TAILORING YOUR EMC SOLUTION

RF Immunity

EMI/RFI Connectors, Filter & Power Units

www.rfimmunity.com

- POWER LINE FILTER
- COMMUNICATION & DATA FILTER
- POWER PROTECTOR
- POWER CONDITIONER
- POWER DISTRIBUTION UNIT (PDU)
- POWER PACK

Power Line Filter

This line-up is available with a choice DC or/and AC of single-phase or three-phase inputs and general-purpose or wide band, high-attenuation performance and low leakage current. The power filter units can be supplied in customized case styles with I/O interface according customer requirements. It might be supplied with a circuit breaker or external fuse.

CASE STUDY

3 Phase Power Line Filter

Front-end device for naval application. it is powered form 3 phases, 220VL-L/ 10APH /60Hz that meets MIL-STD-1399 section 300. By applying it, system is protected against spikes and surges of 2500V and EMI conducted from the mains. Filter Attenuation performance of 70db achieved between Line to Line & Line to GND.

Communication & Data Control Line Filter

The Series of EMI communication filter inserts and enclosures accommodate a variety of applications, including telecommunication line filters, data line filters, alarm and control line filters applicable to harsh environmental conditions in airborne, naval and land platforms. Typical system can include any combination of power, telecommunications, control and data line filter inserts.

CASE STUDY

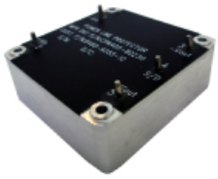
Telecom and Data Line Filter (TDLF)

Collecting more than 200 I/O's signals such as Fast Ethernet (1Gbit), RS422, RS232, Video and discrete. The device is qualified for MIL-STD-461and provides I/Os with:RFI filters, lighting ,spike and surge protections.

Power Protector

Provides protection against over voltage, transient and reverse polarity circuit for DC powered electronic systems in airborne equipment per MIL-STD-704/RTCA DO 160 (sections 16&17) and ground-mobile equipment per MIL-STD-1275. Available with RFI filters to provide additional immunity per MIL-STD-461 and for variety voltage cases.

CASE STUDY



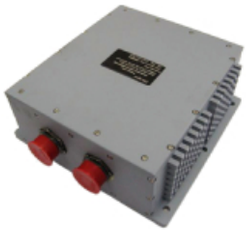
MIL-STD-1275 Power Line Protector (PLP)

Provides MIL-STD-1275 /20A protection while featuring reversed polarity protection and clamping of high voltage input .Input Working Voltage: 12V to 33V Input Transient Voltage: +100V@50msec@0.5Ω source impedance ±250Vpk@50usec@15mj.

Power Conditioner

Ranges of multi-line power conditioners provide output voltage stabilization and input fluctuations of over and under surges. Can be produce with filters suitable for use in various EMI protected installations. All lines are individually filtered and feature inductive input to offer both good continuous wave EMC performance and superior transient handling performance.

CASE STUDY



Avionics Power Line protection and Conditioning (PLPC-AU)

PLPC-AU an aircraft multipurpose power distribution unit.
The PLPC is designed to be installed on 28VDC aircraft power bus.
The unit shown consists of one 28VDC input and two independent 28VD/600W each outputs (total output 1200W). The unit is fully comply with MIL-STD-704A and MIL-STD-810F.

Power Distribution Unit (PDU)

A Design reliable and efficient Power Distribution Units (PDU) for a range of requirements from Rack PDUs a solution for every data center being available with different accessories, such as surge protection, circuit breakers to ruggedized ground mobile applications that include single-phase and three-phase models.

CASE STUDY

Power & Communication Distribution Unit Ground Mobile (PCDU-GM)

PCDU-GM is a vehicular multipurpose power distribution, battery (4Cell Li-Ion) charger and LAN (1GBT) signal transfer unit. The PCDU connects and charges 2 individual consumer channels Man Portable Energy Pack (MPEP), while facilitating on-line mission operation.

Power Pack

Military power pack meets MIL-SPEC reliability requirements, including MIL-STD-1399, MIL-STD-461, MIL-STD-810 and other critical requirements. Utilizing field proven technology, a rugged military power pack product is used in harsh environments including Shelters, Tactical Systems, Ground Support, Airborne, and Shipboard applications.

CASE STUDY

Man Portable Energy Pack (MPEP)

MPEP is a man portable energy pack that is a complementary to PCDU line. It consists of 2590 Ultra-life Battery and peripheral electronics and firmware. The MPEP is designed to provide power to man portable equipment such as ruggedized field computers and displays.

Product Lines

All products have modularized structure that can be manufactured according to customer's technological requirements. Strictly designed according to international military and commercial standards and have been proved and deployed in various high end applications worldwide. Our products integrate filters, protectors and power solutions in the same unit, small size, high performances and efficiency.

- Power Line Filter
- Communication & Data Filter
- Power Protector
- Power Conditioner
- Power Distribution Unit (PDU)
- Power Pack

The Products Integrate

- EMI/RFI filters
- Transient protection
  - Lightning
  - EMP
  - ESD
- AC Power filters (50Hz, 60Hz & 400Hz) with extremely low leakage (less than 2mA)
  - Single phase
  - Three phases (Y, Δ power sources)
- DC power line filters up to 270VDC applications
- Power conditioners for extremely long surges, high amplitude transients / spikes and power interrupts.
- Power management to control and supply continuously power to system

Cared for Signals

- Low-frequency
- High frequency communication (10/100/1000 Fast Ethernet, USB)
- LVDS (typical 800 MHz)
- Video – analog and digital
- Audio
- Power AC and DC

RF Immunity's products ensure full compliance to EMC standards:

MIL-STD-461, MIL-STD 464, MIL-STD 1275, MIL-STD 704, MIL-STD 1399, RTCA-DO-160, as well as commercial standards i.e. FCC, CISPR, EN etc. The products provide full performances under environmental conditions per MIL-STD-810 and RTCA DO 160.

36 Hayarkon St., Yavne, ISRAEL 8122739
Tel: +972-73-2331300 Fax: +972-73-2331325
www.rfimmunity.com sales@rfimmunity.co.il