

DARTS

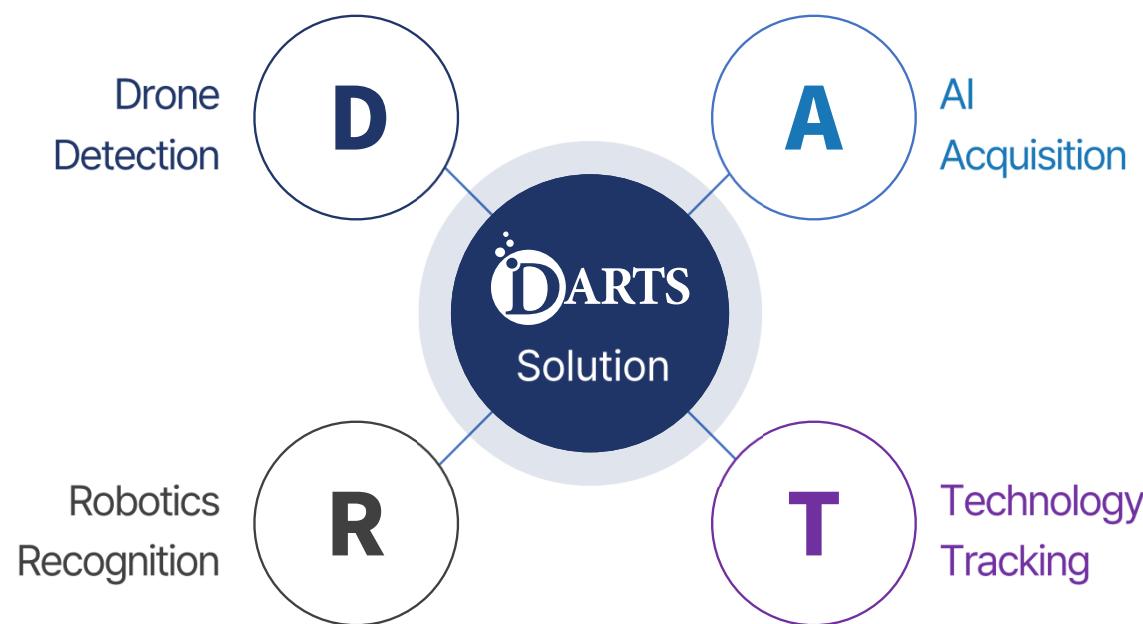
Introduction



DARTS Introduction



Detection, Acquisition, Recognition and Tracking & Strike DARTS
Drones Artificial Intelligence and Robotics Technology Solution DARTS



Darts is a company that develops reconnaissance & attack UAV through convergence of target detection & Recognition, tracking & strike technology

"The Korean Missiles Expert with The Korean Drone Expert"

A Team optimized to business of " Loitering munition "



CEO
Kim Se Yeong

2019.11. ~ Now DARTS Co., Ltd/President, CEO
 1996 ~ 2019.11 ADD(Agency for Defence Development) / Principal Researcher

1996 ~ 2006 Research & Development of Korean Missile Seeker System
 2006 Winning the Golden Prize of Defense Science in ADD
 2010 ~ 2014 Development of Raybolt (Anti-Tank missile) E/O Seeker System
 2014 ~ 2016 Development of Poniard (70mm Anti-Ship missile) E/O Seeker System
 2016 ~ 2019 Development of Taipers (Tank+Snipers, Air-to-ground missile) Seeker System

