DRONE RESCUE
Systems

OUR PRODUCTS

when safety matters

Parachute Safety Solutions made in Austria

www.dronerescue.com

Auterion

Offical Auterion partner

esa

Awarded by European Space Agency

CONTENTS

DRONE
RESCUE
Systems

We save your
multicopter

Drone Rescue Systems was founded by Andreas Ploier and Markus Manninger in the city of Graz, Austria. Starting out with a team of two, the company has since attracted an incredible team of talents and shown a remarkable success record. Drone Rescue Systems has won numerous tech and aviation business awards including the ESNC 2016 award and was incubated in the prestigious ESA-BIC as first pick.

Drone Rescue Systems also was the first company that **passed ASTM-F3322-18** for a drone with a MTOW of 16 kg (DJI-M600).

After many successful system integrations with drone companies around the world, we also **officially partnered with Auterion** in 2022.

Autonomous & independent failure detection

SMART ELECTRONICS

Lightweight design

ONLY 290–650 g

Reusable system

NO PYROTECHNICS

Highest quality & reliability

SUCCESSFULLY TESTED

Easy transportation & travel

LABELLED AS "NON-DANGEROUS GOOD"

Acoustic signal

SAFETY FOR PEOPLE AND EQUIPMENT

DRS-5 Solution

The DRS-5 was designed for drones with a maximum take-off weight between 2 and 5 kg.
It is available with various interfaces to connect to your type of drone. Its lightweight and low maintenance design makes it the ideal solution for professional drone operators who want to spend a lot of time in the air.

Weight range	2–5 kg MTOW
System weight	~ 310 g
Height/Diameter	120 mm / 75 mm
Parachute deployment	within 20 m
Interfaces	MAVLink (Auterion), DJI-API, Customer Serial Interface, PWM, Custom Solution
Optional	Geofencing, IP-Protection, RC Trigger
Descent velocity	2.43–3.49 m/s
Impact energy	2.95–23.14 J

DRS-10 Solution

The DRS-10 was designed for drones with a maximum take-off weight between 5 and 10 kg. It is available with various interfaces to connect to your type of drone. Its lightweight and low maintenance design makes it the ideal solution for professional drone operators who want to spend a lot of time in the air.

Weight range	5–10 kg MTOW
System weight	~ 400 g
Height/Diameter	165 mm / 75 mm
Parachute deployment	within 20–30 m
Interfaces	MAVLink (Auterion), DJI-API, Customer Serial Interface, PWM, Custom Solution
Optional	Geofencing, IP-Protection, RC Trigger
Descent velocity	2–4 m/s
Impact energy	6–80 J

DRS-15 Solution

The DRS-15 was designed for drones with a maximum take-off weight between 10 and 15 kg.
It is available with various interfaces to connect to your type of drone. Its lightweight and low maintenance design makes it the ideal solution for professional drone operators who want to spend a lot of time in the air.

Weight range	10–15 kg MTOW
System weight	~ 400 g
Height/Diameter	165 mm / 75 mm
Parachute deployment	within 20–30 m
Interfaces	MAVLink (Auterion), DJI-API, Customer Serial Interface, PWM, Custom Solution
Optional	Geofencing, IP-Protection, RC Trigger
Descent velocity	3–4 m/s
Impact energy	30.15–120 J

Drone Rescue Systems GmbH • Andritzer Reichsstraße 15, 8045 Graz, Austria

DRS-25 Solution

The DRS-25 was designed for drones with a maximum take-off weight between 15 and 25 kg.
It is available with various interfaces to connect to your type of drone. Its lightweight and low maintenance design makes it the ideal solution for professional drone operators who want to spend a lot of time in the air.

Weight range	15–25 kg MTOW
System weight	~ 600 g
Height/Diameter	250 mm / 75 mm
Parachute deployment	within 30 m
Interfaces	MAVLink (Auterion), DJI-API, Customer Serial Interface, PWM, Custom Solution
Optional	Geofencing, IP-Protection, RC Trigger
Descent velocity	2–3.60 m/s
Impact energy	30–162 J

DRS-M200 Solution

The DRS-M200 was designed for the DJI Matrice 200. It is installed on top of the main frame and uses a modified battery hub to reliably stop the props from spinning when the parachute is activated. Our failure detection algorithms have been optimized for the M200, based on large amounts of flight data we gathered from testing and cooperating customers.

Weight range	DJI Matrice 200
System weight	~ 420 g
Height/Diameter	130 mm / 75 mm
Parachute deployment	within 20–30 m
Interface	Battery hub
Optional	Geofencing, IP-Protection, RC Trigger
Descent velocity	2–4 m/s
Impact energy	6–80 J

Drone Rescue Systems GmbH • Andritzer Reichsstraße 15, 8045 Graz, Austria

DRS-M210 V2 Solution

The DRS-M210-V2 was designed for the DJI Matrice 210 V2 series. It is installed on top of the main frame and is connected via the drone's onboard SDK. Our failure detection algorithms have been optimized for the M210 V2, based on large amounts of flight data we gathered from testing and cooperating customers.

