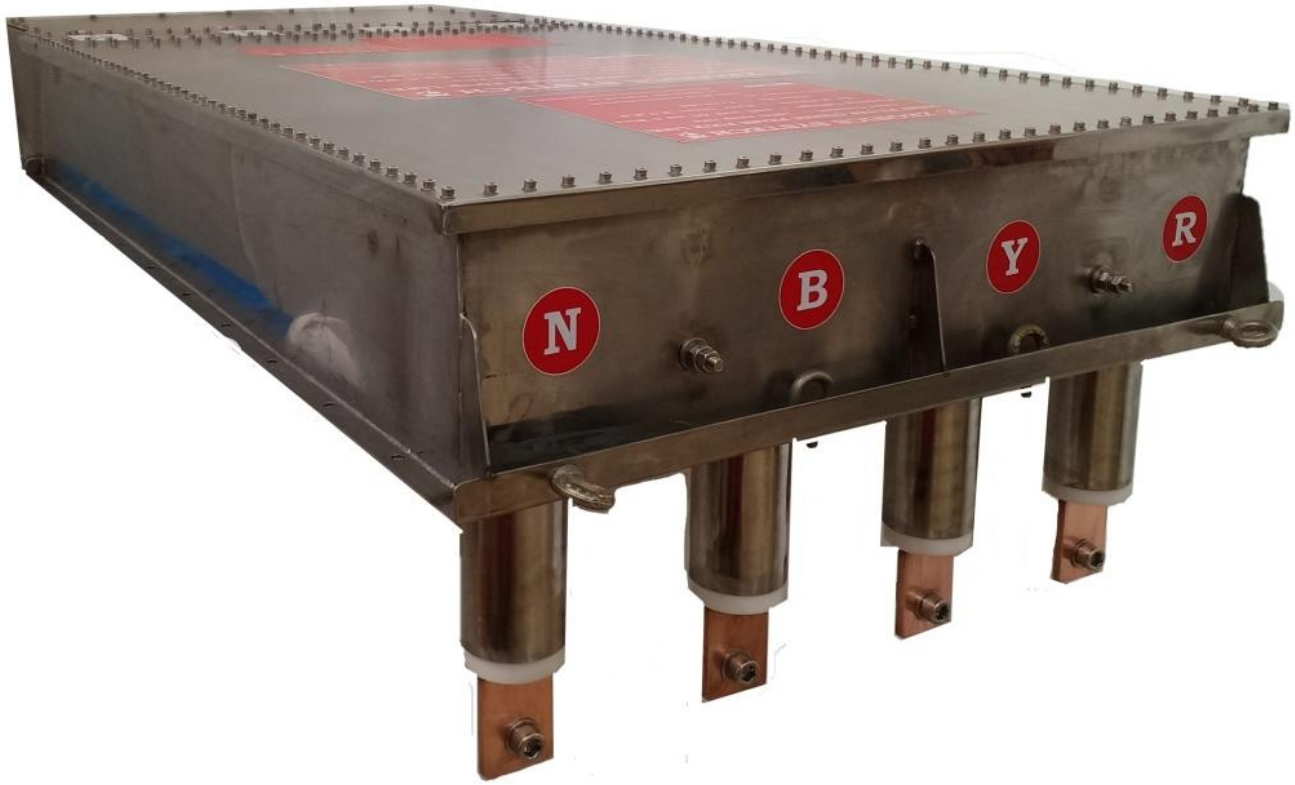
ZEONICS SYSTECH
DEFENCE & AEROSPACE ENGINEERS (P) LTD.

1000A HEMP Filter For a 3 Phase Power Line



The HEMP power line filter design has been carried out for protection of utility 440 V, 3-Phase, 50 Hz power line. The HEMP power line filter is a combination of linear and nonlinear elements, which are used to mitigate the coupling effects of HEMP. The MIL-STD-188-125-1 lays down the detailed guideline for HEMP filter testing and qualifications.

Proudly Made in INDIA

High Voltage High-altitude Electromagnetic Pulse (HEMP) filters are designed to protect sensitive electronics equipment during hazardous transient conditions. These filters are employed to absorb a potentially destructive overshoot voltage and will also help meet the requirements of MIL-STD-188-125.