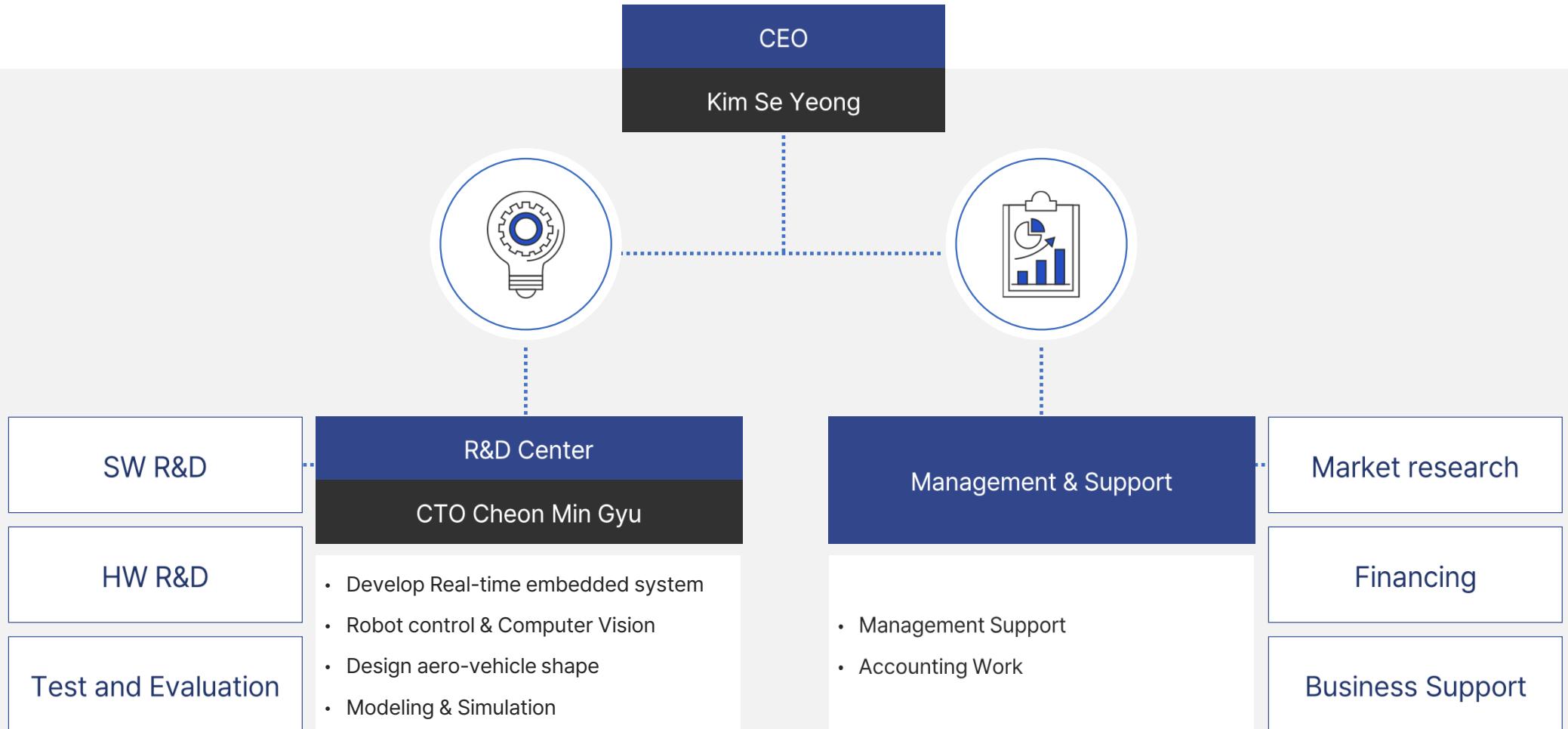


CTO
Cheon Min Gyu

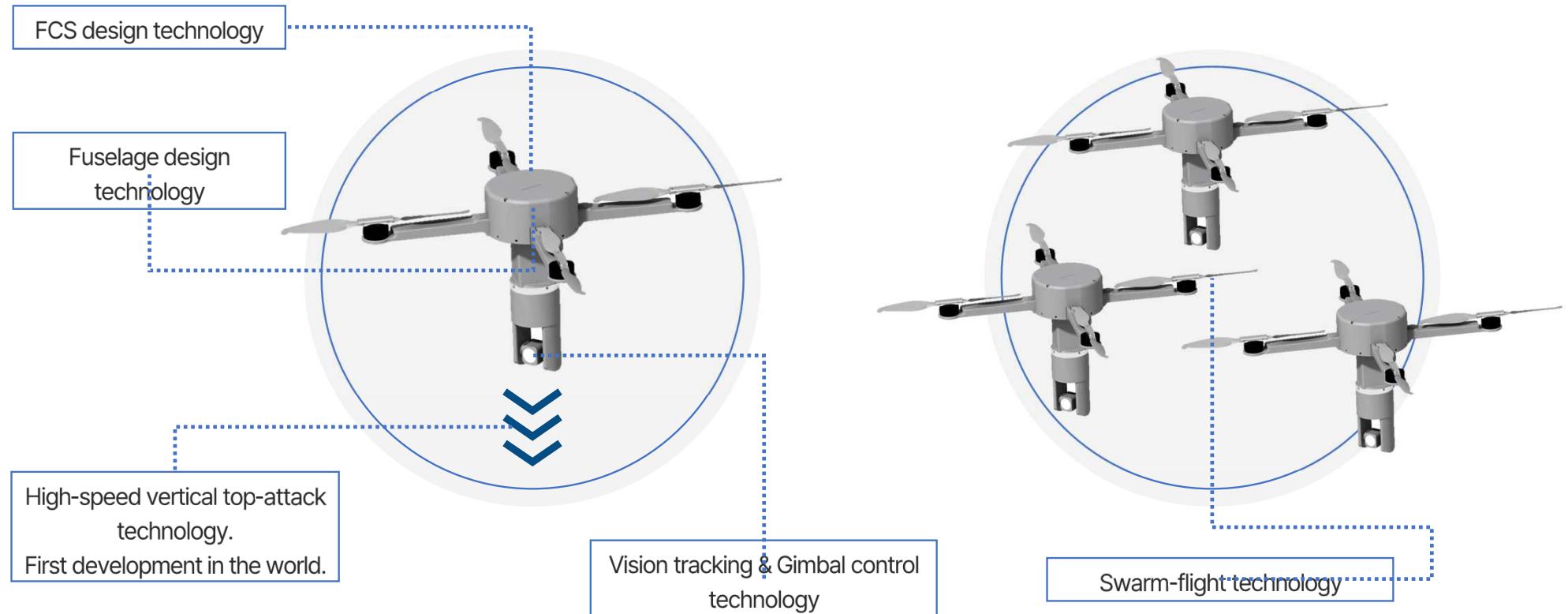
2020.01. ~ Now DARTS Co., Ltd/ Vice President, CTO
 2015.03 ~ 2019 EXENS / CEO

2014 ~ 2015 Research & Development of small UAV with Bihimasena
 2015 ~ 2016 Development of Indoor Drone System based on IoT with CISCO
 2016 Development of GPS jamming and spoofing system with Hanwha System
 2016 Development of Drone with gimbal system for RF Seeker with ADD
 2017 ~ 2018 Development of battalion level Vtol UAV FD-TR with FineADS
 2017 ~ 2019 Development of UAV control system for VTOL
 2018 Development of 3D mapping drone with Doosan Infracore
 2018 Development of performance test equipment for radar with Hanwha System
 2018 ~ 2019 Development of swarm flight control system with ADD
 2019 Development of Drone system for guided missile simulation with LIG Nex1
 2019 Development of Laser dazzling drone system with ADD

