NARMA

NARMA
Fly for People

FLY for PEOPLE

Fly for People

MISSION
To offer equal welfare with drones

VISION
The world' s first tilt-rotor technology company

GOAL
Become the world's top delivery service provider by 2030
and embark on the development of UAM (Urban Air Mobility)

VALUE
UAVs with reliability
Commercialized future technology | Electric dual tilt-rotor
Standard platform for drone delivery | D-Nuri

CONTENTS

HISTORY

2025
Selected for drone commercialization project to develop high-performance drones
Commenced test flights for maturity level certification
Delivered an IR presentation at Plug & Play
Listed for online sales on AliExpress
Demonstrated test flights in Kazakhstan
Granted patent for UAV Delivery and UAV Operation System (USA)
Exhibited at 2025 CES (AF100-AGRI) & Drone Show Korea (Drone Station)

2024
Developed Liquefied H^2 Fuel Cell-driven (AF200FC)
Completed the basic design of the high-weight drone (AF400)
Developed automatic takeoff and landing system for ships (AF100)
Granted patent for Drone System (USA)
Obtained flight permission in Kenya as the first Korean company (EVLOS)
Executed the 2024 SW Safety Innovation Project (AF200)
Supplied to Korea Expressway Corporation (AF100-AED)
Established NARMA US Inc. (Texas, USA) and Daejeon branch (Yu-seong)
Delivered mobile device services for Samsung and LG U+ (Jeju Island)
Exhibited at 2024 CES (Medical delivery service), IFA, AAD Expo, MICE
Named Excellent Research Institute by the Ministry of Science & ICT
Awarded the Minister of SMEs and Startups Award
Selected as Legend 50+

2023
Raised Series A investment
Launched Korea's first commercial drone delivery service (Jeju-Gapado)
Performed maiden flight of H^2 fuel cell tilt-rotor UAV
Obtained safety certification (AF160)
Signed on KOICA CTS Seed 1 Program (Medical delivery in Kenya)
Participated in drone demo city project (Ministry of Land, Infrastructure & Transport)
Selected as 2023 Gyeong-buk & Daejeon Unicorn and Pre-Unicorn company
Exhibited at 2023 CES (AF200FC, D-Nuri)

2022
Raised capital (Investment from Hana Ventures & POSTECH Holdings)
Developed D-Nuri and registered trademark
Started development of H^2 fuel cell-equipped UAV
Certified as FCC & CE (AF200) and FAA Part 107
Delivered antidotes between hospitals in Daejeon
Exhibited at 2022 CES (AF200)

2021
Raised capital (Investment from KIBO)
Performed BVLOS demonstration flight at Korea Drone Expo (Yeouido, Seoul)
Signed MOU for cooperation with Daejeon Yuseong Police (AF100-POLICE)
Acquired the Korean government's R&D project
Selected as Excellent Product by MOTIE (AF200)

2020
Raised Seed Investment
Acquired the Korean Drone Direct Production Certificate
Certified as a Venture Business

2019
Certified as an Innovative Company
Selected as a smart SME

2018
Established NARMA Inc.
Registered as a research institute company
Completed the development of tilt-rotor drone control technology

2024 Johannesburg, South Africa (AF200)

NARMA Inc.

has been established as the first spin-off company of KARI (Korea Aerospace Research Institute) and has launched the world's first electric tilt-rotor drone.

Our in-house capabilities in design, manufacturing and training, enable us to realize everything you can imagine about VTOLs.

BUSINESS

MEDICAL
By delivering AEDs and emergency supplies using drones, we contribute to saving lives.

POLICE
By efficiently conducting surveillance and reconnaissance in urban areas, we support the creation of safer cities.

MILITARY
By utilizing drones for surveillance and reconnaissance, we enhance the efficiecy of military operations.

AGRICULTURE
By contributing to smart agriculture initiatives, we enable the quick and easy management of information from vast landscapes.

