

Interdiction Field SEM

Ke-S3-M2902

History and Development

In an effort to make systems that can be used to strategically assist in a fleet-wide application, the creator of the [Sakura Enhancement Module](#) (Star Army Officer [Kage Yaichiro](#)) decided to design an SEM built to act as a squadron-wide Interdiction Device. Such a device would remove the higher speed advantage of the larger Mishhu ships and allow the smaller and more numerous vessels to converge in combat, while also keeping the battlefield confined to a smaller area. This former option would likely be advantageous when defending a nearby world.

Part of the mentality of this is to prevent the Mishhu from re-using their tactic from the Taiie Massacre, as they would need FTL capability to navigate to the star to destroy it without being confronted, as well as to escape the $\sim 1c$ shock wave. This unit, if proven successful, may be modified and enhanced for use on the [Zodiac-Class Star Fortress](#), which lacks any form of Interdiction technology, and for the [Iori-Class Star Fortress](#), which is still using the older ship-based 1 cubic AU variant. These would allow these Star Fortresses to better serve their roles.

Basic Description

this unit is designed to limit FTL navigation on the scale nine-fold of a normal Interdiction Device, with a maximum AOE of 9 cubic AU, or a sphere with a diameter slightly exceeding 3 AU. The minimum is the same cubic kilometer as its more conventional predecessors.

The ship's secondary mode can defeat interdiction efforts up to 4.5 cubic AU, half of its normal mode of operation. While it is half the area of its conventional mode, it can completely counteract a conventional ship's Interdiction Efforts, so as to prevent the slowing of its attached fleet.

A disadvantage of this unit is that it is only defended by a single Positron Railgun, but as it is intended to be part of a squadron attachment, this isn't usually a problem. Using this SEM on a lone ship is ill-advised, unless it is mission-specific and very well planned. A lone vessel using this unit should likely have Power Armors assigned to the defense of this SEM.

Weapons Systems

Ke-S3-W2901 Positron Accelerator Cannon (1)

This weapon is one of the standard Sakura Railguns normally found on the default nacelles of the ship, placed on the SEM so as not to leave it undefended.

Below is the weapon, taken directly from the Sakura's technical data.

These cannons function as deadly antimatter railguns, firing massive 2000kg compressed positron shells at near-light speeds. Each railgun fires a subspace pulse (to provide shield penetration effects) which is used to provide short-term encasement to a packet of compressed positrons (which are suspended with electromagnetic fields until leaving the cannon). The positrons annihilate electrons they come in contact with, thus destabilizing and destroying molecules, and creating a surge of energy through the target. Anti-matter weapons should not be used in atmospheres.

- Location: Front of Nacelle (1)
- Primary Purpose: Anti-starship
- Secondary Purpose: Bombardment
- Damage: Rating of 9. Extremely Heavy damage against any starship. Smaller starships or starships without high-end armor will likely be completely obliterated.
- Area of Effect: Point of impact and splash area
- Range: About 804,672 km (500,000 miles)
- Rate of Fire: One burst every seven and a half seconds.
- Payload: Self regenerating.

Other Systems

Hull

There are two sections of Zesuaium-reinforced Yamataium Armor with Xiulurium coating, one for the top half and one for the bottom half of the SEM.

HSCS conduits and Passageways

The SEM contains passage ways to permit travel between the Sakura and the SEM, lined with HSCS conduit. While the SEM lacks HSCS fluid or nodal capability on its own, it can utilize such systems from the Sakura it is linked to.

The passageways have thick walls made of Zesuaium-reinforced Yamataium and Yavex mesh, as well as Zesuaium-reinforced Yamataium bulkheads half a meter thick every ten meters down the corridor. These are normally open, but can be programmed as needed. They can be used to prevent depressurization, lock certain people or people below a given rank out of the SEM, or trap an enemy lured into the corridor. These are under the control of the IES as well as the CO.

Aether Generator

The SEM has its own Aether Generator to supplement that of the Sakura. The Sakura does not lose power to the SEM, so SEM use does not prevent the Sakura from firing its Main Gun, for example. However, the Sakura can pull power from the SEM if needed for emergencies.

Capacitor Banks

The SEM relies on Aether Generators from the Sakura and itself to power the Capacitor Banks. The banks

are linked to power any devices on board, which are continuously charged by the Aether generators. Rather than draw massive amounts of power at once for the SEM, they continuously charge, and when the capacitors are discharged, the banks are charged gradually again. The charging rate can be configured via IES, but the faster the rate, the more the drain of the Sakura's and the SEM's Aether generators.

Docking Ports

For emergencies such as when the Sakura is disabled, or other unforeseen instances, a small collection of docking ports can be found, meant for shuttles and Power Armors from the Sakura attached to it.

Life Support

The SEM has basic Life Support, specifically air scrubbers, oxygen tanks, water and ration storage. It is meant to be an emergency "life raft" of sorts, should the attached Sakura be destroyed, but lacks any form of engine capacity unless connected to an external computer. If engines are needed, shuttles can be connected to the unit, though acceleration will be very slow.

Quick Release

In an emergency, the Sakura can detach from the SEM in less than one second, and vice versa. However, this requires permission from the IES being disconnected, the highest ranking and surviving officer on the Sakura being disconnected, or the CO.

Self Destruct

With the potentially sensitive nature of the components of a module designed for any specific mission, it is possible to detach the vessel from a SEM and detonate it, using the Aether generator to overload and destroy the SEM.

Combined Field System

The Sakura S3 has an excellent Combined Field System that can protect against up to 4.5 YottaWatts worth of damage (4.5×10^{24} [4.5 septillion] joules a second) per each 1 square meter area in either kinetic or energy form, or a bit more than the matter-energy conversion rate of the Sun (3.83×10^{24} Watts). This is usually enough to hide within a star or withstand many main cannon blasts from enemy vessels. The nacelles are responsible for 15% of this power.

SRP Costs

| Item | Point Cost (Each) | Number | Description | Subtotal |
|----------------------------|----------------------------------|---------|-------------------------------|----------|
| FTL Engine | (Speed in c/100) $\times 0.15^1$ | 485 | CFS | 485 |
| Main Gun Battery | 25 x DR | 2, DR 9 | Particle Cannon | 225 |
| Main Generator | 400 | 1 | Aether | 400 |
| Armor | 50 x DR | 2, DR 9 | Zesuaium-Reinforced Yamataium | 900 |
| Stealth Armor | 200 | 2 | Xiulurium | 400 |
| Secondary Generator | 200 | 1 | Capacitor | 200 |

| Item | Point Cost (Each) | Number | Description | Subtotal |
|-----------------------|-------------------|--------|-------------------|----------|
| Life Support | 200 | 1 | HSCS/Conventional | 200 |
| Total SRP Cost | | | | 2810 |

¹ Multiplied by 15% because each Nacelle accounts for 15% of the Sakura's total CFS capacity, according to Wes

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