Company Organization chart



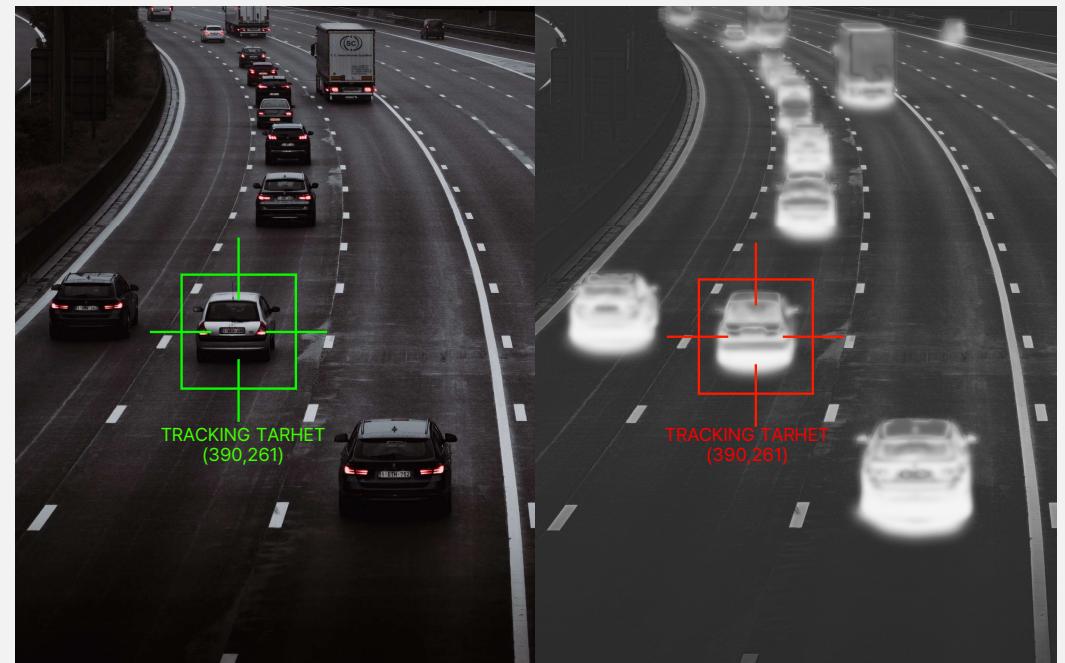
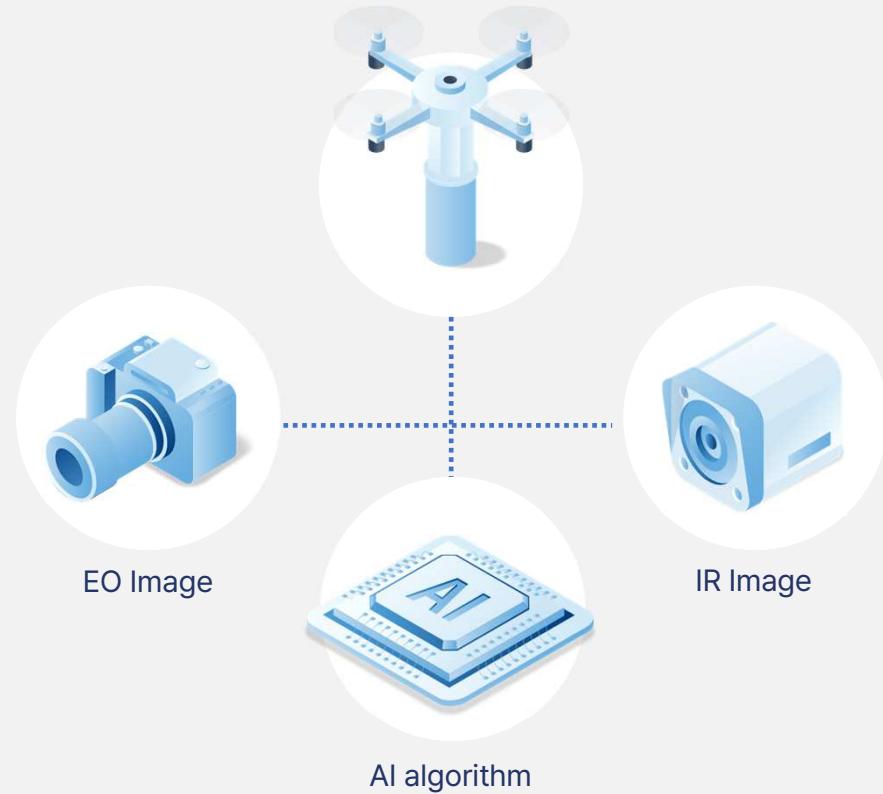
What kind of technologies contain in our Drone?



