

# Orbital Reentry Carapace

The ORC is an armoured exo suit with inbuilt Ion thrusters, it was designed by [Galactic Horizon](#) and built by [lemochi Innovations & Sales](#) in [YE 40](#).

Stats	
Price:	2,500 KS
Weight:	140kg
Nomenclature:	GH-M1-3B
Designer:	<a href="#">Galactic Horizon</a>
Manufacturer:	<a href="#">IIS</a> / <a href="#">Galactic Horizon</a>
Entered Service:	<a href="#">YE 40</a>
Defensive Capabilities	
Undersuit:	<a href="#">DRv3</a> tier 2, Medium Personnel
Nerimium Armor:	<a href="#">DRv3</a> Tier 4, Light Armour

## About the Armor

The Orbital Re-entry Carapace <sup>1)</sup> is an industrial exo-suit designed for working in dangerous environments with little to no atmosphere, it was designed by [Galactic Horizon](#) and built by [lemochi Innovations & Sales](#) in [YE 40](#). The armour plating of the ORC is highly protective and heat resistant, able to survive a fall from orbit with only some minor cosmetic damage. <sup>2)</sup> The mechanized skeleton that resides underneath the armoured layers lets the pilot lift roughly 3x the weight of the suit in addition to bearing its full weight for the pilot.

## Appearance

The ORC's base layer is a padded jumpsuit made of a quilted, brown material that acts as an insulating layer. The outermost layer of this armour is made up of Nerimium plates that are off white in colour with an orange streak along the top edge. A thick collar runs around the neck of the suit and the base of the helmet, with the helmet resembling an aerodynamic skydiver's helmet with two black circles where the pilot's eyes would be. <sup>3)</sup> The 'backpack' area of the suit has a housing that contains an air bladder, two [Galactic Horizon power cores](#) and the suit's biggest sources of thrust<sup>4)</sup>. The inside of the helmet is padded with the same material the undersuit is made of, the suit comes stock standard in these colours but alternate paintjobs can be requisitioned by the buyer upon purchase.

## Advantages

Allows the pilot to lift 4x the weight of the suit & pilot with relative ease.

nearly Immune to small arms fire and resistant to other forms of damage.

Thrusters and the suit’s mechanized skeleton allow the pilot to fly and move faster than they normally would be able to.

Drawbacks

The tough armour and mechanized skeleton of the suit means that it is a pretty heavy suit.

Mobility

The rigid, strength enhancing skeleton of the suit helps negate the weight of the suit itself to allow the pilot mostly unimpeded movement. In addition to this, the Ion thrusters <sup>5)</sup> allow the pilot to accelerate up to 60 miles per hour (96.5 kilometers per hour) in space and 20 miles per hour (32.19 kilometers per hour) in an Earth-like atmosphere.

Armor Size

The dimensions of each suit are customized to fit the intended pilot with enough ‘wiggle room’ for a reasonable bit of clothing to be worn underneath, as a rule of thumb the suit <sup>6)</sup> tends to bulk out the pilot's body with 3cm thick walls in most areas except the joints and the backpack area of the suit which is 6cm thick.

Height	+8cm to pilot’s height
Width	+3cm to the pilot’s body
Length	+3cm in most places, +6 for the backpack
Weight	140kg

Damage Capacity Stats

Undersuit:	DRv3 tier 2, Medium Personnel
Nerimium Armor:	DRv3 Tier 4, Light Armour

Donning and Doffing the armour

The suit’s front splits vertically down the middle from the helmet to the waist, separating the plates and creating an empty space that the pilot climbs into backwards, putting their limbs into the appropriate cavities. The pilot then uses either a holographic interface on the left forearm or the sensors that line the helmet to seal and activate the suit. Simply reverse the process to doff the armour, alternatively there is an emergency release latch located underneath each armpit that releases the armour plating and the mechanised skeleton from the undersuit when used.

When not in use, the suits are generally hung on a rack by a handle in the back of the collar.

## Controlling the Armor

The helmet of the suit is lined with electrodes that translates the brain's electrical activity into actions, moving the mechanised joints of the suit in synchronicity with the pilot's own bodily movements. A particular section that runs from each temple to connect at the back of the head <sup>7)</sup> is dedicated to controlling the suit's thrusters and parachutes without the need for joysticks or other, possibly fiddly controls.

