

KLM VANTREL SERIES

COMPACT ONE-MAN ISR

PART OF THE VANTREL SERIES

VANTREL 30

COMPACT ISR • TECHNICAL BROCHURE

The rapid-deploy, long-zoom reconnaissance platform — 30x hybrid-zoom day sensor with AI target identification, on the backpack-portable Vantrel airframe. In the air in minutes, from a single case, with a single operator.

34 MIN
ENDURANCE

10 KM
RADIO RANGE

1.74 KG
ALL UP WEIGHT

30x
HYBRID ZOOM

COMPACT ISR · MISSION PROFILE

LAUNCH FAST.
SEE FAR.

Vantrel 30 is KLM Defense's one-man portable reconnaissance platform — a compact airframe, quick-swap battery and the KAT7 Pro controller in a single case one operator can carry, deploy and recover alone. The Sniper30 gimbal delivers 30x hybrid zoom with AI-assisted target identification over an FHSS + AES encrypted, dual-band link.

34 MIN

MAX FLIGHT ENDURANCE

10 KM

MAX RADIO RANGE

27,000 FT

SERVICE CEILING AMSL

90 KM/H

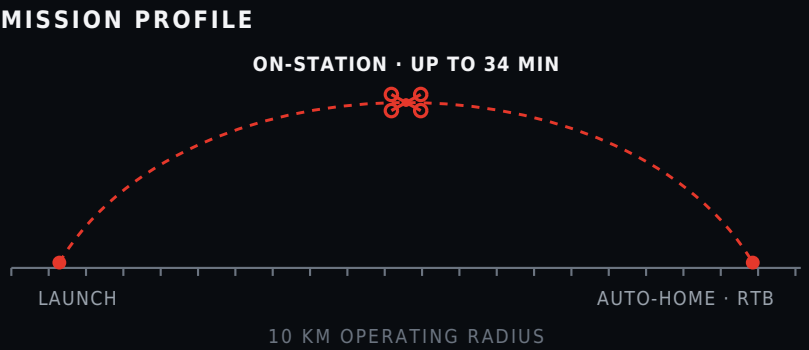
MAX SPEED

55 KM/H

WIND RESILIENCE

<15 SEC

BATTERY SWAP TIME



VANTREL 30 · FIELD DEPLOYMENT

● LIVE AIRFRAME



LIVE AIRFRAME · UNEDITED FIELD PHOTOGRAPHY

CORE CAPABILITIES

BUILT FOR THE FIRST FIVE MINUTES

01 ONE-CASE, ONE-OPERATOR DEPLOYMENT



Carbon-fibre-and-polyurethane arms, quick-release props and a sub-15-second battery swap let a single operator unpack, power up and launch from one case — no tools, no ground crew.

02 SNIPER30 · 30X HYBRID ZOOM



8 MP day sensor with 30x hybrid zoom, 3-axis mechanical stabilisation plus EIS, and AI-assisted target identification and tracking for fast, confident stand-off reconnaissance.

03 ENCRYPTED, DUAL-BAND LINK



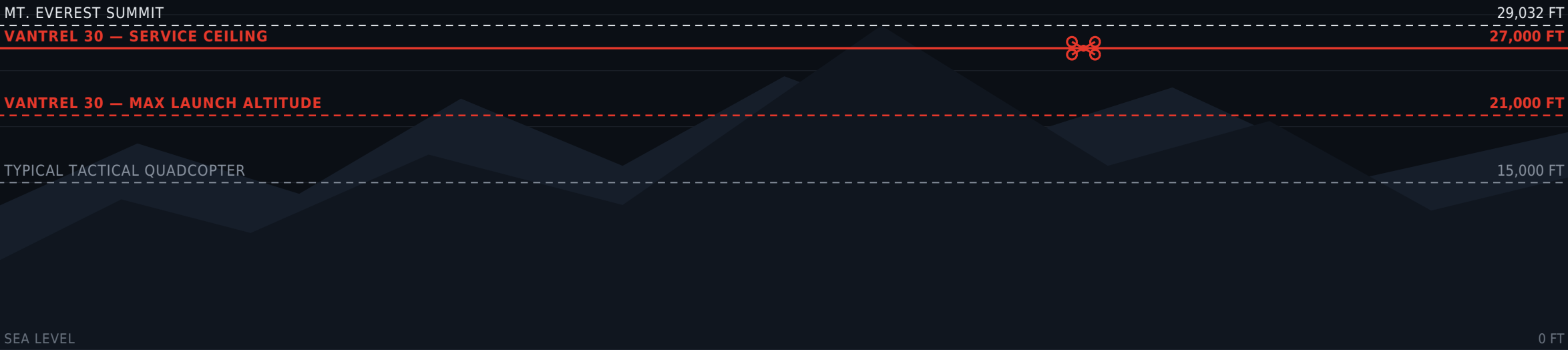
FHSS frequency-hopping with AES channel encryption across 2.4 and 5.8 GHz control and video links, with sub-20ms control latency, so the mission feed can't be intercepted or spoofed mid-flight.

