
EMP&DRONE
SOLAR FLARES


-MISSION-
Safety
in the digital society

Executive Order 13865

- **Executive Order 13865-Coordinating *National Resilience to Electromagnetic Pulses***
- **March 26, 2019**
- **Defense and national security : Electromagnetic pulses, national resilience, coordination efforts**

E M P ATTACK?

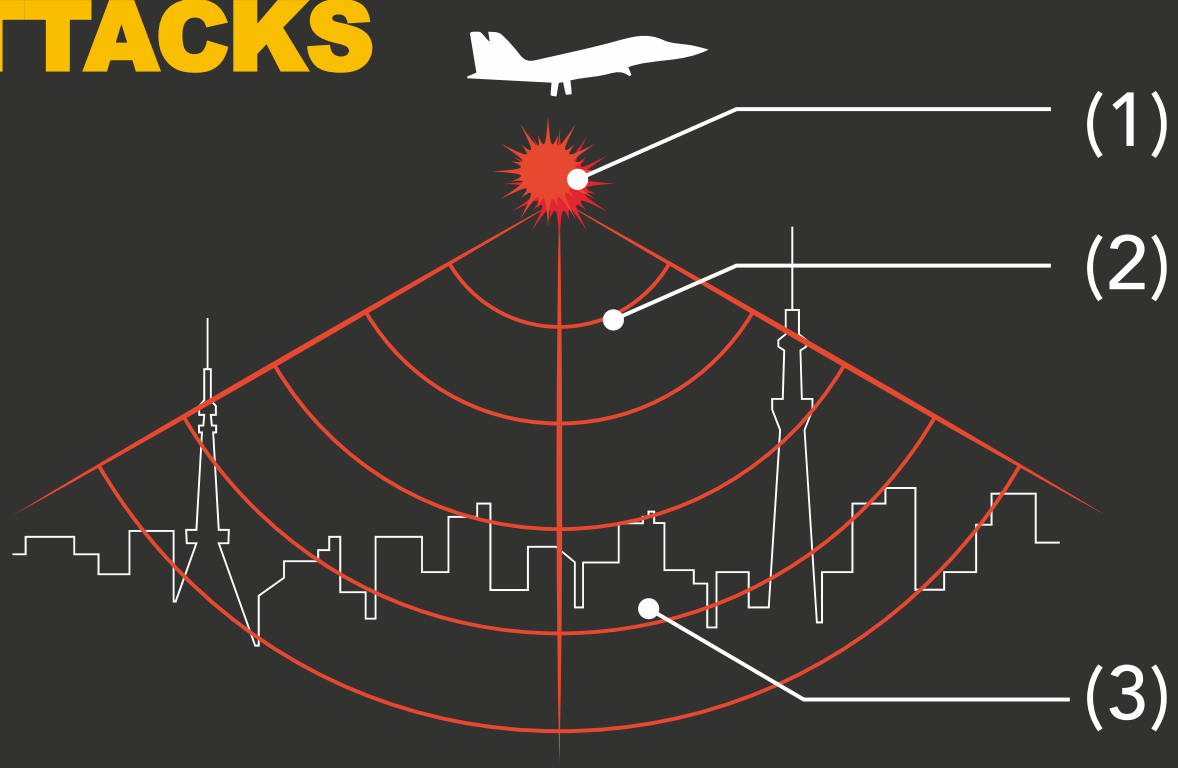
Electromagnetic Pulse Attack

An EMP attack (Electromagnetic Pulse Attack) is a physical attack that makes any electronic product in the area irrevocable by powerful electromagnetic waves.

It is said that infrastructure will be degenerate for a century, and in recent years, there has been a rapidly growing sense of caution, especially in developed countries.

DETAILS OF EMP ATTACKS

EMP attacks short out and irreparably destroy servers, devices, and other electronic devices which is above and under ground by generating instantaneously powerful electromagnetic waves by means such as nuclear explosions at high altitudes (30 km to several hundreds km).



1.
EMP BOMB etc.

2.
Instantly generates powerful electromagnetic waves

3.
server down
Destruction of electronic equipment

ESTIMATED DAMAGE

The EMP attack itself has no human impact and only destroys electronic devices.

All urban infrastructures heavily dependent on electrical and electronic equipment are criptic

Not only large-scale attacks, but also local infrastructure destruction using small EMP bombs is expected

THE DIFFERENCE BETWEEN EMP AND CYBERATTACKS

An EMP attack is a physical attack on an electronic product.

Unlike cyberattacks, which cause damage from online attacks, physically short out and destroy all electronic products in the area, including servers and devices that are storages of data.

Compared to cyberattacks, EMP attacks are more lossy and damaging

	EMP attack / Solar Flares	Cyber attack
Attack Object	All electronic devices in the target area	Data and systems on the server
Attack methods	Overcurrent due to instantaneously releasing powerful electromagnetic waves	Unauthorized access to the system
Recovery period	Irreparable	Days ~ several years

EFFECTS OF SOLAR FLARES

As a physical attack, such as an EMP attack, it is also similarly affected by solar flares, which are natural disasters. Superflares (large solar flares) are expected to occur between 2025, and it‘s damages are estimated that large-scale flares will cause more than trillions of yen.

Electromagnetic Pulse Attack

Explosive solar flares intermittently affect the area for several weeks. In the worst case, all electronic devices become unusable. This issue is an equally equal issue anywhere in the world. We have to overcome a big disaster.

