UYGAR COMMUNICATION POD

Intra-group Communication among Field Personnel

The ground control unit (Command Control Terminal, Manager) assigns personnel to specific groups. As a result, personnel within the group carry out LTE-based data transmission through a closed network.

The management of the data to be transmitted is carried out by the ground control unit or the personnel deployed in the field and designated as the group leader.

Communication between Ground Control Unit and Field Personnel

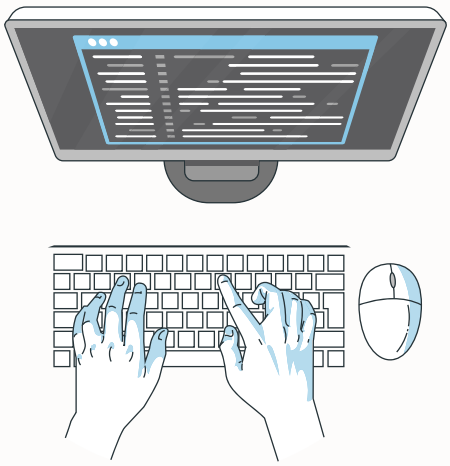
The personnel within the group transmit data to the ground control unit via the Uygar Communication Pod. The data to be transmitted and the personnel transmitting the data are controlled by the ground control unit.

Transmission of EO/IR Camera Images on the UAV to Field Personnel

Field personnel request EO/IR camera images from the ground control unit. With the approval of the ground control unit, EO/IR camera images are transmitted to the requesting personnel.

Transmission of UAV Data to Ground Control Unit

The EO/IR camera images on the UAV platform, along with the UAV's position, speed, and altitude data, are transmitted to the ground control unit.



TECHNICAL SPECIFICATIONS

Closed Network

- Independent of commercial operators

Data Transmission

- Data (video, image, personnel data, etc.)
- Voice
- Text
- Transmission of sensor data from UAV to personnel
- Transmission of FLIR camera images

Data Sharing Management Software

- Control of which data is transmitted to whom/which group by the ground control unit
- Control of intra-group communication
- Control of the data to be transmitted from the field to the ground control unit and the personnel transmitting it

Encrypted Communication

- AES-128

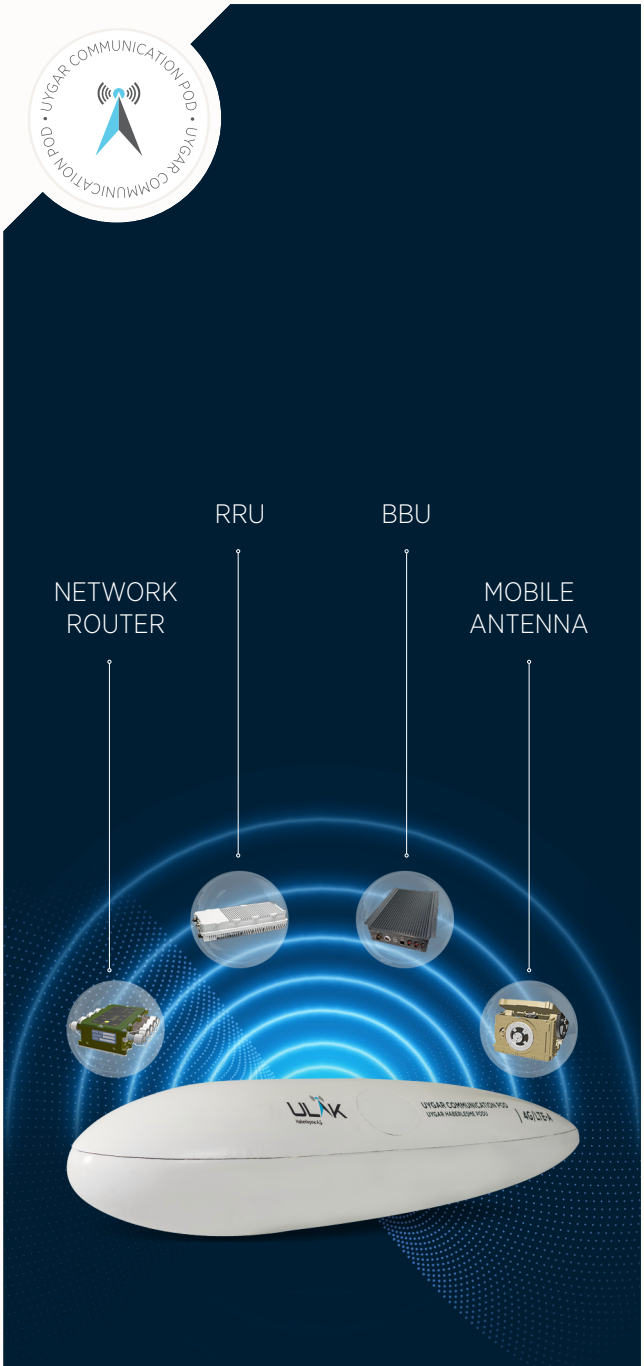
Group Management Software

- Management of which group field personnel are assigned to
- Personnel authorization management (assignment of group leaders)

Provides 35 Mbit bandwidth at altitudes of 5,000 ft, 10,000 ft, 15,000 ft, 20,000 ft, and 25,000 ft.

Enables group calling while displaying FLIR images simultaneously.

Provides 18 km^2 coverage at 20,000 ft, and 26.22 km^2 coverage at 15,000 ft.



APPLICATION AREAS

- Providing airborne communication in regions where telecom infrastructure is inaccessible
- Operational use during disaster situations (forest fires, earthquakes, etc.)
- Use in emergency situations where infrastructure is damaged or in regions without infrastructure
- Use by military personnel in tactical fields
- Rapid provision of coverage area requirements during cross-border operations