

In-line SPD for Coaxial & RF Systems
RayDat CP UHF Series
C1 • C2 • C3



IEC/EN Category: C1/C2/C3
 Protection: Impedance Matched
 Maximum Operating Voltage: 70, 180, 280V
 Maximum Peak Power: 40, 125, 300W
 Frequency Range: DC–600MHz
 Surge Discharge Ratings: I_n : 10kA, I_{max} : 20kA
 Impedance: 50Ω
 Insertion Loss: <0.4dB
 Return Loss: >20dB
 Termination: UHF Type (F-F, M-F)
 Housing: In-line Installation, Shielded Enclosure
 Compliance: IEC/EN 61643-21

The RayDat CP UHF Series of coaxial surge protectors is intended to protect RF antenna systems and is suitable for frequencies from DC to 600MHz.

It is designed as an in-line unit allowing ease of installation. The careful design, low capacitance gas discharge arresters and high quality UHF-type termination connectors, ensures a minimum of insertion loss throughout the frequency band.

Transfer power is 40W to 300W continuous, depending on the coaxial cable protector voltage.

The CP UHF coaxial cable protector is designed in accordance with IEC 61643-21: 2009 standards and regulations.

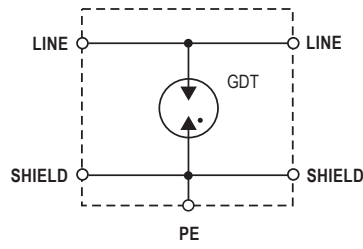
A grounding stud is provided which should be connected to the system ground or coaxial feed-through bulkhead, as directly as possible.

Technical Data

CP UHF		70V	180V	280V
Electrical				
Maximum Continuous Operating Voltage	U_c	70V	180V	280V
Maximum Peak Power	P_{max}	40W	125W	300W
C2 Nominal Discharge Current (8/20μs)	I_n		10kA	
Maximum Discharge Current (8/20μs)	I_{max}		20kA	
Residual Voltage at (1kV/μs)	U_{res}	<600V	<700V	<900V
Impedance	Z		50Ω	
Insertion Loss	I_L		<0.4dB	
Return Loss	R_L		>20dB	
Insulation Resistance of Protection	R_{iso}		>10GΩ	
Frequency Range	f_G		0–600MHz	
Mechanical				
Temperature Range		-40 °C to +80 °C		
Connection		UHF Female/Female	UHF Male/Female	
Degree of Protection IEC/EN 60529		IP20		
Housing Material		Metal		
Order Information				
Order Code		70V	180V	280V
CP UHF-FF-xxx		800 869	800 870	800 871
CP UHF-MF-xxx		800 872	800 873	800 874

RayDat CP UHF Series

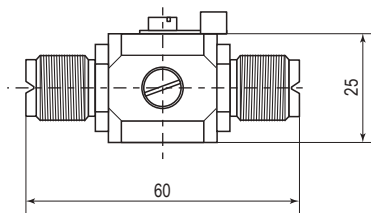
Internal Configuration



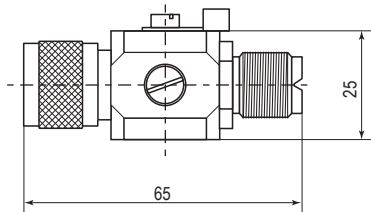
Legend

GDT Gas Discharge Tube

Dimensions & Packaging



CP UHF-FF



CP UHF-MF

CP UHF	CP UHF-FF-xxx			CP UHF-MF-xxx		
	70V	180V	280V	70V	180V	280V
Dimensions						
Weight per Unit	104 g			104 g		
Packaging Dimensions (Single Unit)	62 × 30 × 35 mm					
Minimum Package Quantity	100 pieces					