Safety in the Digital Society

EMP Shield Tech Lab Inc. / Yuya Ishikawa

Anti-EMP Electromagnetic Shielding Business

Business Overview

- Provision of server infrastructure services using electromagnetic shielding effective for anti-EMP countermeasures
- Server defense measures are needed as cloudization progresses rapidly
- It has already been introduced by the Ministry of Defense, etc., and its effectiveness has been proven

Patented for electromagnetic shielding

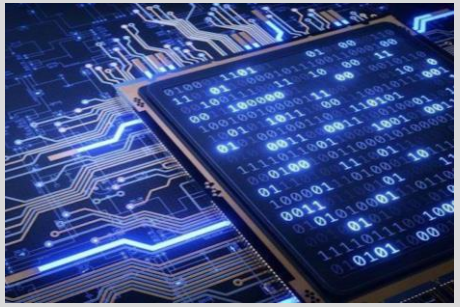
Patent No.4282913 acquired in 2009 "Server Rack"

・ Related patents related to the above will be filed soon (2023/12~)

■ Implementation (GORGON2)

Data centres

Medical institutions



Information institutions

Local government

PRODUCT INFORMATION

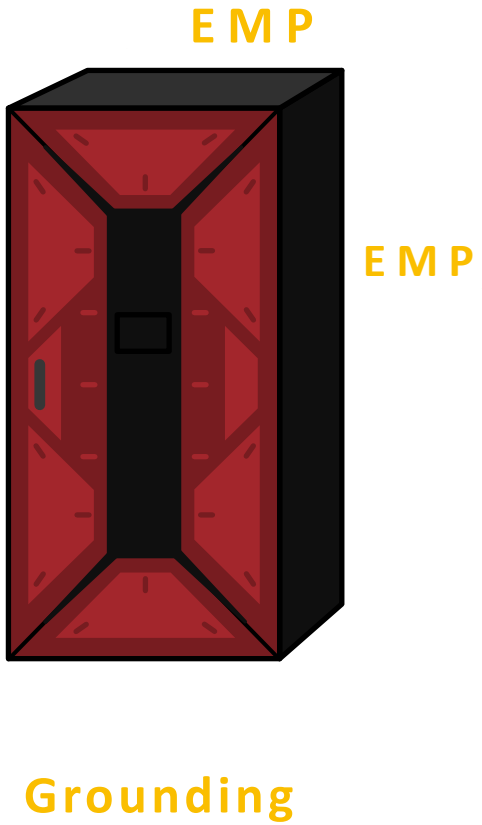
GORGON2

- Equipped with the world‘s most advanced electromagnetic shielding technology.
- Can be deployed on small servers.
- Designed to provide electromagnetic shielding for the entire server room.
- One unit can accommodate approximately 20 servers
- Custom sizes are available to match the environment in which they will be installed.

SHIELD TECHNOLOGY-COMPETITOR COMPARISON

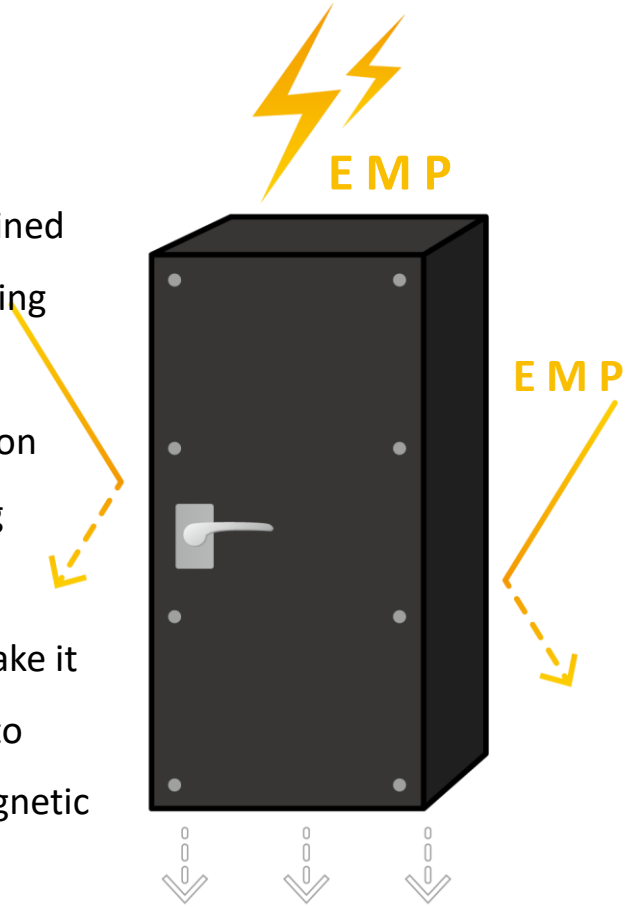
GORGON2

In addition to blocking electromagnetic waves, each surface of GORGON acts as an antenna,
receiving electromagnetic waves and channeling them to ground.
Therefore, even strong low-frequency electromagnetic waves are well shielded.



Competitors' products

Shielding performance is maintained by using multiple pieces of blocking material.
Shielding performance depends on the specifications of the blocking material.
It also has characteristics that make it difficult to cover when exposed to strong low-frequency electromagnetic waves.



Contact us for partnership

Sales agent — Manufacture and sale of GORGON

※UAE, Middle East and Africa have agency agreements in place

JV Recruitment — Joint Venture recruitment

Sales reasoning — Exclusive/Non-exclusive

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