04 ALL-WEATHER, GRAB-AND-GO READY



IP55-sealed airframe rated -20°C to +55°C, with a -15°C cold-soak launch capability from 21,000 ft, plus Auto-Home failsafe on link loss or low battery.

OPERATING ALTITUDE IN CONTEXT



TECHNICAL SPECIFICATIONS

FLIGHT PERFORMANCE

SPECIFICATION	VALUE
Max Flight Endurance *1	34 Mins Max
Max Radio Range *2	10 km
Max Launch Altitude (AMSL)	21,000 ft
Service Ceiling (AMSL)	27,000 ft
Max Speed	90 kmph (Electronically Limited)
Max Climb Rate	3.6 m/s
Wind Resilience	55 km/h
ECM Suite	Level 1 ECM
Cockpit Video Link	1080p FHD
Payload Tilt Angle	-90° to +15°
Failsafe (Over Range / Link Loss / Low Battery)	Auto-Home
Transmission	FHSS + AES · Dual-Band

*1 Endurance measured at standard payload, no-wind, 20°C ambient. *2 Line-of-sight, unobstructed terrain.

VANTREL 30

● LIVE PRODUCT RENDER



SNIPER30 GIMBAL · FRONT VIEW

SNIPER30 · GIMBAL PAYLOAD

ONE LOOK. THIRTY TIMES CLOSER.

The Sniper30 gimbal pairs an 8 MP day sensor with 30x hybrid zoom, stabilised across 3 mechanical axes plus EIS, with onboard AI handling target identification and tracking on every flight.

SPECIFICATION	VALUE
Day Sensor	8 MP · 4K stills · 4K video @ 30 FPS
Zoom	30x hybrid · 3-axis mechanical stabilisation + EIS
Feed Mode	1080p fully encrypted video
AI Lock	Target identification & tracking
Gimbal Rotation	±95° yaw
Sight ECM Rating	Level 1

SNIPER30 · HYBRID ZOOM RANGE



ONBOARD INTELLIGENCE

- AI LOCK · TARGET TRACKING
- 1080P FULLY ENCRYPTED FEED
- 3-AXIS MECHANICAL + EIS

SNIPER30

LIVE PRODUCT RENDER



GYRO-STABILISED · THREE-QUARTER VIEW

SNIPER30 OPTICAL PAYLOAD · IN THE FIELD

ONE TARGET. 0x TO 30x.

SNIPER30 · EO DAY SIGHT

● ZOOM ENVELOPE



0x WIDE FOV (LEFT) · 30x HYBRID ZOOM (RIGHT) · SAME AERIAL VANTAGE

Both frames come from the same aerial vantage — nothing moved but the zoom. At 0x, the wide field of view sweeps the whole valley for area search; at 30x, the Sniper30 resolves the same vehicle to identification level from kilometres of stand-off. For reconnaissance, that difference is decisive: the Vantrel 30 can find, fix and positively identify a target without closing the distance — keeping the aircraft, and its operator, unseen and unheard.

DAY SIGHT

30x HYBRID ZOOM

FEED MODE

1080P ENCRYPTED

AI LOCK

TARGET TRACKING

STABILISATION

3-AXIS + EIS

KLMFLY GROUND CONTROL SOFTWARE

ONE SCREEN. ONE OPERATOR.