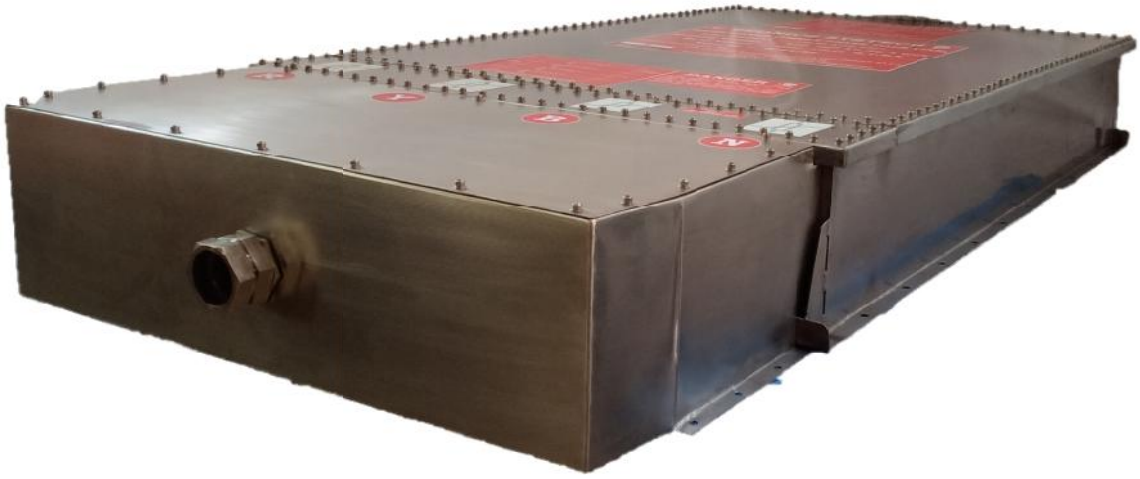
Though all applications of the latest technology are also accompanied by their associated EMC standards, often based on perceived impact of system failure, typical EMC standards are likely inadequate to protect against HEMP/IEMI threats. EMC standards are predominantly designed to prevent interference to an extent, not for survivability and suppression of HPEM pulses and transients to the point of continued operation. Most EMC standards focus predominantly on unintended interference, and don't account for IEMI from malicious parties. For example, data center equipment isn't likely protected based on EMC standards from corporate sabotage, terrorism, or being caught in the crossfire of a nearby utility target by a wide area EMP.

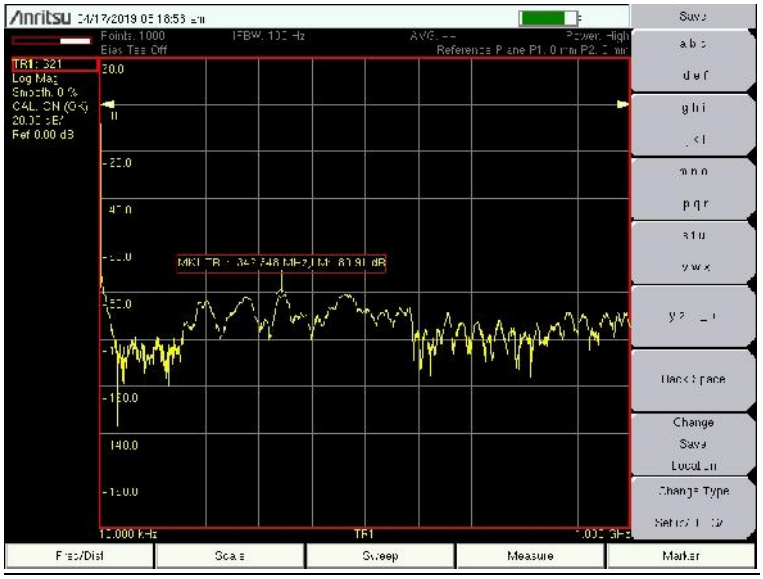
Hence, there are many current civil systems that are vulnerable to HEMP/IEMI, some of which may be emerging and new applications where HEMP/IEMI protection isn't commonly considered. This could include transportation for freight and passengers, new small satellite space and ground equipment, industrial and commercial electronics repurposed for critical applications, and renewable energy systems. Many remote facilities rely on renewable energy and onsite energy generation for operation, as well as satellite and telecommunications, which includes civil nautical/maritime systems.

Specifications

Type Y-1247

1. Total current	: 1000A / Line
2. Working voltage	: Max 415 Volts 50 Hz AC, 3Ø
3. Type No.	: Y – 1247
4. Weight	: ≈ 400 kgs
5. Case Material	: Stainless Steel
6. Current rating	: 1000A each phase
7. Voltage rating	: 415V 50/60Hz AC
8. Max Surge Current	: 50kA 8/20µs
9. Max Lightning Current	: 125kA 8/20µs





Applications

1. Prevent High Altitude Electromagnetic Pulse from entering through the conductors into the power lines of a secure area.
2. Protects the equipment against surge and lightning impulses.
3. Prevents EMI noises from entering the system through the power lines, reducing disturbances in the system operation.
4. Provides very good shielding effectiveness throughout the broad frequency range.

Advantages

1. Modular construction helps in easy repair.
2. Highly robust construction which gives long life with zero failure
3. Light weight compared to its counterparts
4. Designed with easy access to all parts.

Installation

1. The system comes in an easy to install mechanism.
2. Wall mounting can be provided.

Contact: Zeonics Systech Defence & Aerospace Engineers Pvt. Ltd.
"ADAR" #3, 10th Main, 7th Cross, Maruthinagar, New Thippasandra P.O., Bangalore - 560075.
Ph: +91 080-50092601, 080-50092602, 080-50092603, 080-25241900, 080-25241901, 080-25240523
Email: zeonicssys@gmail.com ; contact@ zeonicssystech.com
Web Sites: www.systechcapacitors.com ; www.zeonicssystech.com