# Rayvoss<sup>®</sup>

Surge Protection for Industry









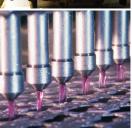














Raycap It's our business to help yours thrive.®

# Rayvoss is Designed to Protect any Industrial Application

#### Industrial Grade Protection

Rayvoss® Surge Protective Devices (SPDs) are industrial grade surge protection products integrated with Raycap's unique next-generation Strikesorb® surge protection modules. Rayvoss SPDs are available in many different electrical configurations and will provide unparalleled overvoltage protection in all low voltage installations.

Raycap facilities are certified and conform to international quality, environmental and safety standards, visit our

website for a complete listing. Strikesorb modules and Rayvoss SPDs are manufactured in Raycap's Post Falls, Idaho, USA; Drama, Greece; and Munich, Germany facilities. All units are

put through individual production testing and given a unique serial number and bar code for global traceability. Rayvoss SPDs have been installed in some of the world's harshest electrical environments, and offer superior protection to customer sites in the industrial, energy, renewable energy, telecommunications, residential and government sectors.

Strikesorb technology has been field proven in providing premium performance where other conventional surge protection technologies have failed.

### Well-justified Investment

Electronic infrastructure represents a sizable investment that can be instantly destroyed without effective surge protection. Investing in Rayvoss SPD systems allows customers uninterrupted load operation and will prevent lost revenue and/or loss of critical functionality.



The Rayvoss family of products is configurable to any industrial requirement.









### Varied Applications

The highly configurable Rayvoss systems can apply to a number of industry applications. Below are just a few of the applications where Rayvoss solutions are currently deployed:

- Wind farms
- Photovoltaic plants
- Railways
- Airports
- Power generation facilities
- Defense
- Mining
- Broadcasting stations
- Manufacturing plants
- Agriculture
- Water and wastewater facilities
- Dams
- Radar towers
- Marine vessels
- Hospitals
- Data centers
- Cellular network radio base stations
- Microwave radio relay stations
- Telecom central offices and street cabinets
- Residential
- Office buildings

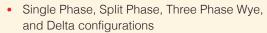
## Enhanced Safety and Maintenance-free Operation

Because Raycap's Strikesorb technology is robust and designed to operate without weak dedicated internal fusing, it offers a lifetime of maintenance-free performance, resulting in significant operational cost savings to customers.

Strikesorb is the only UL 1449 5<sup>th</sup> Edition overvoltage protection module recognized to operate without an internal fuse or thermal disconnection mechanism. Due to its "in-line" installation capability—Strikesorb and Rayvoss SPDs will work to keep protected loads safe, even under catastrophic conditions such as long duration surges, open neutrals, or high intensity lightning strikes.

Single Phase SPD with two Strikesorb 40s.

Rayvoss systems deploy Strikesorb protection modules in a variety of configurations and operating voltages to provide the electrical protection required, whatever the installation type including the following:





 Integration inside larger systems as well as power panels



Three Phase Wye SPD with four Strikesorb 40s in an optional stainless steel enclosure with alarm.



Three Phase Wye SPD with seven Strikesorb 80s.











# Rayvoss Protection



With Strikesorb 40 or Strikesorb 80 surge protection at their core, Rayvoss industrial solutions offer unsurpassed electrical protection that meets the requirements of mission-critical applications.

## Rayvoss Solutions

Rayvoss are available in various sizes and protection configurations.











North American Specifications	Rayvoss A	Rayvoss N		Rayvoss M		Rayvoss S
Enclosure Size (L×W×H)	20.0" × 10.0" × 20.0" [508 × 254 × 508 mm]	16.0" × 8.0" × 20.0" [406 × 204 × 508 mm]		$12.3'' \times 8.0'' \times 12.0''$ [ $311 \times 204 \times 305 \text{ mm}$ ]		8.3"×6.6"×10.0" [210×167×254mm]
Strikesorb Module	80	80	40	80	40	40
Strikesorb Module Capacity	4 or 7	3	3, 4 or 7	2 or 3	2, 3 or 4	2 or 3
AC Voltages Available	120V up to 600V	120V up to 1000V		120V up to 1000V		120V up to 1000V
Optional Alarm Feature	Available	Available		Available		Available
European Specifications	Rayvoss A	Rayvoss N		Rayvoss M		Rayvoss S
Enclosure Size (L×W×H)	19.7"×10.4"×19.7" [500×263×500mm]	15.8"×8.4"×19.7" [400×214×500mm]		11.8"×8.1"×11.8" [300×206×300mm]		7.9"×6.1"×9.8" [200×156×250mm]
Strikesorb Module	80	80	40	80	40	40
Strikesorb Module Capacity	4 or 7	3	3, 4 or 7	2 or 3	2, 3 or 4	2 or 3
AC Voltages Available	120V up to 600V	120V up to 1000V		120V up to 1000V		120V up to 1000V
Optional Alarm Feature	Available	Available		Available		Available













## Strikesorb Surge Protection Technology

Raycap has led the way in finding creative protection solutions that ensure its customers' vital equipment does not experience downtime due to lightning or other overvoltage events. The company has made significant research, development

and operational investments to validate
Strikesorb's unique surge protection
qualities meet global safety standards.

The innovative Strikesorb technology has been engineered and tested for use in AC and DC power applications. Strikesorb modules are compliant to IEC 61643-11 and the UL 1449 5th Edition safety standards. Where ever deployed, Strikesorb will significantly improve the availability of the equipment it protects.

#### Strikesorb Benefits

- Innovative Design—Strikesorb features an innovative SPD design that ensures continuous protection and eliminates all the failure and safety risks related to conventional SPDs.
- Maintenance Free Strikesorb's fuse-less operation, its unparalleled performance against power surges and its immunity to TOV conditions make it the most reliable SPD for protection of the entire installation, and eliminates the need for maintenance and replacement parts.
- High Surge Current Withstand
   Capability—Strikesorb incorporates
   a wide distribution grade MOV disk
   kept under pressure between large
   aluminum electrodes, enabling
   effective thermal dissipation and
   excellent management of the surge
   currents' negative effects. Strikesorb
   can actually withstand thousands
   of repetitive surge events without
   degradation.
- High Short-Circuit Current
   Rating—Strikesorb's inherent
   capacity to resist high short-circuit
   currents enables flexible integration
   into industrial systems and "in-line"
   installation in all common AC and DC

- applications without the need for a dedicated fuse.
- Best overall protection for the installation—Strikesorb's capability to be installed "in-line" even in the case of very high short-circuit currents, eliminates the need for long cable lengths, results in the lowest possible let-through voltage and ensures optimum protection levels. The sensitive equipment remains continuously protected in the most efficient way possible.
- Safest SPD-Strikesorb's aluminum casing and internal components manage the heat generated within the device when multiple lightning surges or faulty operating conditions occur. Its design eliminates the use of any materials which could burn or smoke.
- International Standards Certified
   Compliance—Strikesorb modules
   have been tested and approved by
   internationally accredited independent
   laboratories to the latest IEC and UL
   safety and performance standards.
- Long Lifespan and Warranty—
   Strikesorb's expected lifetime is much more than 20 years; it is supplied with a 10 year limited lifetime warranty.

## Raycap Worldwide Locations



#### Raycap Inc.

806 South Clearwater Loop Post Falls, ID 83854 United States of America

7555-A Palmetto Commerce Pkwy North Charleston, SC 29420 United States of America

46 Sellers Street Kearny, NJ 07032 United States of America

#### Raycap GmbH

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#### Raycap S.A.

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Raycap S.A. Manufacturing Industrial Area of Drama

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