

## MULTISCOPE RESCUE WITH HYDRA



### ASSISTING FIREFIGHTERS IN EXTREME SITUATIONS

#### FIRE MONITOR SYSTEM

- » Both supply approx. 2000 l/min
- » Both controlled by radio remote control
- » Both Move 360°
- » Both can be used with water and foam
- » Throw length at 5 bar: 45m
- » Throw length at 8 bar: 62m

#### SKID UNIT

- » Two cooling sprinklers mounted in front of the skid unit for cooling down the skid unit and UGV.
- » Control cabinet with LED lights for system status
- » Four fire hose compartments
- » The skid could be executed with 2 medium expansion generators to supply a thick foam blanket with medium expansion foam
- » 22" LED light bar / Light coverage up to 380m



#### INDUSTRIAL FIRES

- » Modularity
- » High temperature resistance
- » Able to pass through tight gaps
- » High Maneuverability
- » Water and foam compatible



#### FOREST FIRES

- » Especially useful in collapse zones
- » Able to climb obstacles
- » Low ground pressure
- » Able to tow pressurized water hoses
- » All terrain compatible



#### LANDSCAPE FIRES

# MULTISCOPE RESCUE WITH HYDRA

## TECHNICAL SPECIFICATIONS

### UGV

Measures \_\_\_\_\_ 240 cm x 200 cm x 115cm

Weight \_\_\_\_\_ 2080 kg

### Payload area

UGV hight (with Hydra) \_\_\_\_\_ 181 cm

Payload weight (Hydra) \_\_\_\_\_ 300 kg

### 360 deg sensorics & lights

Sensors \_\_\_\_\_ LiDARs

Cameras \_\_\_\_\_ IR, Thermal, HDR

Lights \_\_\_\_\_ LED, IR

### Performance

Max. speed \_\_\_\_\_ 20 km/h

Ground clearance \_\_\_\_\_ 60 cm

Ground pressure \_\_\_\_\_ 0,23 kg/cm

Max. grade \_\_\_\_\_ 31 degrees / 60 %

Fording depth \_\_\_\_\_ 61 cm

Pull force \_\_\_\_\_ 21 000 N

Run time (hybrid, full internal tank) \_\_\_\_\_ 12...15 h

Run time (full load, silent mode) \_\_\_\_\_ 0,5...1,5 h

### Transportability

Towing speed \_\_\_\_\_ up to 80 km/h

Air transportability \_\_\_\_\_ According to STANAG 3542

Airlift \_\_\_\_\_ Helicopter under slung

## CONTROL SYSTEM



Line of sight up to 1,5 km



Vehicle and fire monitors  
Operated separately

## OPTIONAL AUTONOMOUS FUNCTIONS



Waypoint navigation



Follow me

# Multiscope

The Multiscope UGV's modular design combined with third party integrations creates generic flexibility to respond throughout various rescue and firefighting situations.

## RESCUE UGV



- Power source \_\_\_\_\_ Hybrid Diesel-Electric Drive
- Pulling force \_\_\_\_\_ 21000 N
- Payload (rated) \_\_\_\_\_ 750 kg / 1650 lbs
- Max payload \_\_\_\_\_ 1200kg/2645 lbs
- Max grade \_\_\_\_\_ 31°/60%
- Max side slope \_\_\_\_\_ 17°/30%
- Run time hybrid \_\_\_\_\_ Up to 15 h
- Run time electric \_\_\_\_\_ Up to 1,5h
- Max speed \_\_\_\_\_ 20 km/h

\*All data is provided with maximum payload

### Upgradability and Adaptability

- Upgradable in all aspects

**Hardware:** Modular design allows for swapping out for new payloads – integrate new technology as it emerges

**Software:** Upgrade UGV to AI-powered autonomy functions via software packages in the near future

- Get the perks of being an early adopter without worrying about depreciation

- Stay ahead of the curve in a fast-evolving field

- Long machine life span -> reduced costs and improved Return-on-Investment



+ Firehose container



+ Extinguisher



+ Transporter

#### Phase I

##### Building the infrastructure fire and rescue operation

- Gather critical information for operational planning
- Set up communication using radio relays
- Transport critical supplies, equipment and teams

#### Phase II

##### Supporting first responder on the site of operation

- Remote extinguishing inside the danger zone for first responders
- Reaching into narrow and steep areas where fire trucks are helpless
- Live video feed throughout remote conducted dive-in
- MEDEVAC from harsh terrain
- Supply chain management without exhausting manpower

#### Phase III

##### Packing up and finishing the operation

- Robot-assisted post-operation logistics
- Packing up equipment and transportation of auxiliary loads
- Faster regain of readiness for new operations