Key Technologies

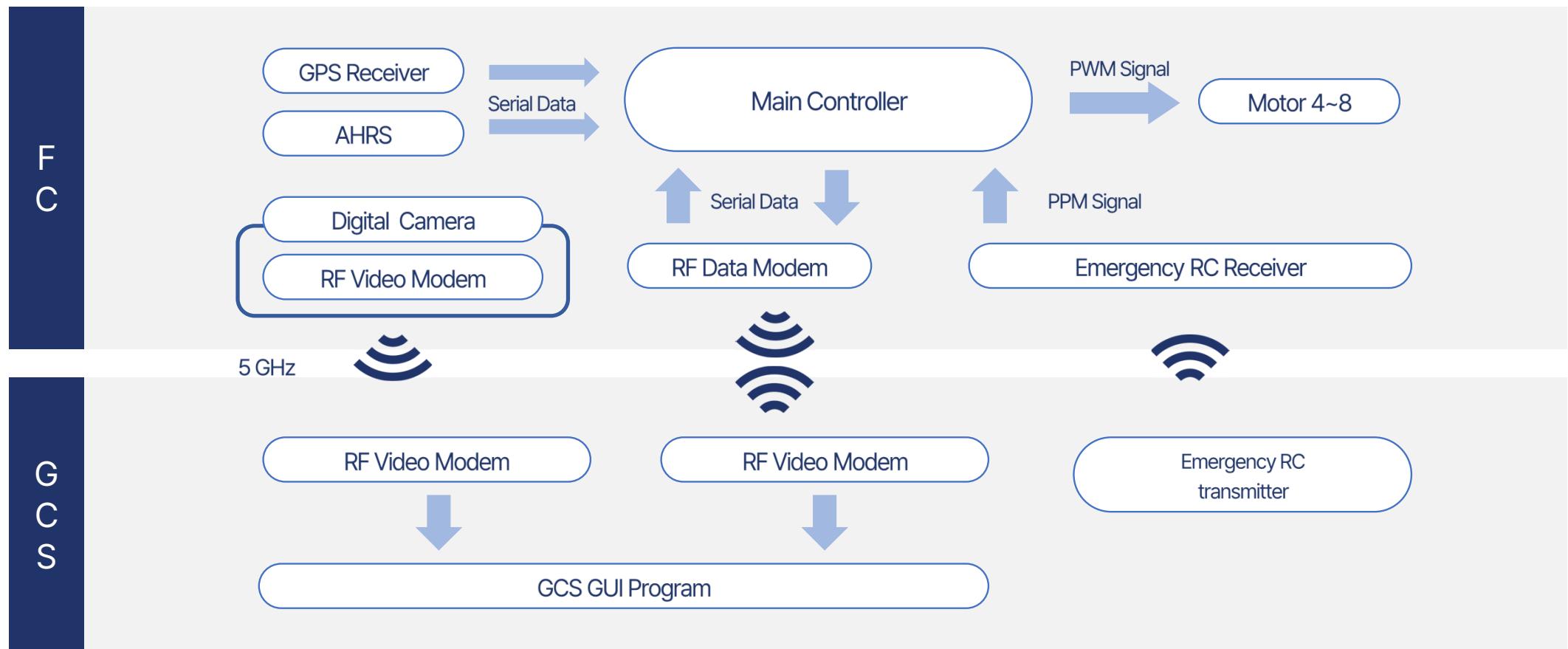


AI based detecting and tracking system



Key Technologies

Flight Control System



Product Introduction

DLM-1 (Wraith)



One man operating guided weapon that precisely strikes four targets
Wraith is low price and effective weapon system
The Korean army is evaluating the operational test

