

In-line SPD for Coaxial & RF Systems
RayDat CP BNC 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–2.6GHz
 Surge Discharge Ratings: I_n : 10kA, I_{max} : 20kA
 Impedance: 50 Ω
 Insertion Loss: < 0.4 dB
 Return Loss: > 20 dB
 Termination: BNC Type (F-F, M-F)
 Housing: In-line Installation, Shielded Enclosure
 Compliance: IEC/EN 61643-21

The RayDat CP BNC Series of coaxial surge protectors is intended to protect RF antenna systems and is suitable for frequencies from DC to 2.6 GHz.

It is designed as an in-line unit allowing ease of installation. The careful design, low capacitance gas discharge arresters and high quality BNC-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 coaxial cable protector is designed in accordance with IEC 61643-21: 2009 standards and regulations.

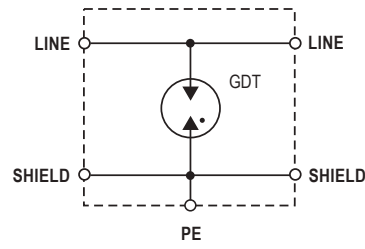
A grounding stud is provided which should be connected to the system ground or coaxial feed-through bulkhead, as directly as possible.

Technical Data

CP BNC		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 (8/20 μ s)	I_n		10 kA	
Maximum Discharge Current (8/20 μ s)	I_{max}		20 kA	
Residual Voltage at (1 kV/ μ s)	U_{res}	< 600V	< 700V	< 900V
Impedance	Z		50 Ω	
Insertion Loss	I_L		< 0.4 dB	
Return Loss	R_L		> 20 dB	
Insulation Resistance of Protection	R_{iso}		> 10 G Ω	
Frequency Range	f_G		0–2.6 GHz	
Mechanical				
Temperature Range		-40 °C to +80 °C		
Connection		BNC Female/Female	BNC Male/Female	
Degree of Protection IEC/EN 60529		IP 20		
Housing Material		Metal		
Order Information				
Order Code		70V	180V	280V
CP BNC-FF-xxx		800 850	800 851	800 852
CP BNC-MF-xxx		800 853	800 854	800 855

RayDat CP BNC Series

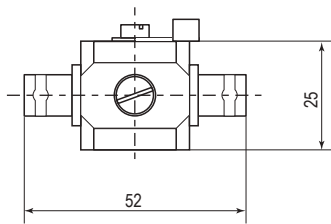
Internal Configuration



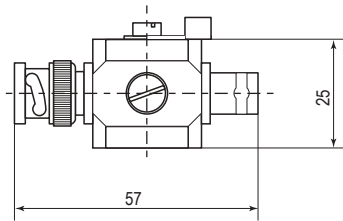
Legend

GDT Gas Discharge Tube

Dimensions & Packaging



CP BNC-FF



CP BNC-MF

CP BNC	CP BNC-FF-xxx			CP BNC-MF-xxx		
	70V	180V	280V	70V	180V	280V
Dimensions						
Weight per Unit	106 g			114 g		
Packaging Dimensions (Single Unit)	73 × 30 × 30 mm					
Minimum Package Quantity	100 pieces					