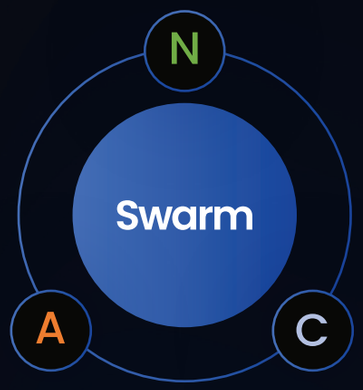
Swarm AI



Network
Applied mesh Network technology for flexible and resilient swarm intelligence

Autonomy
Enhanced autonomous mission execution through self-organizing capabilities, and AI-based target recognition, obstacle detection, and avoidance, and distributed flight control

Collaboration
Efficient swarm collaboration enabled by AI-driven task distribution, mission prediction, and decision-making

Swarm Level

Lv0	Lv1	Lv2	Lv3	Lv4	Lv5
No Swarming	Operator Assistance	Centralized Swarming	Conditional Swarming	High Swarming	Full Swarming
Single-Platform Manual Operation	Basic Coordinated Operation for Identical Missions	Limited Task Allocation and Formation Flight	Collaborative Missions Enabled by Autonomous Coordination and Collision Avoidance	Swarm Autonomy with Dynamic Role Reassignment and Reconfiguration	Objective-Oriented Fully Autonomous Swarm with Minimal Human Intervention
1(RPIC) : 1(UAS)	1(RPIC) : n(UAS)	1(Safety Pilot) : N(UAS)	1(Safety Pilot) : N(UASSw)	M(SwS) : Nsw(UASSw)	M1(SwS) : M2(SwS)
▲ AS-IS					▲ TO-BE

Head Office
5F, 82, Venture-ro, Yeonsu-gu, Incheon, ROK

USA
3135 Kashiwa St. Torrance CA 90505, USA

R&D Center
(Daejeon) 48, Yuseong-daero 1184beon-gil, Yuseong-gu, Daejeon, ROK
(Gwangmyeong) 67 Saebitgongwon-ro (Xi-Tower A-25th Floor), Gwangmyeong-si, Gyeonggi-do, ROK

Manufacturing Center
(Songdo) #2004, 30, Songdomirae-ro,Yeonsu-gu, Incheon ROK
(Gimpo) 55, Hwanggeum 1-ro 80beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, ROK
(Changwon 1) 85, Jukjeon-ro, Uichang-gu, Changwon-si, Gyeongsangnam-do, ROK
(Changwon 2) 2 Gomjeol-gil 28beon-gil, Seongsan-gu, Changwon-si, Gyeongsangnam-do, ROK

Office
(Seoul) #317-8, 57, Magokjungang 8-ro 7-gil, Gangseo-gu, Seoul, ROK

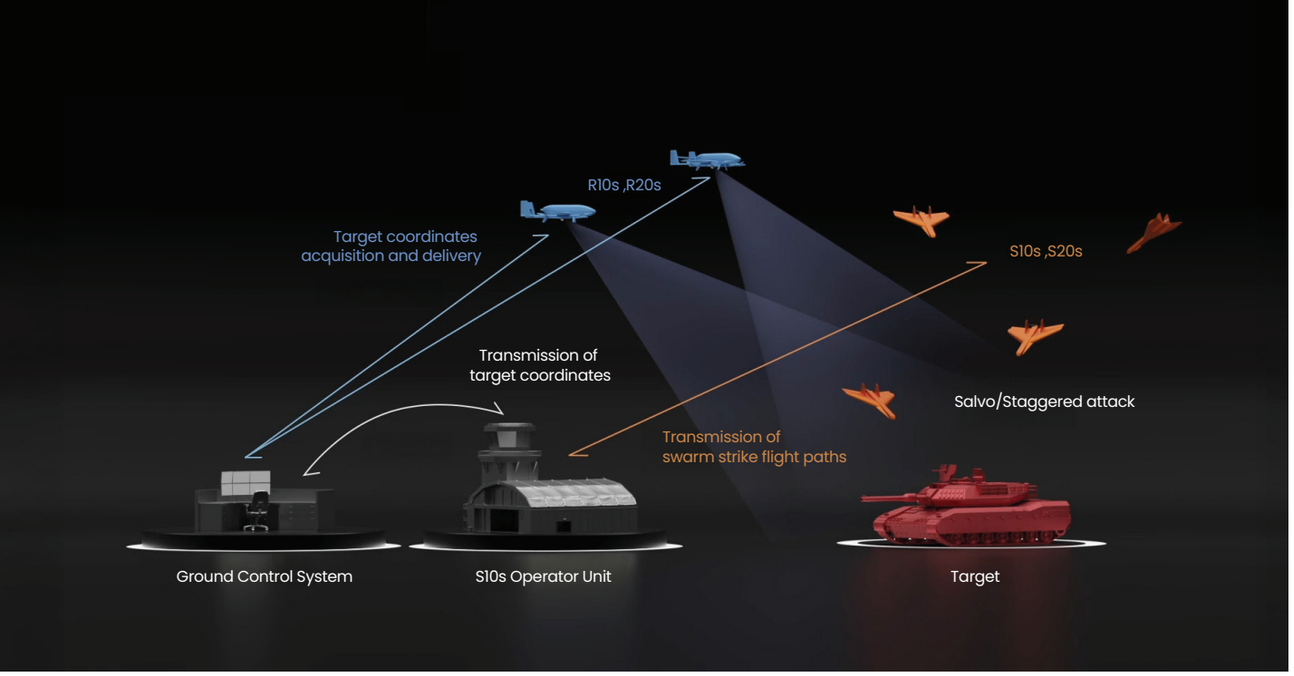
CG-AC

Tel +82 070-5222-6968
Fax +82 070-8220-6968
Email pabloair@pabloair.com

PABLO AIR

PabloM

PabloM is PABLO AIR's defense-dedicated brand. The "M," representing "Military," embodies the identity of a strategic unmanned combat power platform designed for operational deployment. The PabloM series serves as the foundation of a 'Swarm Loitering Munition Combat System' poised to redefine the paradigm of future battlefields.



