

# H520E



## PIONEERING HEXACOPTER

This next generation H520E Hexacopter was specially developed for commercial drone applications and provides SAR ground teams, inspectors, police, fire brigades and surveying teams with a versatile tool. The H520E is a robust, powerful and flexible UAV platform that can be ideally adapted to individual requirements and thus enables a variety of industry-specific applications. Long flight times and high-quality camera systems with embedded GPS data allow an area to be recorded quickly and precisely, while the interference-free precision compass enables flying even in previously difficult-to-fly environments.

## SECURITY CONCEPT

The H520E was developed with the highest demands on safety and functionality. The 6-rotor system enables a stable and safe flight by ensuring that the H520E can continue to fly safely even if a rotor fails. Built-in ultrasonic sensors allow the drone to detect obstacles and avoid collisions, while the battery issues battery warnings when the voltage is too low and finally changes to a fail-safe function. In addition, the H520E is equipped with a redundant control signal, a return home and a geo fence function, which ensures that the drone does not move beyond a radius specified by the user.

## FEATURES

- / New Powerful flight control processor
- / New battery connector with fail safe design
- / New 3.5-7 km\* long range OFDM module
- / Designed for professional, commercial and governmental requirements
- / High-precision, low-interference compass
- / New 30 pin payload interface
- / No data transfer to external servers
- / Stable and safe 6 rotor system
- / Energy efficient and quiet operation
- / ST16E with integrated 7" touch display, voice output and comprehensive DataPilot™ software
- / HDMI signal directly from the ST16E to output the drone's live image onto larger monitors
- / Mission planning on the computer or ST16E

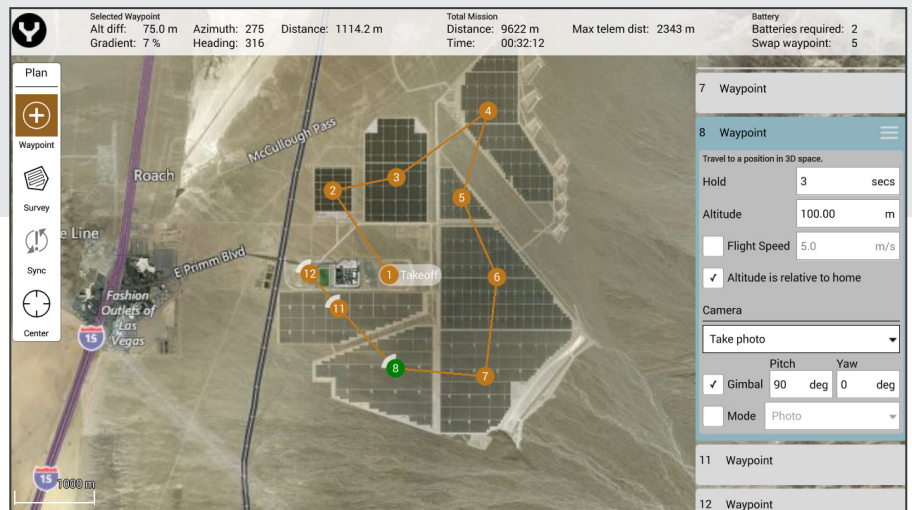


## DATAPILOT™ SOFTWARE

Yuneec DataPilot™ is a comprehensive software solution for planning waypoint and survey missions, that is fully integrated into the hardware and software of the H520E. The DataPilot™ software system enables users to efficiently and consistently create orthomaps, 3D scans, crop data imagery, in the field or on the desktop for repeatable, recallable aerial flight paths, without requiring expensive third party software. DataPilot also allows for storage of maps from many map providers for access in areas with no connectivity, and provides tools for precise waypoint placement even in areas where no updated maps are available.

## DATA SECURITY

The H520E has been developed as a closed system, its technical design prevents communication with third-party servers. Communication only takes place between the drone, the payload and the ST16E remote control. Log files are stored locally in the drone and are only required by Yuneec for service purposes in the event of a guarantee. There is no involuntary data transfer to servers. Neither flight data nor images, videos or log files are forwarded to external servers and remain in your possession. Thus, your data is optimally protected.



## ST16E CONTROLLER

The Android-based ST16E is equipped with a fast Intel quad-core processor and OFDM support. Thanks to the OFDM support, the live image transmission can be expanded up to 3.5-7 kilometers. The integrated 7 inch display with touchscreen ensures precise and intuitive operation of the H520E and shows all flight information as well as the live image from the camera. The live image can also be transferred to a larger monitor via the HDMI output of the ST16E.

## VERSATILE PAYLOAD OPTIONS WITH X CONNECTOR

Thanks to its multiple load options, the H520E can be easily adapted to different areas of application. Replace sensors in a matter of seconds, downtime is minimized and productivity is improved. This means that one gimbal-camera combination can be exchanged for another without power cycling the airframe.