Every Vantrel 30 mission runs over an FHSS + AES encrypted, dual-band link between aircraft and controller, so the mission map, live feed and telemetry can't be intercepted or spoofed mid-flight — controlled entirely from the KAT7 Pro.

SATELLITE / TERRAIN / HYBRID

Switch base map layers on the fly to match terrain, lighting and mission need.

ONE-CLICK MISSION

Plan a full waypoint mission and launch it with a single confirmed command.

WAYPOINT NAVIGATION

Drop, sequence and edit unlimited waypoints directly on the map.

TOUCH-TO-GO

Tap any point on the map and the aircraft flies there — no manual entry.

ONE-TOUCH TAKEOFF & LAND

Single-command autonomous takeoff and landing at the marked home point.

HOLD & HOVER

Command an instant position hold at any point for on-station observation.

IN-FLIGHT ALTITUDE CHANGE

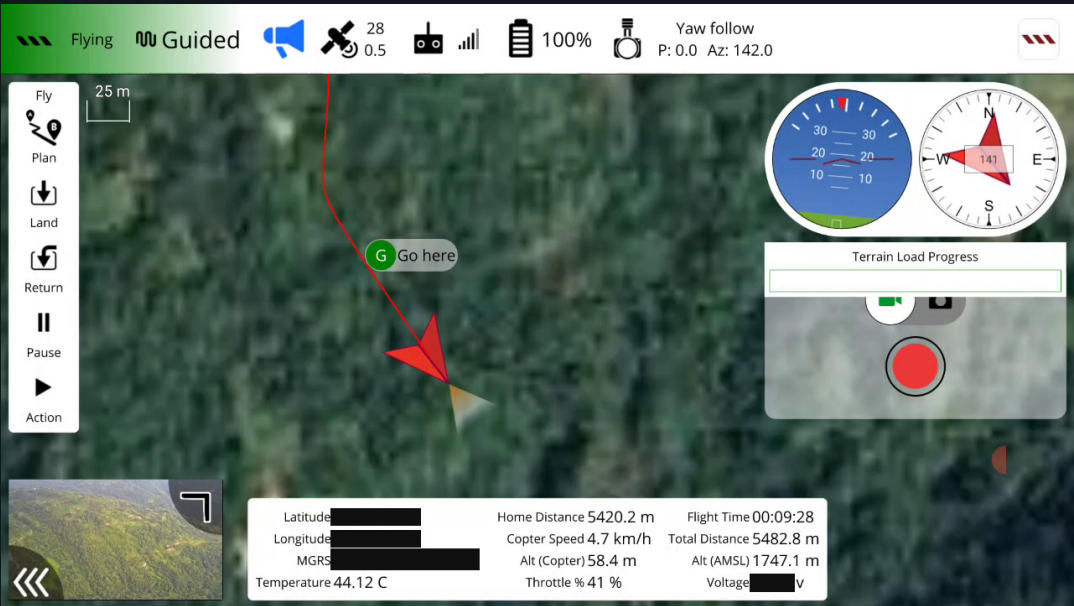
Raise or lower mission altitude live, mid-mission, without re-planning.

FULLY ENCRYPTED LINK

FHSS frequency-hopping with AES channel encryption end-to-end.