STRENGTH

WORLD'S STANDARD DELIVERY DRONE SOLUTIONS

Technology	Based on the tilt-rotor technology acquired from KARI, NARMA has independently advanced its own technology development
Certificates	CE, FCC, KC Safety Certification, DO-178C
Manufacture	In-house production and assembly
Design	Create designs that integrate NARMA identity
Network	Established a global network across Europe, Africa, and the Americas

PARTNERS

INVESTORS
KARI · KIBO 기술보증기금 · 하나벤처스 · POSTECH HOLDINGS · Company K partners

INSTITUTION
대전광역시 DAEJEON METROPOLITAN CITY · 대전테크노파크 · KIAST · 경북테크노파크 Gyeongbuk Technopark · 울산광역시 울주군 · 금산군 · DiCIA · KAIST · 한남대학교 · Jeju 제주특별자치도 Jeju Special Self-Governing Province · KIAT · KRIT 국방기술진흥연구소 · 대전일자리경제진흥원 · 서울대학교 SEOUL NATIONAL UNIVERSITY · POSTECH · 단국대학교 · ex 한국도로공사 · 국립한발대학교

DOMESTIC PARTNERS
CU · SK planet · ASPI · NINANO COMPANY · K data · 진성플라테크 · Superb AI · FLARE · unitec semiconductors · 캠크 · NAMYANG NEXMO · LG Energy Solution

OVERSEAS PARTNERS
Kenya Red Cross · Moi University · MINISTRY OF HEALTH · Helint AVIATION · Kenya FlyingLabs · ZING DRONE SOLUTIONS · ELEVON TECHNOLOGIES

ACHIEVEMENTS

Patents

Registration	Title	Remarks
PCT/KR2024/17955652	UAV Delivery and UAV Operation system	Registered
10-2024-0182358	Tilt-rotor drone with improved fixed wing and tilting section structure	Filed
10-2024-0181338	Drone Landing Method and System with Human Detection Capability	Filed
10-2024-0147122	Modular Drone for Delivery and Surveillance Reconnaissance	Filed
10-2024-0123965	Waterproof, Dustproof, and Highly Modular Tilt-Rotor Drone Structure	Filed
10-2024-0123972	Tilt-Rotor with Parachute Module for Vertical Takeoff and Landing	Filed
10-2024-0111715	Quad Tilt-Rotor Unmanned Aerial Vehicle	Filed
10-2024-0082440	Liquid Hydrogen Fuel Cell Power Pack Device for UAV	Filed
10-2024-0082433	High-Pressure Hydrogen and Liquefied Hydrogen Dual-Fuel Cell Tilt-Rotor UAV System	Filed
10-2024-0082447	Dual Blade Rotor Assembly for Unmanned Aerial Vehicles	Filed
10-2023-0151405	Multirotor Drone with Adjustable Lift Fixed Wings	Filed
10-2023-0133252	Delivery Device Using Drones and Its Delivery Method	Filed
10-2023-0142629	Drone Delivery Device Equipped with a Winch	Filed
PCT/KR2023/013546	Reverse Thrust Over-Tilting Drone	Filed
PCT/KR2023/009332	Drone Operation System Provide with Kiosk and Station for Drone Control	Filed
2022-0189455	Hydrogen Fuel Cell Aircraft	Filed
2022-0126744	Drone Operation System with Drone Control Kiosk and Station	Filed
2022-0104954	Reverse Thrust Over-Tilting Tilt-Rotor Drone	Filed
2022-0104937	Military Supplies Drone Delivery and Drone Operation Station	Filed
10-2021-0169758	Micro Spray Device	Registered
PCT/KR2021/003898	Drone Station	Registered
10-2020-0177969	Winch for Drones	Registered
10-2020-0118462	Tilt Rotor UAV	Registered
10-2020-0118460	Drone Station	Registered
10-2019-0162619	Drone Landing Gear	Registered
10-2018-0136611	Electronic Drone Battery Coupling Device	Registered
30-2025-0009381	Drone Station	Registered (Design)
30-2024-0009365	UAV	Filed (Design)
30-2023-0047248	Multi-Drone Operation Kiosk	In Progress (Design)
30-2023-0047247	Charging Station for Drones	In Progress (Design)
30-2023-0038535	Package Box	Registered (Design)
30-2021-0010123	Aircraft	Registered (Design)
30-2021-0010122	Aircraft (AF100)	Registered (Design)
40-2022-0203194	Category (09)	Registered (Mark)
40-2019-0012796	Category (09)	Registered (Mark)
40-2019-0012797	Category (42)	Registered (Mark)

Certifications

	Title	Expiration Date
CE	European Certification (AF200)	2022. 12. 01
FCC	US Certification (AF200)	2022. 11. 01
KC	Korea Certification (AF100)	2021. 07. 07
KC	Korea Certification (AF200)	2020. 06. 30
Safety Certification	Safety Certification for Ultra-Lightweight Flying Device (AF160)	2025. 02. 20

