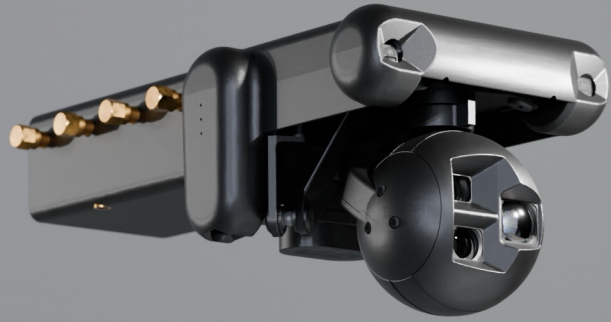


Parrot

CHUCK 3.0

THE SOVEREIGN AI AUTOPILOT
POWERING ALL UAV PLATFORMS



PRODUCT DESCRIPTION

CHUCK 3.0 is designed to bring Parrot's state of the art flight software, optics and Ai technology for integration to various types of UAV platforms (multi- and single-rotors, fixed-wings and VTOLs), on top of bringing a 35x zoom camera and FLIR Boson 640 thermal imaging, combined with a stabilized 3-axis gimbal, and two pairs of obstacle avoidance sensors (front and bottom).

CHUCK 3.0 also features MARS a frequency hopping radio, resistant to jamming and spoofing, 5G connectivity & optical navigation for GNSS-denied flight.

CHUCK 3.0 is compatible with Parrot's advanced app (FreeFlight 8) and ground control station (Skycontroller UKR).

KEY FEATURES

MULTIPLE SECURE RADIO ARCHITECTURE

- 5G
- MARS (Frequency Hopping Radio)
- Over 1.5 GHz bandwidth spread over 10 bands across 1.8 - 5 GHz
- Encrypted backup LoRa radio
- Direct video stream resolution: 1080p at 30 fps
- AES 256 encryption: packet and radio level

SENSORS

- Satellite navigation: GPS, GLONASS, Galileo & BeiDou
- Barometer and magnetometer
- Front and vertical stereo cameras, and vertical range sensor
- 4 x 6-axis IMU (3-axis accelerometers + 3-axis gyroscopes)
(Flight IMU: ICM-40609-D)

EO IMAGE CHAIN

- 2 sensors: 1/2.4"
- Digital zoom: 35x
- Electronic shutter speed: 1/25 s to 1/10,000 s
- ISO range: 100 - 12,800
- Video resolution: 4K / FHD / HD
- Video format: MP4 (H.264 & H.265)
- Photo resolutions:
 - Wide: 21 MP (84° FOV)
 - Rectilinear: up to 16 MP (up to 75.2° FOV)
- Photo formats: JPEG, DNG (Digital Negative RAW)

IR IMAGE CHAIN

- Sensor: FLIR BOSON
- Resolution: 640 x 512 px
- Temperature range: -40 °C to +250 °C (-40 °F to +482°F)
- Thermal sensitivity: ≤60 mK
- Measured IR wavelength range: 8 to 14 micrometers
- Video resolution: UHD (2160p) at 8.6 fps
- Video format: MP4 (H.264 / H.265)
- Photo formats: JPEG

IMAGE STABILIZATION

- 3-camera IR/EO stabilized gimbal:
 - Hybrid: 3-axis
 - Mechanical: 3-axis
 - Electronics (EIS): 3-axis
- Controllable gimbal tilt range: -90° to +90°

HARDENED CYBERSECURITY

- Zero data shared without user consent
- Manage your data privately between drone and device or share anonymous data on secured European servers
- MicroSD card AES-XTS encryption with a 512-bit key
- Digitally signed firmware
- Compliant with FIPS140-2

CONNECTIVITY & STORAGE

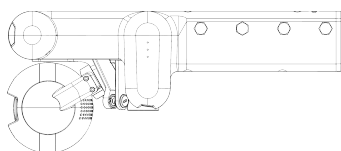
- Ports: USB-C, Ethernet
- Connectors: XT30 power jack, GPS, Interface board, (x2) TELEM, (x8) external SMA antenna
- MicroSD and SIM cards ports
- 512 GB internal memory

ADVANCED FLIGHT APP - FREEFLIGHT 8

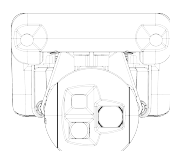
- Flight Planning with waypoints and points of interest
- Object recognition & tracking
- Cursor On Target
- Video streaming & recording
- EO and IR cameras settings management
- Touch & Fly
- System settings and management
- Flight logs recording and reviewing

MEASUREMENTS

- Size: 222 x 100 x 85 mm (8.7 x 3.9 x 3.3")
- Mass: 390 g (0.86 lb)



222 mm



100 mm

85 mm

10/25
v2.9.7



INTEGRATES WITH UAV PLATFORMS INCLUDING:

