



U-RHEX

Untethered Rotary Wing Hazard Exploitation

The U-RHEX is a short range reconnaissance (SRR) rotary wing payload. Weighing less than 6 pounds, this rugged, multi-band electro-optic/infrared (EO/IR) on-board payload for the sUAS detects desired threats at standoff ranges in real-time.

Threats

- Minefields
- In-road buried threat
- Vehicles (static/dynamic)
- Personnel (static/dynamic)
- Camo/cover
- Complex Obstacles: Concertina/Barb Wire, Tank Ditches, Hedgehogs,

Payload

- Real-time ATR
- Day/Night Operations
- Low Size Weight and Power
- Ruggedized
- Accurate GPS for Target localization
- Platform Agnostic
- Stabilized

U-RHEx General Specifications

Height	<10"
Max Payload Weight	(<5.5lbs)
Constraints	Power Flight time Bandwidth(Datalink) Location Accuracy Autonomous Flight Control

Features and Capacities

Bandwidth	(Datalink)
------------------	------------

Sensor Requirements

Max Alt:	40m
Field of Regard: Pitch	+60° to -120°
Gimbal	2 axis
Weight	5lbs
Height	10"

The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement.



Collaborating with QinetiQ

At QinetiQ we bring organizations and people together to provide innovative solutions to real world problems, creating customer advantage. Working with our partners and customers, we collaborate widely, working in partnership, listening hard and thinking through what customers need. Building trusted partnerships, we are helping customers anticipate and shape future requirements, adding value and future advantage.

www.QinetiQ.com

© QinetiQ Inc. 2021 | U-RHEx 21v26

For further information please contact:

10440 Furnace Road Suite 204
Lorton, VA USA
+011 540 658 2720
BD@US.QinetiQ.com
www.US.QinetiQ.com



T-RHEX

Tethered Rotary Wing Hazard Exploitation

The T-RHEX multi-mission payload is designed for long range reconnaissance and does include a marking or designating component. The T-RHEX weighs 5.5 pounds, has the ability of being tethered to support CONOP and can provide real-time video display to the operator

Threats

Mines

Vehicles

Personnel

Camouflage/Cover

Complex Obstacles: Concertina/Barb Wire, Tank Ditches, Hedgehogs,

Payload

Accurate GPS for target localization

Stabilization

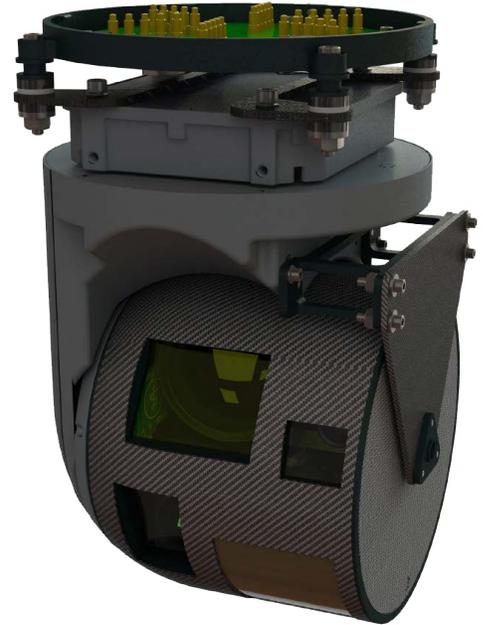
ISA compliant and capable

Long term platform agnostic

T-RHEX General Specifications

Max Payload Weight	(5.5lbs)
<hr/>	
Payload Component	SWAP Considerations
Gimbal	Weight: (~2lbs) Height: (~ 8") Diameter: (4" - 6")
LWIR Sensor	Weight: (~0.75lbs)
Day Camera	Weight: (0.15lbs)
Laser Designator	Weight: (~1.5lbs)
CPU/GPU	Weight: (~0.5lbs)
<hr/>	
Sensor Requirements	
Max Alt:	100m (00 cm)
Field of Regard: Pitch	+60° to -120°
<hr/>	
Gimbal	2 axis (T); 3 axis (O)
Weight	5lbs (T); 3.5lbs (O)
Height	10" (T); 5" (O)

The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement.



Collaborating with QinetiQ

At QinetiQ we bring organizations and people together to provide innovative solutions to real world problems, creating customer advantage. Working with our partners and customers, we collaborate widely, working in partnership, listening hard and thinking through what customers need. Building trusted partnerships, we are helping customers anticipate and shape future requirements, adding value and future advantage.

www.QinetiQ.com

© QinetiQ Inc. 2021 | T-RHEX 21v26

For further information please contact:

10440 Furnace Road Suite 204
Lorton, VA USA
+011 540 658 2720
BD@US.QinetiQ.com
www.US.QinetiQ.com



F-HEX

Tethered Rotary Wing Hazard Exploitation

The F-HEX is a multi-mission payload designed for long range reconnaissance (LRR) and does include a marking or designating component. Weighing less than 2 pounds, this rugged, on-board, multi-band electro-optic/infrared (EO/IR) payload for the Puma UAS detects threats in real-time.

Threats

Vehicles (Static/Dynamic)

Personnel (Dynamic)

Camo/Cover

sUAS

Complex Obstacles: Concertina/Barb Wire, Tank Ditches, Hedgehogs, Minefields

Payload

Real-time ATR

Day/Night Operations

Low SWAP

Ruggedized

Accurate GPS for Target localization

Platform Agnostic

Retractable Gimbal

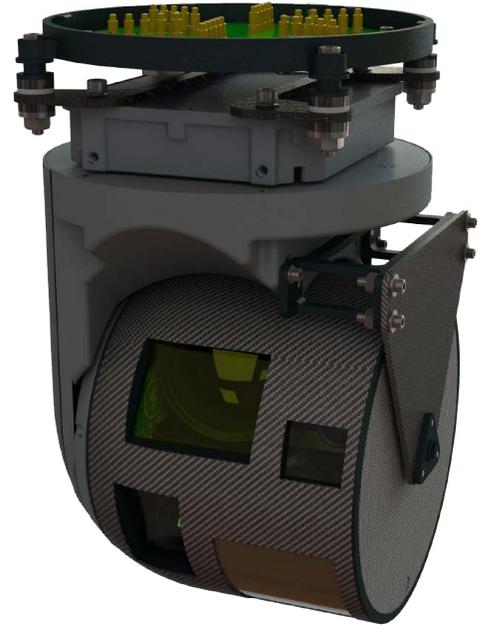
F-HEX General Specifications

Constraints	Takeoff Weight (<3.5lbs)
	Bandwidth (Datalink)
	Location Accuracy
	Landing Mechanism

Sensor Requirements

Max Alt:	150m
Field of Regard	Pitch: +30° to -90°
	Roll: UAV Limitation
Gimbal	2 axis
Weight	3.5lbs
Size	Fit Puma payload
AGL	100m

The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement.



Collaborating with QinetiQ

At QinetiQ we bring organizations and people together to provide innovative solutions to real world problems, creating customer advantage. Working with our partners and customers, we collaborate widely, working in partnership, listening hard and thinking through what customers need. Building trusted partnerships, we are helping customers anticipate and shape future requirements, adding value and future advantage.

www.QinetiQ.com

© QinetiQ Inc. 2021 | F-HEX 21v26

For further information please contact:

10440 Furnace Road Suite 204
Lorton, VA USA
+011 540 658 2720
BD@US.QinetiQ.com
www.US.QinetiQ.com