皓準科技股份有限公司
HAO JUEN TECHNOLOGY CO., LTD.

HAOJUEN TECHNOLOGY CO., LTD.

PRODUCT CATALOGUE

d0981101@gm.nfu.edu.tw

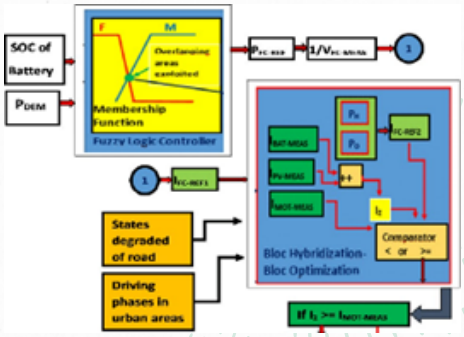
+886 972 345 357

No. 49-56, Sec. 2, Daqing St., South Dist.,
Taichung City 402026, Taiwan (R.O.C)

THE NEW INNOVATION

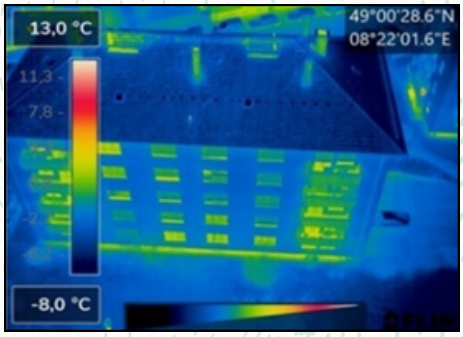
AI-Powered Firefighting Drone

Precision Aerial Fire Suppression
for Rapid First Response



AI Algorithm System

AI Launch Compensation and
Attitude Correction System



Sensing and Inspection Module

Thermal Imaging, AI-Powered Visual
Recognition System, Vision-Based
Distance Estimation Capability

Firefighting Drone

FD-068

Specifications

Configuration	Heavy-duty quadcopter with reinforced launch platform
Suppression Method	Precision-launch fire extinguishing ball deployment
Launch Module Type	Servo-assisted pneumatic/electromechanical launcher
Ammunition Type	Dry-powder extinguishing balls / clean-agent balls
Frame Material	Carbon fiber composite + aviation-grade aluminum
Landing Gear	Wide anti-tip tubular landing skid
Dimensions (Folded)	680 × 620 × 540 mm
Dimensions (Unfolded)	1380 × 1380 × 560 mm
Wheelbase	1220 mm
Standard Takeoff Weight	12.8 kg
MTOW	17.5 kg
Max Flight Time (No Payload)	Up to 52 minutes

Firefighting Drone

FD-082

Specifications

Configuration	Heavy-duty quadcopter (reinforced industrial frame)
Suppression Method	Carbon fiber composite + aerospace-grade aluminum
Launch Module Type	Wide anti-tip shock-absorbing landing skid
Frame Material	Carbon fiber composite + aviation-grade aluminum
Dimensions (Folded)	820 × 760 × 620 mm
Dimensions (Unfolded)	1650 × 1650 × 680 mm
Wheelbase	1500 mm
Empty Weight	14.5 kg
Standard Takeoff Weight	19.8 kg
MTOW	32 kg
Ingress Protection	IP55
Operating Temperature	-10°C to 55°C

Camera

DC-020

Specifications

Sensor Type	1-inch CMOS (Sony IMX-class)
Effective Resolution	20 MP
Dynamic Range	13–14 stops
ISO Range	100 – 12,800
Shutter Type	Electronic rolling shutter
Lens Type	Interchangeable industrial lens mount
Focal Length	24mm (default)
Aperture	f/2.8 – f/11 adjustable
Field of View (FOV)	84° wide-angle
Gimbal Type	3-axis mechanical stabilization
Control Accuracy	±0.01°
AI Detection Module	Fire / smoke detection Human detection (rescue missions) Hotspot tracking

Fire Extinguisher Ball Launcher

FBP-018

Specifications

Type	Aerial Fire Extinguisher Ball Deployment System
Configuration	4-ball integrated launcher (single discharge pipe system)
Deployment Mode	Sequential / Burst / Smart AI-triggered release
Mounting	Universal drone payload mount (quick-release compatible)
Weight (empty)	~1.8 kg
Weight (loaded)	~3.2 – 3.8 kg
Dimensions	220 × 180 × 160 mm
Ball Diameter	100 – 120 mm
Ball Weight	~0.5 kg each
Extinguishing Agent	Dry chemical powder (ABC type)
Launch Force	Adjustable (soft drop → active projection)
Effective Drop Height	2 – 30 meters

Drone Pilot Class

Class 1A

Training Focus

- Basic flight control & maneuvering
- Takeoff / landing stability
- Visual Line of Sight (VLOS) operation
- Emergency stop & fail-safe handling

Applications

- Aerial photography & videography
- Infrastructure inspection
- Environmental monitoring

This class focuses on fundamental drone operation and flight control for lightweight UAVs. Students will learn basic manuvering, safety procedures, and visual line-of-sight flying techniques. It is ideal for beginners entering aerial photography and inspection tasks.

Maximum Takeoff Weight (MTOW)	< 15 kg
Typical Flight Time	20 – 40 minutes
Payload Capacity	0.5 – 5 kg
Propulsion System	Electric multi-rotor (quad/hexacopter)

Drone Pilot Class

Class 1B

Training Focus

- Payload integration (camera, sensors, delivery systems)
- Flight stability under load
- Semi-autonomous navigation
- Advanced safety procedures

Applications

- Industrial inspection (oil, gas, power lines)
- Mapping & surveying (LiDAR / thermal)
- Emergency response support

This class introduces more advanced flight operations with medium-sized drones carrying heavier payloads. Trainees will develop skills in payload integration, flight stability, and semi-autonomous navigation. It prepares operators for industrial applications such as mapping, inspection, and emergency support.

Maximum Takeoff Weight (MTOW)	15 – 25 kg
Typical Flight Time	15 – 30 minutes
Payload Capacity	5 – 10 kg
Propulsion System	Multi-rotor / hybrid UAV

Drone Pilot Class

Class 1C

Training Focus

- Complex mission planning
- Autonomous & AI-assisted flight
- Multi-payload coordination
- Risk management & regulatory compliance

Applications

- Firefighting & disaster response
- Cargo transport & logistics
- Agricultural spraying
- Military & operations

This class is designed for professional-level drone operation involving heavy-lift UAV systems. Students will learn complex mission planning, autonomous control, and strict safety and regulatory compliance. It is suitable for high-risk operations such as firefighting, logistics, and large-scale industrial missions.

Maximum Takeoff Weight (MTOW)	> 25 kg
Typical Flight Time	10 – 25 minutes
Payload Capacity	10 – 50+ kg
Propulsion System	Heavy-lift multi-rotor / hybrid / VTOL

皓準科技股份有限公司
HAO JUEN TECHNOLOGY CO., LTD.

PRODUCT CATALOGUE

HAOJUEN TECHNOLOGY CO., LTD.

No. 49-56, Sec. 2, Daqing St., South Dist., Taichung City 402026, Taiwan (R.O.C)

+886 972 345 357

d0981101@gm.nfu.edu.tw