

# *Hornet* XR



**Fully autonomous UAV**

for intelligence, surveillance, target acquisition  
and reconnaissance missions (ISTAR)



Hornet XR is a cutting-edge autonomous UAV designed for defense and security.

Unmanned Aerial Vehicle (UAV) **Hornet XR** (extra range) – new, upgraded version with extended features and experienced in Ukraine

#### ENDURANCE



Flight time in the air for up to **3 hours**

#### LINK RANGE



Control range - up to **60 km**  
Total range - up to **160 km**

#### SPEED



Cruise speed - **16m/s**  
Maximum speed - **25m/s**

#### WEIGHT



Unmanned Aerial Vehicle (UAV) weight **3.2 kg**

#### HARDLY VISIBLE



**Hornet XR** is quiet and virtually undetectable. Very silent system and hardly visible in the air.

#### LAUNCH



Launchable by hand and deep stall landing

#### STANDARDS

Visual information and metadata are stored according to the **STANAG-4609**

The system can be integrated with other NATO systems according to the **STANAG-4586** Level-2 standard

#### DATALINKS



Our in-house designed and manufactured datalink is jamming resilient and battlefield tested. It comes with AES-256 encryption and can transmit video feed directly to unlimited amount of Hornet RVTs (Remote Video Terminal).

Link range - **60+ km**

AES-256 Encryption

Battlefield tested

Hornet RVT

Post to Radensk | Altitude 1.2 km



CAMERA PAYLOAD SPECIFICATION

The camera turret is steerable and has mechanical two-axis stabilisation together with 3D axis digital stabilisation. The camera tower is equipped with two high-resolution daylight-sensitive cameras and a thermal camera



ENVIRONMENTAL RESISTANCE

Operating temperature: -20°C to +40°C

DAYTIME CAMERA SPECIFICATION

Cameras: x2 16MP sensor

Horizontal field of view: 60° - 3°

Resolution of the image transmitted to the ground control station: 1280 × 960 (960p)

THERMAL CAMERA SPECIFICATION

Camera resolution: 640x512

Horizontal field of view: 14mm lens HFOV 32° (GS-214X)  
18mm lens HFOV 24° (GS-218X)

The camera module is equipped with different thermal cameras.

| Module name     | Thermal camera                                   | Sensitivity |
|-----------------|--------------------------------------------------|-------------|
| Payload GS-218X | Teledyne FLIR Boson+ 640 x 512, Industrial Grade | <20mK       |
| Payload GS-214X | Teledyne FLIR Boson+ 640 x 512, Industrial Grade | <20mK       |



Whether gathering intelligence, conducting surveillance, or performing reconnaissance

HORNET XR IS YOUR ULTIMATE PARTNER IN THE SKIES



## AIRCRAFT GENERAL SPECIFICATION

|                      |                                                                  |
|----------------------|------------------------------------------------------------------|
| Link Range           | Up to 60 km                                                      |
| Flight time          | Up to 3.5 h                                                      |
| Speed                | 16m/s cruise, 25 m/s maximum                                     |
| Operational altitude | 300 m above ground                                               |
| Wingspan             | 160 cm                                                           |
| Length               | 85 cm                                                            |
| Weight               | 3.2 kg                                                           |
| Launch method        | Hand-launched. Take-off is possible even in a confined area.     |
| Recovery method      | Deep-stall landing. Landing is possible even in a confined area. |
| Personnel            | Two operators                                                    |

## GROUND CONTROL STATION SPECIFICATION

|                               |                                                                                                                                         |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Communication encryption      | Equal or better than AES256                                                                                                             |
| Communication frequency band  | 850 - 930 MHz, 2.3 - 2.7 GHz                                                                                                            |
| Minimum computer requirements | A laptop with Windows 10 OS, CPU Intel i5, 4Gb RAM, 15Gb space on disc                                                                  |
| Software                      | Software is provided with the aircraft and is used for aircraft configuration, mission planning, video monitoring, camera control, etc. |

**Hornet XR** was designed from scratch by **Granta Autonomy**. We have been developing reconnaissance remotely controlled aircraft and gimbals since 2015. Most of our team has a military background and regularly participates in military training as drone operators providing intelligence information from the air. When developing our products, we aim to create professional, reliable reconnaissance tools to perform the mission in any condition.

**Granta Autonomy** is an innovative and experienced engineering company with a focus on the development and production of unmanned aircraft systems (UAS) and components for intelligence, surveillance, target acquisition & reconnaissance (ISTAR), search & rescue, and loitering munitions.



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