TILT-ROTOR

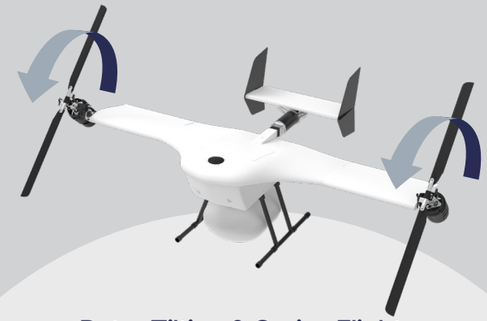
- High-speed flight by tilt-rotors after vertical take off
- Overcome the disadvantages of multicopter drones and fixed-wing drones
- High-speed, long-distance flight, making it the best for delivery services
- AI Edge computing technology for surveillance etc.

VTOL Drones

Delivery Service

AI Edge Computing

Auto Landing on Moving Vehicle



Rotor Tilting & Cruise Flight

2

3

Vertical Landing

1

Vertical Takeoff

KEY TECHNOLOGIES & PRODUCTS

Key features

- NARMA's tilt-rotor drone offers higher wind resistance (up to 15 m/s) compared to ordinary VTOLs (up to 12 m/s), resulting in greater annual usage.
- AF100 series and AF200-AMBULANCE can fly up to 30 km and 40 km respectively, with a maximum speed over 100 km/h. This allows them to fly 4~6 times further and at 2~3 times the speed of ordinary multicopter drones (average 10 km flight distance, 50 km/h flight speed).
- Breaking away from traditional drone operation using manual controllers, NARMA has developed a KIOSK system that enables drone operation with simple touch on the KIOSK screen.
- Enabled flight control and monitoring of drones anywhere in the country using LTE communication.
- Damage can be minimized in the event of an accident with the parachute automatically deployed on the AF200-AMBULANCE.
- Easier maintenance and various mission equipments can be mounted on customer request.

Our Value

- Emergency medication delivery with long-range, high-speed flight capability
- Surveillance of vast areas with a built-in camera
- Performance and safety levels verified through various demo flights in Korea and overeas

Usecase

- Capable of taking off and landing on a moving ship with high landing accuracy, making it highly useful for maritime operations
- Quick delivery of goods to islands or mountainous areas that are difficult to access

AF100 SERIES

AF200 SERIES

AF100 SERIES

AF100 series supports versatile payload options, including cameras and AEDs, enhancing functionality across various fields such as precision agriculture, surveillance and emergency.

AF100-AED

[AED]

Payload	HeartSine PAD 350P / 360P
Size	W184 X L234 X H48 mm

Reach a heart attacker within 5km in 3 minutes.
Easy to control with KIOSK, D-Nuri.

AF100-AGRI

[Spectral Camera]

Payload	MicaSense RedEdge-P dual
Size	W132 X L88 X H96.7 mm

Capture and analyze crop conditions across vast lands, and manage the data smartly.

HARDWARE

Drone Type	Electric dual tilt-rotor (eVTOL)
Size	W1,000 X L860 X H300 mm
Payload / MTOW	1.2 kg / 6.99 kg (with batteries)
Propulsion	2 rotors during operation
Battery	1 LiPo battery (16,000 mAh)
Avionics	1 GNSS system 2 Magnetometers
Connectivity	1 Cellular data link (4G) 1RF data & video link (5.8GHz 5km max.)

CERTIFICATION

Korea Certification

OPERATION

Flight Speed	around 80 km/h nominal cruise speed
Climb Speed	7.2 km/h climb, 5.4 km/h descent
Max. Speed	over 135 km/h
Flight Distance	30 km
Flight Time	25 min
Max. Altitude	2,000 m AMSL
Landing Accuracy	1.5 m (0.1 m with RTK-optional)
Operating °C	-5 ~ 40 °C
Wind Resistance	9 m/s average wind, 15 m/s gusts
Weather Limits	No operation during rain

AF100-PATROL

[EO&IR Camera]

Payload	SIYI A8 mini
Size	W55 X L55 X H70 mm

Experience the convenience of departing a drone from a moving vehicle

AF200-AMBULANCE

AF200-AMBULANCE is specifically designed for medical supply delivery, providing reliable performance in critical situations.