MISSION MAP · GUIDED

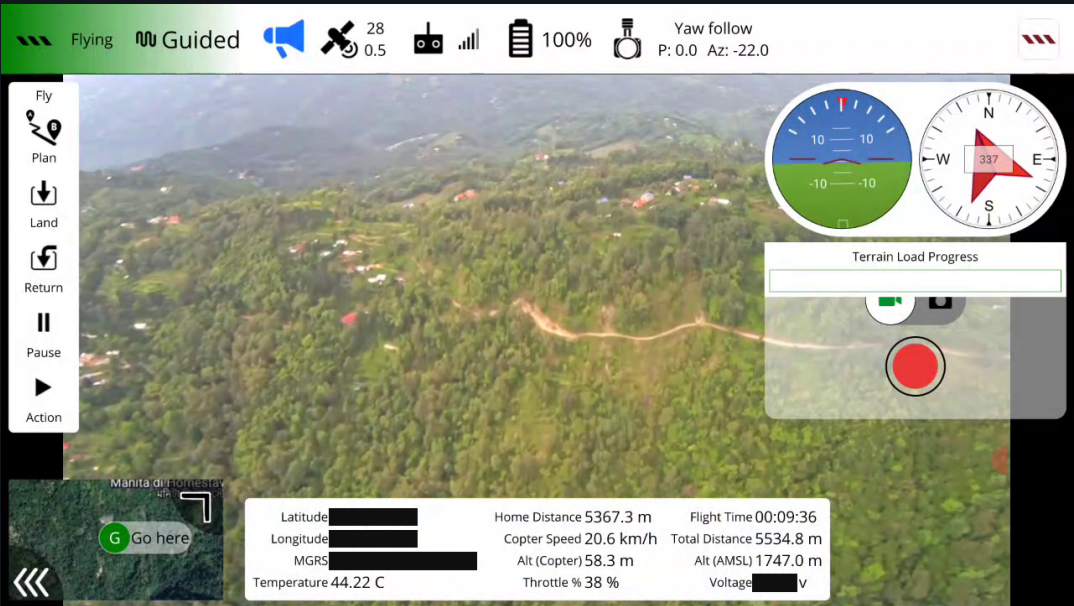
● TOUCH-TO-GO



ACTUAL KLMFLY COCKPIT CAPTURE

LIVE FEED · EN ROUTE

● FULL TELEMETRY HUD



ACTUAL KLMFLY COCKPIT CAPTURE

KAT7 PRO · VANTREL 30 CONTROLLER

ONE UNIT. FULL COMMAND.

The KAT7 Pro is a palm-sized, one-hand-operable controller running the KlmFly app — smart integrated aircraft control, live sensor feed and mission telemetry in a 5.5" FHD display, with dual-band radio diversity and 120 minutes of endurance on internal power.

SPECIFICATION	VALUE
Display	5.5" FHD
Control Architecture	KlmFly App — smart integrated aircraft control
Live View	KlmFly App — map + live sensor feed
Radio Diversity	Dual-band (2.4G + 5.8G)
Internal Battery Endurance	180 min
Cockpit Recording	64 GB
Failsafe (Over Range / Low Battery / Link Loss)	Auto-Home

OVER RANGE

AUTO-HOME

LOW BATTERY

AUTO-HOME

LINK LOSS

AUTO-HOME

KAT7 PRO

LIVE PRODUCT RENDER



OLIVE · VANTREL 30 CONTROLLER

TECHNICAL SPECIFICATIONS

BUILT TO CARRY, LAUNCH, SUSTAIN

PHYSICAL & POWER		VALUE
Diagonal / Footprint (unfolded)	231 × 231 × 57 mm	
Maximum Take-Off Weight (MTOW)	1,740 g	
Empty Weight	1,100 g	
Frame Material	Carbon fibre + polyurethane	
Number of Rotors	4	
Propeller Size	9"	
Battery Chemistry	Lithium Hybrid	
Battery Capacity	11,500 mAh	
Battery Swap Time	<15 sec	
Charge Time (0-100%)	45 min fast · 90 min normal	
Max Additional Payload Capacity	500 g	

COMMS & ENVIRONMENTAL		VALUE
Control Link Frequency Band	2.4 & 5.8 GHz	
Video Link Frequency Band	2.4 & 5.8 GHz	
Control Link Latency	<20 ms	
Video Latency	<100 ms	
GNSS Constellations Supported	GPS · GLONASS · Galileo · QZSS	
RTK / PPK Support	No	
Onboard Recording Storage	64 GB	
Operational Temperature	−20°C to +55°C	
Cold-Soak Launch	−15°C from 21,000 ft	
Weatherproofing	IP55	
Operating Air Pressure	33 kPa	
Operating Humidity Range	92% RH	
Applicable MIL-STD Reference	MIL-STD-810G	

ORDERING INFORMATION

DEPLOY THE VANTREL 30

FIELD	DETAILS
Part Number	KLMPVT0001
Warranty Terms	2-year warranty
Included Accessories	Battery & spare props — FlyMore Combo
Training & Support Package	Included

Contact for Full Briefing
sales@klmpower.com — Subject: Vantrel 30 Briefing