### E10TX E10TvX

- / Thermal imaging and residual light camera with FLIR® Boson sensor
- / 320 x 256 (E10TX) or 640 x 512 (E10TvX) thermal resolution
- / Supports DataPilot and mission planning
- / Dual video stream
- / 30 pin X-connector
- / 320° rotation of the gimbal for perfect image stabilization
- / High-value for inspection, law enforcement, fire fighting, search & rescue and construction tasks



### E30Z

- / 30x optical zoom + 6x digital zoom
- / Autofocus
- / Defogging
- / 1080p video resolution
- / 30 pin X-connector
- / 2.55 s zoom speed (from wide to tele)
- / Ideal for law enforcement and inspection tasks



### E90

- / 20 megapixel / 4K resolution at 60 frames per second
- / 1" CMOS sensor
- / Digital zoom up to 8x
- / 23 mm lens with low distortion
- / 30 pin X-connector
- / 320° rotation of the gimbal for perfect image stabilization
- / Ideally suitable for professional film applications, 3D mapping / modeling and search and rescue

## APPLICATION AREAS



### / Law Enforcement

Accident scene reconstruction, crime scene mapping, as “eye in the sky” for crowd control, intelligence-gathering, or monitoring of targeted areas - The H520E empowers Law Enforcement officers to quickly record an accident scene in 2D or 3D, for later assembly of data for court appearances, reporting, or archiving. Camera systems with embedded GPS data enables evidence-gathering to be captured and examined before fire investigators or first-responders have entered the area.



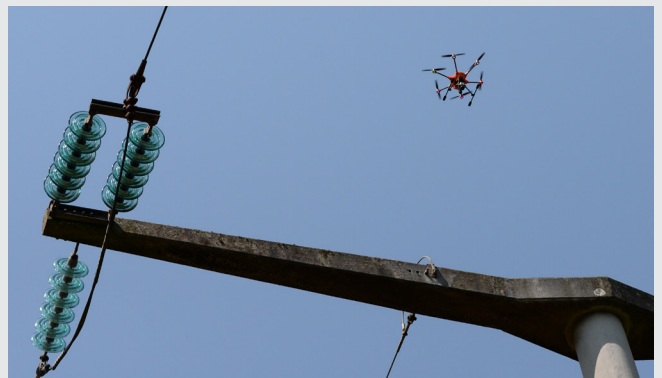
### / Search & Rescue

The Yuneec H520E enhances safety at a contaminated scene, speeds rescue and recovery. Firefighters appreciate the ability to “see” through smoke and rapidly identify hotspots using thermal imaging, and the ability to gain a birdseye view of operations on a large scene. In addition, the drone can be used for scouting the route ahead for obstacles, finding victims, photographing remote crash sites, terrain mapping, crash site monitoring or for improving communication



### / Site Mapping

Preconstruction survey, topographical measurements, and project progress - The Yuneec H520E is designed to fly repeatable, perfect-placement flight over construction sites, providing not only measurable and demonstrable project data, but also helping to identify shrink points, at-risk areas, or security breach points. Autonomous flight allows for repeated flights that may be layered to determine changes in the work site and provide comparisons over time.



### / Inspection

Vertical structures can be inspected safely and efficiently with the precise flight behavior of the H520E. Long focal lengths allow users to fly further back from the object being viewed, without compromising image quality or depth. DataPilot™ can store missions that require weekly or monthly re-flight for purposes of comparison, failure evaluation, or deterioration studies. The safety improvement and cost reduction with sUAS inspection are staggering in comparison.

## TECHNICAL SPECIFICATIONS

### DRONE

Take Off Weight:	1860 g (excl. camera)
Diagonal Length:	520 mm (w/o rotor blades)
Dimensions:	551x482x309 mm
Flight Time:	25-30 min
Max. Speed:	20 m/s
Max. Ascent Speed:	5 m/s
Max. Descent Speed:	3 m/s
Max. Flight Height:	500 m
Max. Angular Velocity:	120°/s
Battery:	4S-6200mAh LiPo
Motors:	720kV
Charger:	SC4000-4H
Operating Temperature:	0°C - 40°C
Storage Temperature:	-10°C - 50°C

### OBSTACLE AVOIDANCE

Sensor:	Ultrasonic
Flight Speed:	4 m/s
Operating Environment:	Height > 1.5m Distance to obstacles < 5 m

### REMOTE CONTROL

Operating System:	Android™
Channels:	16
*Transmission Distance:	Up to 3.5-7 km (3.5 km Europe)
Battery:	3.6V 8700mAh 31.32Wh Li-Ion
Frequency:	2.4 GHz
Videolink Frequency:	2.4 GHz
Videolink Resolution:	720 p
Screen:	7"
Operating Temperature:	0°C - 40°C
Video Outputs:	HDMI

### COMPATIBLE CAMERAS

**E90x** (YUNE90XEU)  
**CGOETx** (YUNETXEU)  
**E30Zx** (YUNE30ZXEU)  
**E10Tx** (YUNE10TXEU)  
**E10TvX** (YUNE10TVXEU)

### RELEASE DATE

14-10-2020

### H520E

YUNH520EEU / YUNH520EUK  
YUNH520EUS

- /H520E Hexacopter
- /OFDM module
- /ST16E Remote Control
- /2 Batteries 4S-6200mAh
- /Charger
- /SD Card



Camera not included.