DATA SHEET

DC Surge Protection for Remote Radio Heads

IS Product Series

Rack-mount Overvoltage Protection

The deployment of Remote Radio Head (RRH) architecture poses unique challenges to the mobile telecom industry. Raycap's innovative RRH protection solutions mitigate the risk of damage due to lightning and provide high levels of availability and reliability to radio equipment.

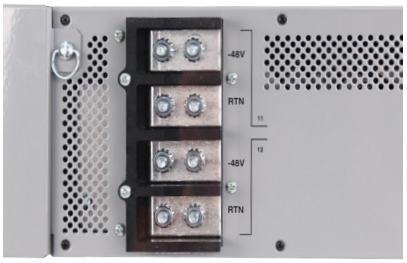
powered by **Strikesorb®**

Features

- Employs the innovative Strikesorb® Protective Device (SPD) technology specifically designed for the Remote Radio Head (RRH) installation environment and certified for use in low, 48 volt DC operating applications.
- The Strikesorb 30-V1-HV is a Class I SPD, certified by VDE per the IEC 61643-11 standard as suitable for installation in areas where direct lightning exposure is expected. Strikesorb 30-V1-HV is able to withstand direct lightning currents of up to 5 kA (10/350 µs) and induced surge currents of up to 60 kA (8/20 µs).
- Provides very low let-through/clamping voltage – unique for a Class I product – as it does not employ spark gaps or other switching elements. Strikesorb offers unique protection levels to the RRH equipment as well as the base band units.
- 12-radio protection system using “AM” bullet style breakers. The flexible and upgradeable design allows for upgrades of up to twelve circuit breakers.
- Available options up to 100 amp output capacity.
- The unit provides connection for power drops with or without dedicated grounds.
- All connections are front access for easy installation.
- Slim, 3RU design fits 19 inch rack configurations (23 inch also available).
- Normally Open (NO) relay contacts allow for remote monitoring of suppressor and circuit breaker status.

Benefits

- Strikesorb modules are fully Recognized to the UL 1449 5th Edition and comply to IEC 61643-11 Safety Standards. They meet all intermediate and high current fault requirements of original equipment manufacturer (OEM) applications.



Output option for 100 amp (backside of unit)

PSM-48

G02-00-226 240522

Raycap

www.raycap.com

SPECIFICATIONS

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Rack-mount Overvoltage Protection

Electrical	RGNDC-4371-BDU-48	RGNDC-5970-BDU-48
Surge Protective Device (SPD) Type per UL 1449 5th Edition	Type 4 Component Assembly	Type 4 Component Assembly
Surge Protective Device (SPD) Class to IEC 61643-11	Class I	Class I
Nominal Operating DC Voltage [U_n]	48 V	48 V
Maximum Continuous Operating DC Voltage [U_c] (MCOV)	75 V	75 V
Nominal Discharge Current [I_n] per UL 1449 5th Edition	20 kA 8/20 µs	20 kA 8/20 µs
Maximum Impulse (Lightning) Current [I_{imp}] per IEC 61643-11	5 kA 10/350 µs	5 kA 10/350 µs
Maximum Surge Current Capacity[I_{max}] per NEMA LS1	60 kA 8/20 µs	60 kA 8/20 µs
Voltage Protection Level [U_p] per IEC 61643-11	300 V	300 V
Voltage Protection (VPR) per UL 1449 5th Edition	400 V	400 V
Number of Protected Circuits	up to 12	up to 12
Maximum Input	300 A	300 A
Maximum Output Circuit Breaker	40 A	100 A
Mechanical		
Connection Terminal (Suppression) Method	#8 Single Lug Right Angle for Branch	
Connection Terminal (Suppression) Hardwired	1/4" [0.6 cm] Double Lug up to #3/0 AWG [85 mm²]	
Environmental Ingress Protection (IP) Rating	Indoor Only	
Operating Temperature	-40° C to +80° C	
Storage Temperature	-70° C to +80° C	
Enclosure Dimension (L × W × H)	18.98" × 7.74" × 5.24" [482.09 × 196.60 × 133.10 mm]	
Weight	30 lbs [13.6 kg]	

Optional Accessories	Part Number	
Circuit Breakers (order as seperate line item)		up to 12 AM style breakers with mid-trip alarm
15 A Circuit Breaker	650-0094	
20 A Circuit Breaker	650-0090	
30 A Circuit Breaker	650-0091	
40 A Circuit Breaker	650-0092	
100 A Circuit Breaker	650-0093	Available only for 100 A model RGNDC-5970-BDU-48

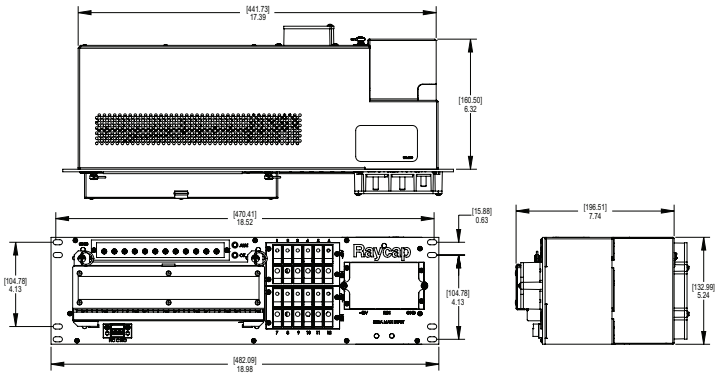
Standards Compliance & Certifications

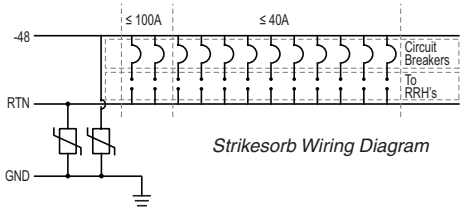
Strikesorb modules are compliant to the following Surge Protective Device (SPD) standards:

Standards	UL 1449 5th Edition: 2011, IEC 61643-11: 2011, EN 61643-11:2012, IEEE C62.41: 2002, IEEE C62.45: 2002, NEMA-LS1
Certifications	UL, VDE, CE
Associations	ANSI, EN, IEC, IEEE, NEMA

Product Diagram

[mm]
inches





Strikesorb Wiring Diagram

AWG=American Wire Gauge

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