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# **Enhanced Mobility Armor**

The Enhanced Mobility Armor, also known as the EMmA, is a variant of the exoskeleton used in the ORC suit with lighter armor that sits somewhere between traditional infantry armor and a suit of power armor. It was designed and developed by Galactic Horizon in YE 40 for use by their expeditionary and security forces.

Stats			
Availability:	railability: Galactic Horizon Security and Expeditionary Forces Onl		
Price:	1,750ks		
Weight:	25kg		
Nomenclature:	Gh-M1-4h		
Manufacturer:	Galactic Horizon		
Designer:	Galactic Horizon		
Defensive Capability			
Armor Plating:	DRv3 Tier 3, Heavy Personnel		
<b>Conformal Barrier Shield:</b>	DRv3 Tier 4, Light Armor		

### **About the Armor**

The EMmA is a Durandium Alloy exoskeletal power frame that has been implemented into a suit of polymer combat armor, it was designed to enhance the wearer's physical capabilities while keeping a low overall profile and still providing decent protection.

### Design

The Durandium Alloy exoskeleton of the EMmA clings to the outside of the wearer's limbs, their back and their shoulders while the polymer armor wraps around this and 95% of the wearer's body. The outermost shell is made up of a structured polymer composite consisting of alternating glassy and rubbery layers. When the composite is hit, it quickly melts into a liquid before instantaneously hardening to close up the resulting damage – meaning there's no structural deformities to deal with. Joints like the elbows and knees of the suit are covered with sections of Bulletproof Wool that has been woven with Stone Thread for added strength.

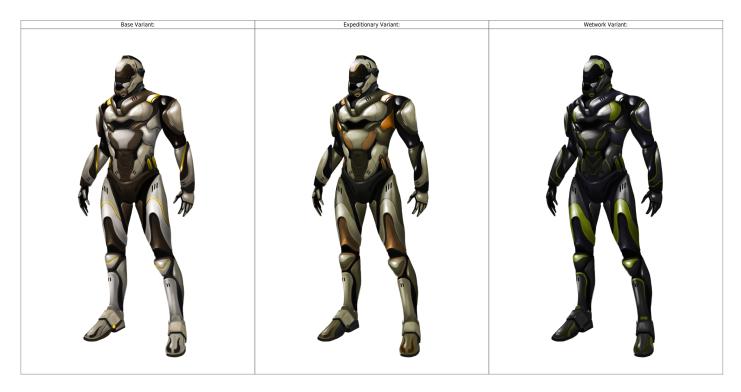
The armored backpack section of the suit houses the majority of its systems, three Galactic Horizon power cores sit on the shoulders and are capable of keeping the suit powered for 168 hours while a vacuum sealed canister of liquid air combined with a rebreather system can feed breathable gasses to the user for 72 hours at a time. A Foursight Helm comes standard with each suit but may be swapped out for a different helmet at the user's discretion, helmet must contain come kind of synaptic controller interface and hook-ups for oxygen, power and data to be compatible.

Note: most helmets have enough space for an ASCI to be implemented into them if the need arises.

### **Appearance**

The EMmA is a rather low-profile, basic-looking suit of powered armor that fully cover's the user's body. It is available in a wide variety of colours and designs to fit the situation's requirements with slightly bulkier shoulder pauldrons and a pronounced backpack area that is still small enough to fit a backpack over. The front of the suit has hidden seams that open/close for the user to enter/exit through with a thick collar around the neck that the helmet mounts to, this collar hides the suit's power, data and oxygen hookup tubes.

The conformal barrier shield is invisible to the naked eye until struck - the point of impact becomes a series of yellowed triangle lattices that break like glass and dissipate once the defensive capabilities have been exceeded.



### **Advantages**

Lightweight and portable.

Allows the user to lift 2.5x their body weight.

Adequate protection against small arms fire and most infantry weapons.

Can run for a week and provide enough oxygen for 72 hours before a re-stock is required.

