

In-line SPD for Coaxial & RF Systems  
**RayDat CP F75 Series**  
**C1 • C2 • C3**



IEC/EN Category: C1/C2/C3  
 Protection: Impedance Matched  
 Maximum Operating Voltage: 70, 180V  
 Maximum Peak Power: 40, 125W  
 Frequency Range: DC–2.0GHz  
 Surge Discharge Ratings:  $I_n$ : 10kA,  $I_{max}$ : 20kA  
 Impedance: 75Ω  
 Insertion Loss: <0.4dB  
 Return Loss: >20dB  
 Termination: F Type (F-F, M-F)  
 Housing: In-line Installation, Shielded Enclosure  
 Compliance: IEC/EN 61643-21

The RayDat CP F Series of coaxial surge protectors is intended to protect RF antenna systems and is suitable for frequencies from DC to 2.0GHz. It is eminently suitable for the protection of USA CCTV and CATV systems.

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

Transfer power is 40W to 125W continuous, depending on the coaxial cable protector voltage.

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

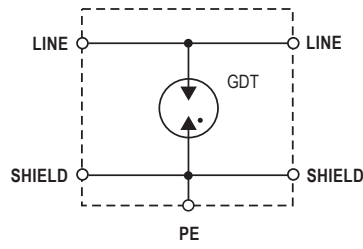
A grounding stud is provided which should be connected to the system ground or coaxial feed-through bulkhead, as directly as possible.

**Technical Data**

CP F75		70V	180V
<b>Electrical</b>			
Maximum Continuous Operating Voltage	$U_c$	70V	180V
Maximum Peak Power	$P_{max}$	40W	125W
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
Impedance	$Z$	75Ω	
Insertion Loss	$I_L$	<0.4dB	
Return Loss	$R_L$	>20dB	
Insulation Resistance of Protection	$R_{iso}$	>10GΩ	
Frequency Range	$f_G$	0–2.0 GHz	
<b>Mechanical</b>			
Temperature Range		-40 °C to +80 °C	
Connection		F Female/Female	F Male/Female
Degree of Protection IEC/EN 60529		IP20	
Housing Material		Metal	
<b>Order Information</b>			
Order Code		70V	180V
CP F75-FF-xxx		800 875	800 876
CP F75-MF-xxx		800 877	800 878

# RayDat CP F75 Series

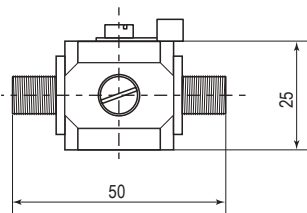
## Internal Configuration



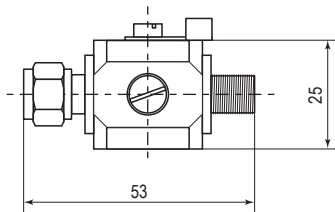
### Legend

GDT Gas Discharge Tube

## Dimensions & Packaging



CP F75-FF



CP F75-MF

CP F75	CP F75-FF		CP F75-MF	
	70V	180V	70V	180V
<b>Dimensions</b>				
Weight per Unit	80g		84g	
Packaging Dimensions (Single Unit)	73 x 30 x 30mm			
Minimum Package Quantity	100 pieces			