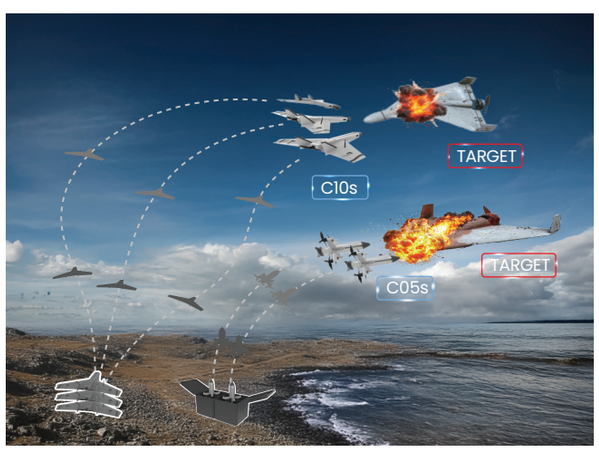
Swarm Loitering Munition Combat System

PABLO AIR has established a three-pillar framework—reconnaissance, strike, and interception—optimized for future battlefields, spanning loitering munition attacks against ground targets to counter-drone interception using unmanned systems powered by swarm AI.

Swarm Reconnaissance and Strike System

Swarm reconnaissance drones (R10s/R20s) provide persistent surveillance, collecting real-time target intelligence during extended flight operations. Based on this data, ground control systems deploy swarm loitering munitions (S10s/S20s), which autonomously generate flight paths and engage designated targets. Multiple loitering munitions conduct coordinated Salvo Strikes, simultaneously attacking from multiple directions to maximize effects relative to payload weight. Mission flexibility is further enhanced through combined operations with higher-payload variants such as the S20s (up to 5 kg). The R20s and S20s share a common airframe with modular wing configurations, enabling rapid mission transition in time-critical combat environments.

- Maximized combat capability through swarm operations
- Modular mission payloads enabling rapid replacement
- Cost-efficient and rapid mass production
- AI-based automatic path generation and terminal guidance



Swarm Interceptor Drone System

Upon detection of an airborne intruding target, an optimized interception system activates by engagement range medium (30 km) or short (10 km) deploying Counter-UAS Hard-Kill drones that autonomously launch from dedicated launchers, intercept targets through Vision AI swarm operations.

- Vision AI optimized for hard-kill missions
- Tiered interception missions based on engagement range
- Maximized combat capability through swarm operations

Swarm Drone Combat System Platform

Swarm Loitering Munition Drone (Strike)

S10s

- Swarm Salvo/Time-phased loitering munition capability
- Light Class / Short-range

MTOW	4.2kg	Max Speed	42m/s (150km/h)
Empty Weight	2.7kg (With Battery)	Flight Range	Over 40km
Flight Time	Over 40min	Dimension (W*D*H)	1,300*1,032*225mm
Max Payload	1.5kg	Production lead-time/1EA	Depends on quantity
Payload	Warhead + Nose Modules		

S20s

- Swarm Salvo/Time-phased loitering munition capability
- Heavy Class / Medium-long range, low-performance EO/IR for close surveillance/reconnaissance

MTOW	32kg	Max Speed	42m/s (150km/h)
Empty Weight	27kg (With Battery)	Flight Range	110km
Flight Time	Over 80min	Dimension (W*D*H)	3,300*2,400*440mm
Max Payload	5kg	Production lead-time/1EA	Depends on quantity
Payload	Warhead + EO/IR (Optional)		

*Rapid mission reconfiguration through interchangeable main wing modules(S20s ⟷ R20s)
*Main wing modules available for separate purchase

Swarm Reconnaissance Drone (Reconnaissance)

R10s

- Long-range wide-area swarm surveillance/reconnaissance
- Loitering / Long-range

MTOW	25kg	Max Speed	33m/s (120km/h)
Empty Weight	22kg (With Battery)	Flight Range	140km
Flight Time	Over 120min	Dimension (W*D*H)	3,800*2,220*630mm
Max Payload	3kg	Production lead-time/1EA	Depends on quantity
Payload	EO/IR		

R20s

- Long-range wide-area swarm surveillance/reconnaissance
- Loitering / Long-range

MTOW	32kg	Max Speed	38m/s (130km/h)
Empty Weight	27kg (With Battery)	Flight Range	130km
Flight Time	Over 90min	Dimension (W*D*H)	4,300*2,400*440mm
Max Payload	5kg		
Payload	Warhead + EO/IR (Optional)		

*Rapid mission reconfiguration through interchangeable main wing modules(S20s ⟷ R20s)
*Main wing modules available for separate purchase

Swarm Interceptor Drone (Counter)

C05s

- Short-range
- Radar-based midcourse & image-based terminal gudance

MTOW	4kg	Max Speed	83m/s (300km/h)
Empty Weight	2.1kg	Flight Range	8km
Endurance	15min	Dimension (W*D*H)	780*780*800mm
Max Payload	0.5kg		
Engagement Type	Hard-kill (Kinetic Ramming or Explosive)		

C10s

- Medium-range
- Radar-based midcourse & image-based terminal guidance

MTOW	4.2kg	Max Speed	42m/s (150km/h)
Empty Weight	2.7kg	Flight Range	40km
Endurance	30min	Dimension (W*D*H)	1,300*1,032*225mm
Max Payload	1.5kg		
Engagement Type	2-axis Gimbal EO Camera		