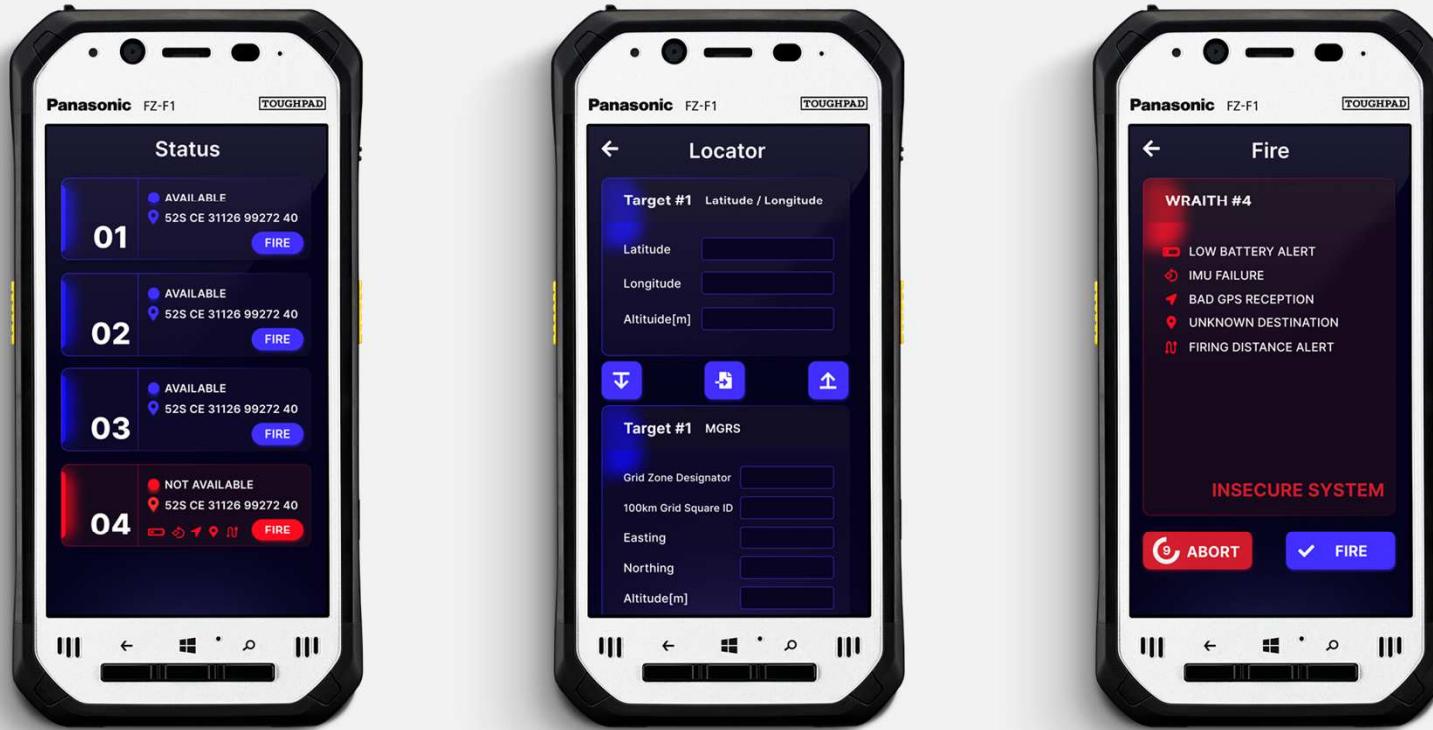
Specification

Loitering Munition	Type	Multi-copter
	Size (Length × Wing-Span × Height)	390×250mm(Fly) / 150×250mm(Carry)
	Operation Range	2.5km
	Speed (Horizontal)	36km/h
	Flight time	7min
	Target accuracy	CEP 3.5m
	Maximum Flight Altitude	3 km above sea level (Maximum)
	Wind Resistance	Wind level 3
	Payload	500g
TADS (Target Acquisition & Designation System)	Operating Temp	-20°C~50°C
	Resolution	EO or IR (HD or VAG)
	Zoom	EO Optical Zoom 18x
	Detection Range	1.3km
	Operating Temp	-20°C~50°C