## History

In [YE 40 Galactic Horizon](#) decided to start dipping their toes into power armour, deciding to aim more toward utility than warfare although there is no doubt this suit could hold its own in a firefight. It was decided on that they would build something sturdy and what originally was going to be constructed from lightweight polymers and alloys quickly snowballed into an armoured exoskeleton made of more heavy-duty materials.

[Iemochi Innovations & Sales](#) and [Galactic Horizon](#) always had great intercompany relations and so IIS had no issue with letting Galactic Horizon use their facilities.

## Systems

The ORC is not an overly complicated piece of machinery, in fact it makes use of more than a few off-the-shelf components in its construction which allows it to be relatively easy to repair with an exception being the armour plating.

## Parachute

A [Rip-Pod Parachute System](#) is mounted to the back of the suit, above the power assembly - this pod contains three circular, heat treated parachutes that are 5 meters (16ft) in diameter and made of [Bulletproof Wool](#). The Parachutes are activated via the wrist-mounted holographic display and are designed to be airbrakes rather than a gliding apparatus, the parachutes can self-pack themselves in 30 seconds through another input from the wrist display

## Armor

The protection this suit provides comes from the thick, insulating suit that sits under the mechanised frame and the layers of [Nerimium](#) plates. The outermost layer is designed to take the brunt of the attacks and is highly protective against most forms of damage <sup>8)</sup> while the gel-lined suit underneath helps cushion the impacts as well as providing shielding for the pilot from radiation and extreme temperatures.

## Camouflage

The suit has no included stealth systems besides the potential to be painted with a camouflage pattern.

## Life Support

The ORC contains a simple yet effective life support system, the combined air bladder and rebreather system can support the pilot for up to 72 hours before it needs to be refilled, in addition the gel-like layer in the undersuit acts as both a pressure-suit in high G manoeuvring and a way of re-sealing any small punctures that may occur.

## Power Systems

The ORC is powered by two [Galactic Horizon energy cores](#) located on the back that run in tandem and can fully power the suit for up to 72 hours on a single charge<sup>9)</sup>, in addition the suit has a capacitor that is kinetically charged and can store enough power to run the suit for an additional 5 hours when fully charged<sup>10)</sup>.

## Sensors and Communications

The ORC suit houses a variety of sensors that monitor both the suit's and the pilot's vitals, anything from power levels and suit integrity to heartrate are monitored and displayed for the pilot either on the helmet's HUD or on the wrist display. The cameras that act as the suit's 'eyes' are contain a full suite of [optical, thermal, IR, UV, and Low light sensors](#), with seismic sensors in the boots. Communications include satellite(if available), video, suit to suit relay and standard radio(1LY range).

## Weapons

The suit itself comes with no built in weapons<sup>11)</sup> and is limited to infantry weapons<sup>12)</sup> as well as anything that can be mounted onto the shoulder hardpoints.

## Hardpoints

The ORC suit has the following hardpoints<sup>13)</sup>:

» Left Shoulder: On the left shoulder of the suit is a hardpoint designed to hold larger items such as rifles, utility packs and larger tools.

» Right Shoulder: On the right shoulder of the suit is a hardpoint designed to hold larger items such as

rifles, utility packs and larger tools.

» Left hip: The left hip hardpoint is made for tools, sidearms, a small pouch or something of similar size to be mounted there.

» Right Hip: The right hip hardpoint is made for tools, sidearms, a small pouch or something of similar size to be mounted there.

» Right Forearm: The right forearm hardpoint is made for small items and hand-mounted tools.

» Left Forearm: The left forearm hardpoint is made for small items and hand-mounted tools.

## OOO Notes

[sirskully](#) created this article on 2018/05/16 08:33.

Approval Info [here](#)

1)

Also referred to as the ORC Suit

2)

hence the name

3)

each circle being a grouping of seven small cameras that feed through to the pilot's HUD

4)

lower profile thrusters are located on the chest and the backs of the legs

5)

mounted to the chest, the backpack and the boots of the suit

6)

undersuit, armoured plates and mechanized skeleton

7)

like an incomplete halo

8)

even to the point of being nearly impervious to small arms fire

9)

it takes 7 hours to fully charge both power cores

10)

it takes roughly three hours of constant activity to charge the capacitor

11)

besides raw strength

12)

armoured and unarmoured

13)

note that the shoulder and wrist hardpoints pass power onto devices that are plugged into them

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