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#### **Drawbacks**

Not as tough as most other suits of power armor

#### **Mobility**

The rigid, strength enhancing skeleton of the suit helps negate the weight of the suit itself to allow the pilot mostly unimpeded movement while also letting them run twice as fast and jump upto 20 feet in a single bound <sup>1)</sup>.

#### **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 tends to bulk out the pilot's body with 2cm thick walls in most areas except the joints and the backpack area of the suit which is 6cm thick.

Height	+3cm to wearer's height	
Width	+2cm to the user's body	
Length	+2cm in most places, +6cm for the backpack	
Weight	25kg	

### **Damage Capacity Stats**

Below is the defensive capacity for the EMmA suit of powered armor, it offers less defence than a suit of full blown power armor but exceeds normal suits of combat armor due to the enhancing exoskeleton, a low-profile shield system is built in to the armor to provide it with some extra oomf.

Armor Plating:	DRv3 Tier 3, Heavy Personnel
<b>Conformal Barrier Shield:</b>	DRv3 Tier 4, Light Armor

# **Donning and Doffing the Armor**

The front of the suit opens up on hidden hinges, allowing access to an empty space that the user climbs into backwards, putting their limbs into the appropriate cavities. The pilot then uses either a holographic interface on the left forearm or lowers the helmet and uses the sensors that line it to seal and activate the suit.

# **Controlling the Armor**

The helmet of the suit is lined with electrodes and senors that translates the brain's electrical activity into actions, moving the mechanized joints of the suit in synchronicity with the wearer's own bodily movements.

# **Systems**

The EMmA is rather simple in design yet without sacrificing functionality or quality, in fact most of its base systems were heavily inspired – almost copied – from the ORC suit.

#### **Parachutes**

The EMma uses two parachute modules from the ORC suit, a small pod is mounted to each shoulder of the suit- these pods each contain three circular, heat treated parachutes that are 5 meters (16ft) in diameter and made of Bulletproof Wool.

#### **Power Systems**

The EMmA is powered by three Galactic Horizon energy cores in the back that run in tandem and can fully power the suit for upto 168 hours on a single charge, in addition the suit has a capacitor that is kinetically charged and can store enough power to run the suit for an additional 10 hours when fully charged<sup>2)</sup>.

# **Magnetic Anchoring**

The boots and palms of the suit can magnetize and allow the user to anchor on to metal surfaces, the on/off is controlled via the helmet's synaptic controller.

### Life Support

The EMmA suit contains an armored canister of liquid air combined with a rebreather system that can provide the wearer with up to 72 hours of breathable air.

#### **Armor**

This suit can provide reasonable protection against space's background radiation and extreme temperatures but the main focus is providing protection against energy-based and kinetic attacks, both of which the polymer composite handles well. In addition the suit is hardened against electromagnetic

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pulses and has a conformal barrier shield system built unto the plates.

#### **Sensors and Communications**

The Communications capabilities include satellite (if available), peer to peer relay and standard radio(5LY range) while vision modes include low light vision, IR, thermal and x100 zoom standard optical - all with a laser range finder.

#### Weapons

The suit itself comes with no built in weapons<sup>3)</sup> and is limited to infantry weapons<sup>4)</sup>.

#### **Hardpoints**

The EMmA suit has the following hardpoints:

- » 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.
- » Abdomen: Various small pouches for ammunition and such can be mounted to the abdomen section.
- » Chest: A magnetized strip runs across the chest and is intended to hold a knife or small, metal tool.
- » Lumbar: The Lumbar hardpoint is made for small packs or equipment to be stowed.
- » 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.

### **OOC Notes**

SirSkully created this article on 2018/07/02 05:28.

Approval Thread here

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Products & Items Database		
<b>Product Categories</b>	power armor	
<b>Product Name</b>	Enhanced Mobility Armor	
Nomenclature	Gh-M1-4h	
Manufacturer	Galactic Horizon	
Year Released	YE 40	
Price (KS)	1,750.00 KS	
Mass (kg)	25 kg	

1g environment

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

besides raw strength

armored and unarmored

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