HARDWARE

Drone Type	Electric dual tilt-rotor (eVTOL)
Size	W1,750 X L1,010 X H520 mm
Payload / MTOW	3.8 kg / 23 kg (with batteries)
Propulsion	2 rotors during operation
Battery	4 Li-ion batteries (16,000 mAh each)
Avionics	2 GNSS system, 2 Batteries 2 Magnetometers
Connectivity	1 Cellular data link (4G) 1RF data & video link (5.8 GHz)

CERTIFICATION

Korea Certification, European Conformity, FCC

OPERATION

Flight Speed	around 75 km/h nominal cruise speed
Climb Speed	7.2 km/h climb, 5.4 km/h descent
Max. Speed	over 100 km/h
Flight Distance	40 km
Flight Time	35 min
Max. Altitude	3,000 m AMSL
Landing Accuracy	1.5 m (0.1 m with RTK-optional)
Operating °C	-5 ~ 40 °C
Wind Resistance	12 m/s average wind, 17 m/s gusts
Weather Limits	No operation during rain

AF200 FC (under development)

Drone Type	Electric dual tilt-rotor (eVTOL)
Size	W1,750 X L1,335 X H750 mm
Empty Weight	18 kg
Payload/MTOW	2 kg / 23 kg
Flight Speed	70 km/h max. speed / 55 km/h cruise speed
Flight Distance	150 km (based on 5L liquid hydrogen)

D-NURI (KIOSK)

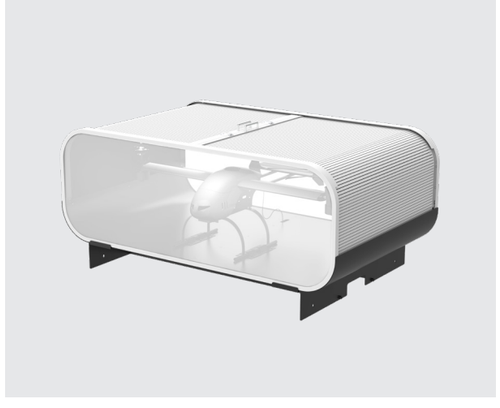
KIOSK	Multi-drone operation / Touch screen
Size	W402 X L350 X H1,000 mm
Characteristics	Reduces pilot's burden Pre-defined flying path Deployment time under 30sec. US & Korea Patent

AF400 (under development)

Drone Type	Electric lift tilting (VTOL)
Size	W4,000 X L3,500 X H1,200 mm
MTOW	110 kg
Payload	20 kg
Cruising Speed	80 km/h
Flight Distance	50 km (standard conditions with full charge)

D-NURI (Station for indoor)

Station	Always on & charged (battery 70%)
Size	W420 X L420 X H450 mm
Characteristics	US & Korea Patent



AF100 STATION (for outdoor)

Station	Always on & charged (battery 70%)
Size	W1,400 X L860 X H640 mm
Characteristics	Outdoor Installation Available Manual Operation Korea Design Patent

AF160

Drone Type	Hexa-copter
Size	W2,392 X L2,392 X H690 mm motor wheelbase 1,624 mm
Weight	21 kg (with battery)
Payload	30 kg
Communication	RF / LTE
Connectivity	2.4 GHX/SKT (B1/3/5) / Requency range
Flight Speed	43 km/h max. speed / 36 km/h cruise speed
Flight Time	30 min. hovering
Drone Battery	4x Li-po battery (16,000 mAh)

AF70

Drone Type	Quad-copter
Size	W1,040 X L940 X H360 mm motor wheelbase 700 mm
Weight	3.5 kg (with battery)
Payload	2.5 kg
Communication	RF / LTE
Flight Speed	36 km/h max. speed / 18 km/h cruise speed
Flight Time	20 min. hovering
Operation	Mission flight / Real-time monitoring

AF60

Drone Type	Quad-copter
Size	W980 X L700 X H360 mm motor wheel base 650mm
Weght	2.2 kg (with battery)
Payload	1.5 kg
Communication	RF / LTE
Flight Speed	36 km/h max. speed / 18 km/h cruise speed
Flight Time	20 min. hovering
Operation	Mission flight / Real-time monitoring

You can fly a drone for people.

2024 Tharaka Nithi, Kenya (AF200-AMBULANCE)

NARMA

Fly for People

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