

The JP-Point is the RPS AEROSPACE concept of a drone-port, which must be more than a simple hangar. The JP-Point completely manage the relationship between human and robots, with constant monitoring of robots, their auxiliaries and equipment. The JP-Point chooses the best combination of battery, payload and vehicle configuration for any mission, giving always ready-to-go robots.

JP POINT

MODEL EX01



### KEY FEATURES

- ▶ 2 different complementary technologies:
  - Aerial Robot
  - Ground Robot
- ▶ A unique drone port, which manage all the deployed systems
- ▶ Engineered for harsh environments
- ▶ Able to reach and deploy up to 50 robot / h
- ▶ Anti-tampering system
- ▶ Robotized to perform small periodical maintenance

### CONFIGURATIONS



- ▶ Mixed robots configuration  
Max 2 UAV  
Max 2 UGV



- ▶ Ground configuration  
Max 2 UGV



- ▶ Air configuration  
Max 2 UAV



DISCOVERY TRN - Light class UAV



### PLUG&PLAY EQUIPMENT



DISCOVERY is a 25kg MTOW UAV. Designed for high-level missions can perform up to 45' of flight with many different modular equipment, automatically installed by the JP-Point robotic systems.

The sensors are managed by a dedicated ground station, different from the one used for piloting the UAV, so an operator can act on the equipment even in case of autonomous flight of the drone.

### KEY FEATURES

- ▶ Vertical and horizontal avoidance system to prevent collisions
- ▶ Thunderstorm rain and snow flight capabilities
- ▶ Auto take-off and land capabilities
- ▶ Five different assisted flight modes:
  - Altitude Quality Augmentation System (AQAS)
  - Altitude Position Augmentation System (APAS)
  - Assisted Velocity Auto Pilot (AVAP)
  - Assisted Position Auto Pilot (APAP)
  - Full Autonomous Auto Pilot (FAAP)
- ▶ Triple redundant radiolink connections

### CONTROL STATIONS



**ADVANCE II**  
Piloting GCS - fleet management  
eNIGMA software  
eNIGMA

The AD-II Ground Control Station with eNIGMA software platform increase the power of DISCOVERY in terms of flexibilities and make it reliable in every conditions.



**CAPCOM**  
Equipment GCS  
EQUIPMENT suite software  
eNIGMA

Born for remove unnecessary tasks from pilot hands, the CapCom GCS works with all the DISCOVERY equipment and allows an independent management of the sensors. Thanks to a phone system UAV pilot and Equipment technician can communicate route, maneuvers and decisions.



CMC Brave - Ground Unmanned robot



### PLUG&PLAY EQUIPMENT



CMC rovers are design for being unflagging, even after several hours of hard work. The tractor, separated from the equipment, can loads different modular payloads. The CMC is driven from a remote control station, connected to the rover through a proprietary LTE server infrastructure. Three high performance cameras give to the pilot the visual informations of front and side spaces, while a rear camera allows safe handling in small working areas.

### KEY FEATURES

- ▶ Infrared and Radar technologies to operate in fully darkness
- ▶ Four independent suspensions
- ▶ 4WD with self-locking differential
- ▶ Terrain mode control
- ▶ Adaptive cruise control
- ▶ Four independent wipers with dust-clean® technology
- ▶ Traction control in sand and snow
- ▶ Lidar based collision avoidance
- ▶ Two independent hydraulic brakes.

### CONTROL STATIONS



**RC1**  
Driving GCS - fleet management  
SIGABA software  
sigaba

The RC1 is a blend of engineering, design and ergonomic. Designed to managed large fleet of Rovers allows a powerful remote driving experience.

The coverage is made thanks to a LTE connection protocol, that allows to connect an RC1 with a Rover everywhere a mobile connection is supplied.

