

Remoted Controlled Mobility

The Drone industry is rapidly developing and impacting our daily lives in numerous and innovative ways. However, with this innovation comes the potential negative impact of security breaches and exploitation from external rogue sources.

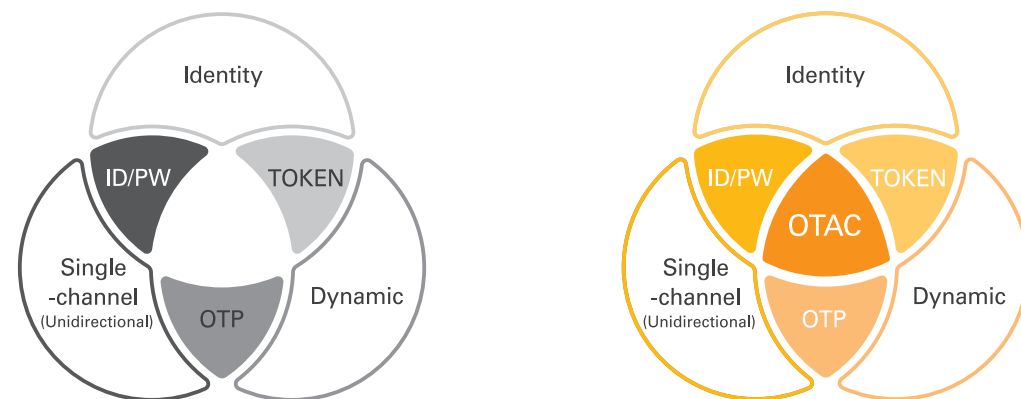
Challenges

As it stands, there are the 3 main challenges that the drone industry and/or drone market is facing today.

Security: Hijacking	Safety: Identification	Regulation: Compliance
 <p>Drone communications with remote controllers are often encrypted, but the encrypted codes are often the same (i.e. static), which makes it a preferred and easy target for hijacking. In military drones, extra hardware, CMVP (Cryptographic Module Validation Program) is installed in drones to validate the security level in communications. Small commercial drones on the other hand often rely on the existing encrypted communication methods which are relatively easy to hijack.</p>	 <p>Drones are small, fast, and relatively difficult to detect in comparison to a flying jet. When multiple aircrafts, both manned and unmanned, are flying, each device needs to identify and communicate with each other to guarantee safety and mission success. This is why there is need for an identification system for drones and its operators. The economic cost of an unidentified drone near an airport is 500,000 euros for every 30 mins an airport is stopped from operating.</p>	 <p>Remote ID is a new regulation introduced by the FAA and it is the "ability of a drone in flight to provide identification and location information that can be received by other parties", such as law enforcement. To comply with this upcoming regulation, drone manufacturers are having to implement a solution to embed identification capabilities on drones in accordance with the standards given by the FAA. The drone pilots/operators must also register themselves with the FAA before they can legally fly the drones.</p>

Why OTAC?

swIDch's OTAC technology provides all the advantages of the three most commonly used authentication systems: ID and password, RSA hardware and software for generating authentication codes, and tokenisation. The functions provided by the individual systems are all combined in OTAC, ensuring a more efficient and effective authentication process.



Limitations of Existing Authentication Methods

- Vulnerable to leakage/exposure by Static value
- User authentication is impossible with OTP only
- Communication required between User and server (Pull & Push)

One-way Unique Identification Authentication Code

- No need to communicate with Server
- Real-Time changes every time for Secure authentication
- Non-reusable One-Time Authentication

Solutions

swIDch upgrades Drone solutions by preventing the use of static information and providing single-channelled dynamic codes to eliminate external threats. OTAC technology, which can be applied to both the software and hardware, maintains and enhances the robust security environment level required for Drone manufacturers and system operators.