Weight range	DJI Matrice 210 V2
System weight	~ 400 g
Height/Diameter	130 mm / 75 mm
Parachute deployment	within 20–30 m
Interface	O-SDK
Optional	Geofencing, IP-Protection, RC Trigger
Descent velocity	2–4 m/s
Impact energy	6–80 J

DRS-M300 Solution

The DRS-M300 was designed for the DJI Matrice 300 and Matrice 300 RTK. It is connected via DJI's onboard SDK and is compatible with all current DJI extensions and antennas. Flight parameters for failure detection are specifically adjusted for the M300, based on countless hours of flight data, that have gone into optimizing failure detection algorithms.

Weight range	DJI Matrice 300 / RTK
System weight	**V01:** ~ 490 g **V02:** ~ 390 g
Height/Diameter	**V01:** 165 mm / 75 mm **V02:** 130 mm / 75 mm
Parachute deployment	within 20–30 m
Interface	O-SDK
Optional	Geofencing, IP-Protection, RC Trigger
Descent velocity	**V01:** 3–4 m/s **V02:** 2–4m/s
Impact energy	**V01:** 30.15–120 J **V02:** 6–80 J

Tested according ASTM-F3322-18-Standard

DRS-M600 Solution

The DRS-M600 was designed for the DJI Matrice 600 and Matrice 600 Pro. It is installed on the side of the main frame and can be used with all available system weights or antennas. With the included motor cut-off board, we reliably stop the props from spinning when the parachute is activated. Our failure detection algorithms have been optimized for the M600, based on large amounts of flight data we gathered from testing and cooperating customers.

Weight range	DJI Matrice 600 / Pro
System weight	~ 430 g
Height/Diameter	165 mm / 75 mm
Parachute deployment	within 20–30 m
Interface	Power-Cut-Off Board
Optional	Geofencing, IP-Protection, RC Trigger
Descent velocity	3–4 m/s
Impact energy	30.15–120 J

Tested according ASTM-F3322-18-Standard

We will find the perfect solution for your project

DRS Mechanics Only – If you want the benefits of our light and efficient parachute hardware, but want to use your own electronics and activation sensors, the DRS-light is perfect for you. Our hardware-only solutions are available for drones from 2 to 25 kg take-off weight and come at a very competitive price. Contact us and request a quote for your project!

ADVANCED PARACHUTE
Specialized design and material for high reliability and minimum weight
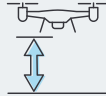
LOW ALTITUDE DEPLOYMENT
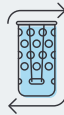Full bloom in only a few meters, depending on take-off-weight

SIMPLE INSTALLATION
Easy to install thanks to various interfaces and our smart mechanism

EASY TRANSPORTATION
No dangerous-good classification that would restrict air travel or shipping

REUSABLE SYSTEM
Reusable within minutes after deployment through repacking or using a spare parachute

LIGHTWEIGHT
Total weight of max. 600 g through intelligent engineering and advanced materials

CUSTOMIZED SOLUTIONS

Are you working on something no one has done before? Great, these are our favorite projects! Contact and challenge us. We are a strong and reliable partner for your project and will find the perfect parachute solution for your needs. **Let's start working together.**

DRS FOR VTOL AND FIXED WING

VTOL and fixed wing designs are often very unique, and so are the possible ways to integrate a parachute. Over the past years we have worked with numerous aircraft manufacturers and have gained much experience in co-operatively developing ideal solutions. Based on this experience, the integration of a parachute in a fixed wing / VTOL configuration should always be customized, as standardized products do not work well in most cases.

The VTOL and fixed wing solutions are not tied to the cylindrical shape of our standardized systems for multirotor drones. They can take various forms, depending on the space available on your aircraft. Contact us to find out if we can fit your project!

GEOFENCING

Geofencing is an optional feature for all DRS solutions. It allows pilots to set a corridor or area in which their drone can operate. In case of a fly away or other malfunction that makes the drone leave this predefined area, our system will activate and bring the drone down safely.

The DRS is equipped with an embedded multi-GNSS receiver, capable of determining its position via GPS, Galileo, GLONASS and BeiDou satellite systems.

This feature works completely independently from the drone and can greatly assist in the SORA process for providing additional containment, as well as providing an extra safety measurement for challenging flight environments.

More on **www.dronerescue.com**

MANUAL RC-TRIGGER

Our RC-trigger is used to manually deploy the DRS parachute. Available in EU and non-EU version it has a tested range of 3.5 kilometers. The range can be further increased by using a stronger radio signal, but might require a radio transmission license in your country!

	EU variant	Non-EU variant
Operating frequency	868 MHz	915 MHz
Max. current consumption (9V)	190 mA	150 mA
Tested range	400 m	400 m
Power supply	9 V battery (PP3 size)	
Dimensions	133 × 80 × 33 mm (without antenna)	

CONTACT US

✉ office@dronerescue.com

📞 +43 664 140 80 22

➤ **www.dronerescue.com**

DRONE RESCUE Systems

Drone Rescue Systems GmbH
Andritzer Reichsstraße 15
8045 Graz, Austria