Product Introduction



GCS GUI



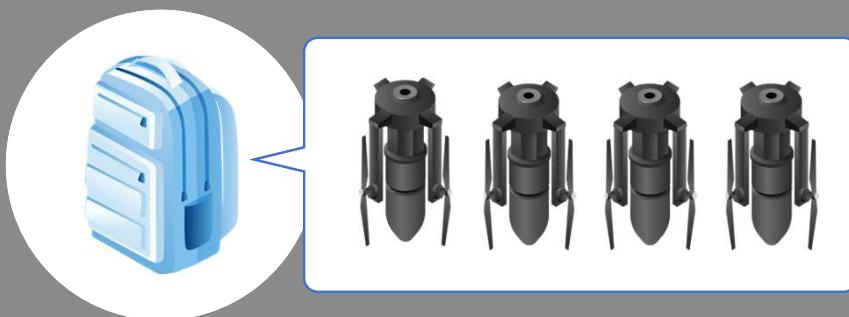
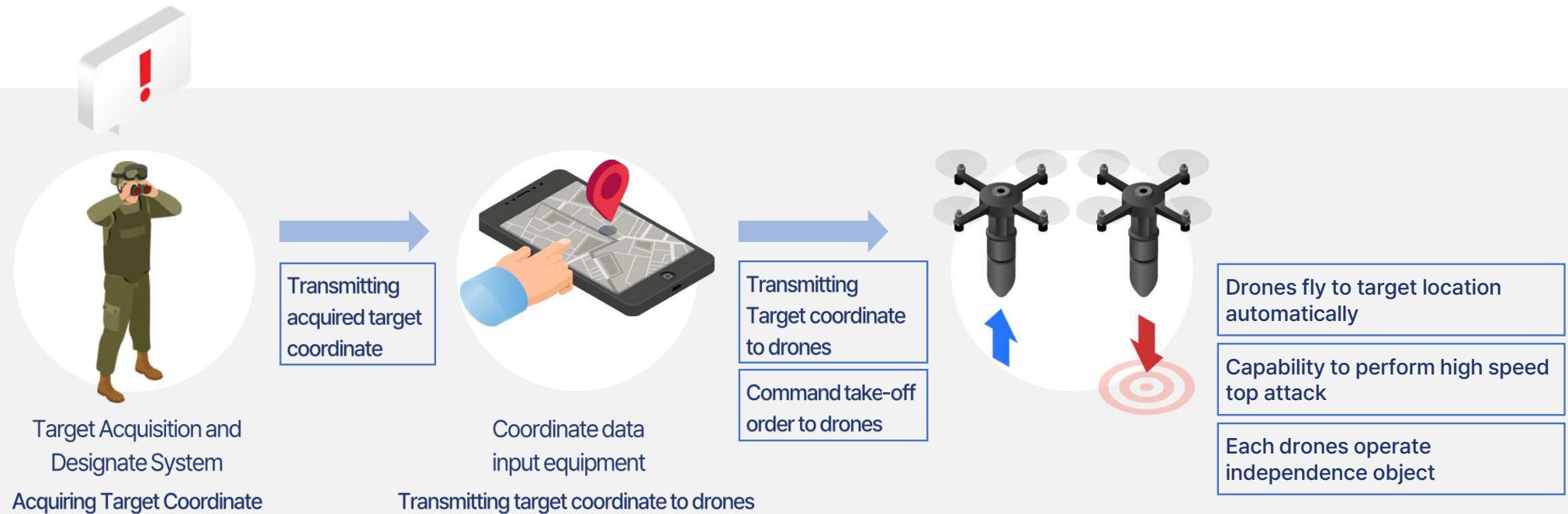
Sales Record



 한국은행 2023년 1월 30일 대표자: 김민수		물품 구매 계약서 부 서명: 미래전역사업전략운영계약팀장 패스번호: 8282			
		구분 계약담당 소행 박경구	직급 주무관(6급) 김민숙		
		성명			
계약 번호 2020B36404 원예 약번호		일반화정계약			
물 품 명 자동 무인기		공 고 번 호	일 카 빙 법		
		외 1 항목	A	총액제	
계약 금액 부과 금액 총 제 부기 금액	본조	금 일실이익침천오백만원	₩1,275,000,000	계약방법	
	부과	금 일실이익침천오백만원	₩0	경쟁 수의	
		계	금 일실이익침천오백만원	₩1,275,000,000	개경쟁(종+)
			₩1,275,000,000		
계약보증금		금 육천삼백칠십오만원		₩63,750,000	납부방법 수·보증보험
지체상금율		0.075 %		율가변동 계약금액 조정방법 --> 국제령 제642조 제1항 1호 품목조정률	
납입 일자		2023년 02월 20일부터 2023년 08월 31일 까지		관급품목	관급최초인도일
납품 장소		188번지 외 4			
계약 증정 번호		2020B36404 기타 사항			
금융 기관		국민은행		계좌 번호	710801-01-390006
				예금주	(주)다초
방위사업청 계약담당부서는 불임과 계약당사자는 불임과 계약당사자에 대하여 위 물품에 대한 구매계약을 체결하고 신의에 따라 성실히 계약상의 의무를 이행할 것을 확약하며, 이 계약의 증거로 계약서를 작성하여 당사자가 기명 날짜로 이를 증명합니다.					
불임서류: 1. 계약당사자 2. 물품(제작 구매) 계약 특수조건 3. 물품구매 계약일반조건 4. 선출내역서					
계약일자: 2020년 11월 30일					
계약 담당 공무원		계약 상대자			
방 위 사 업 청		상 호	주식회사 다초		J F 9 C 1
		주 소	대전광역시 유성구 신성로91 (신성동) 2층		
		대 표 자	김세영		
		사업자등록번호		167-81-01728	
		전 화 번 호		031-607-3202	
		분 담 비 용		해당없음	

1. ON 30 NOV 2020, Contract with ROK Army
 2. Total amount US \$1million (140 unit)
 3. Operation test in 5 Korean army forces include special force
 4. On 30 SEP 2021, Deliver Completed
 5. On 30 JUN 2022, Complete operation test

System diagram



A Drone system have capability to attack the target as a form of top attack.

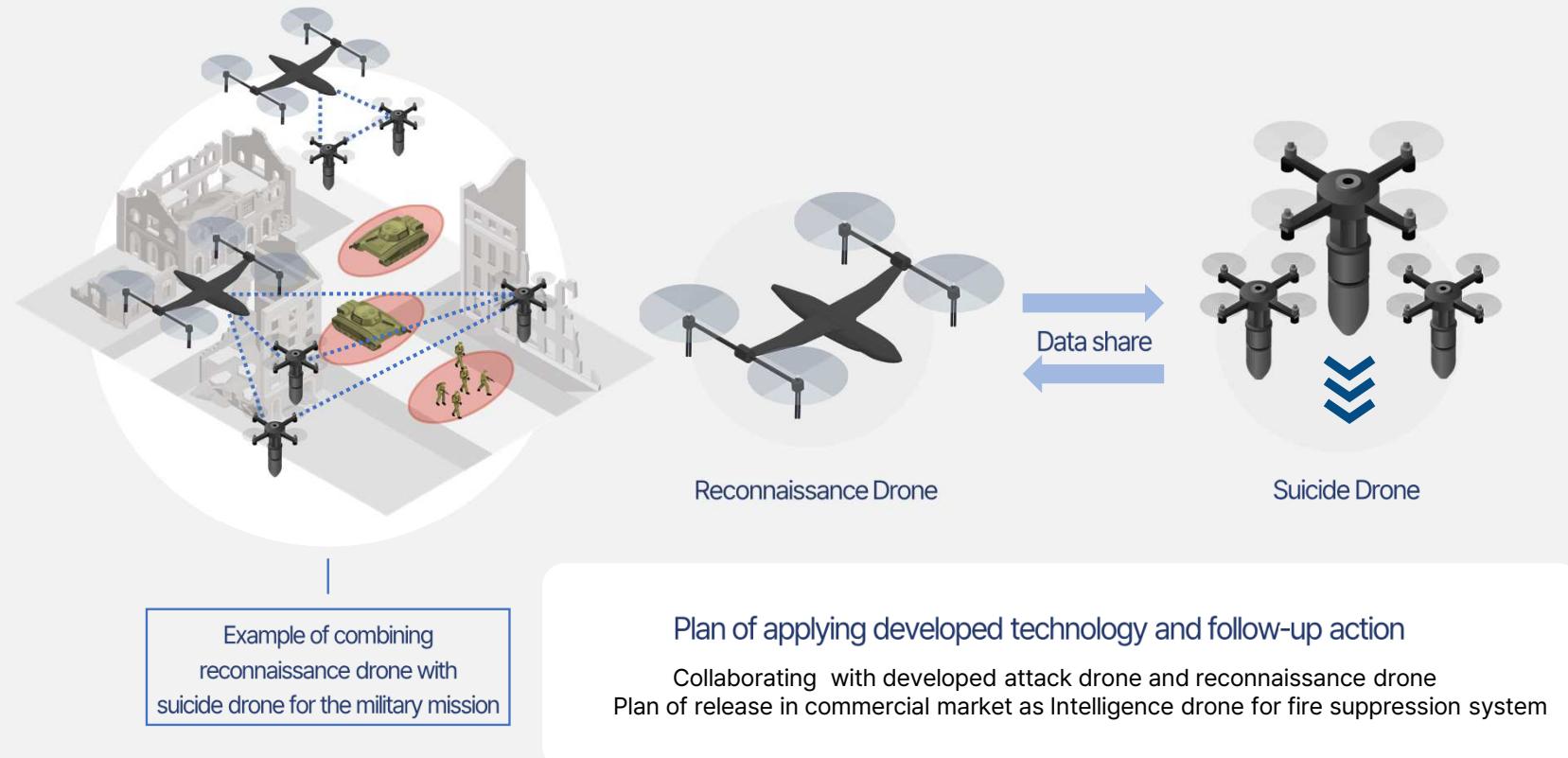
The Drone rotates their motors reverse direction and dives down fast from above of target. (DARTS holds patents of design.)

A operator can carries and controls 4 drones at once.

Application Plan



Applying developed technologies





Contact us

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