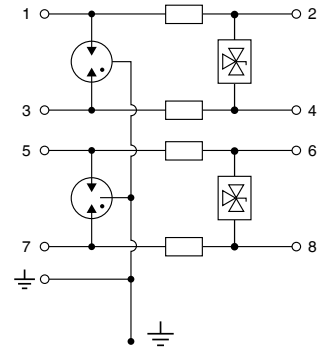


# DATA SHEET

## Modular SPD for Two Pair RayDat SPI-4 Series D1 • C1 • C2 • C3



IEC/EN Category: D1/C1/C2/C3  
 Surge Discharge Ratings:  $I_n$ : 10 kA,  $I_{max}$ : 20 kA,  $I_{imp}$ : 2.5 kA  
 Voltages: 30 V DC  
 Frequency Range: 30 MHz, 10 MHz  
 Housing: Modular Design  
 Compliance: IEC/EN 61643-21  
 Configuration:



### Technical Data

SPI-4 Series

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#### Electrical

Lines Protected		2 (4 Conductors)
Nominal Operating Voltage (DC)	$U_n$	30V
Maximum Continuous Operating Voltage (DC)	$U_c$	33V
Rated Load Current at 25°C	$I_L$	1 A
C2 Nominal Discharge Current (8/20 $\mu$ s)	$I_n$	10 kA
Maximum Discharge Current (8/20 $\mu$ s)	$I_{max}$	20 kA
D1 Impulse Current (10/350 $\mu$ s)	$I_{imp}$	2.5 kA
Total Impulse Current (10/350 $\mu$ s)	$I_{imp}$	10 kA
Residual Voltage at 5 kA (8/20 $\mu$ s)	(Line-Line) $U_{res}$	< 80V
Rated Spark Overvoltage	(Line-Ground)	184-276V
	(Line-Line)	36-44V
Response Time Overvoltage Protection	(Line-Line) $t_A$	< 1 ns
	(Line-Ground)	< 100 ns
Insulation Resistance of the Protection	(Line-Ground) $R_{iso}$	> 1 G $\Omega$ /100V
	(Line-Line)	$\geq$ 33 M $\Omega$
Serial Resistance per Path	R	1.6-2.0 $\Omega$
Transverse Capacitance	(Line-Line) C	50 pF
	(Line-Ground)	5 pF
Cut-off Frequency	$f_G$	30 MHz

#### Mechanical

Temperature Range		-40 °F to +176 °F [-40 °C to +80 °C]
Terminal Cross Section Multi-strand (max.)		12 AWG
		4 mm <sup>2</sup> , 2.5 mm <sup>2</sup> Q Version
Terminal Screw Torque		4.5 lbf-in [0.5 Nm]
Degree of Protection IEC/EN 60529		IP 20 (built-in)
Housing Material		Thermoplastic; Grey; Extinguishing Degree V-0
Mounting IEC/EN 60715		35mm DIN Rail

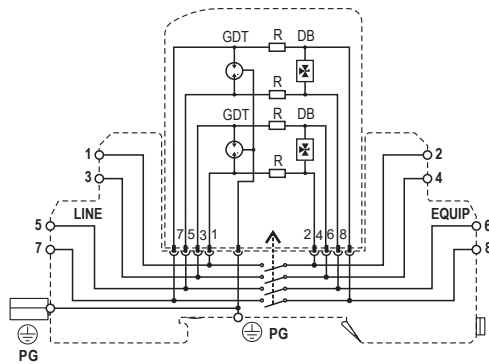
#### Order Information

Order Code		30
SPI-4-xxx		7085.69
SPI-4-xxxM (module)		7085.70

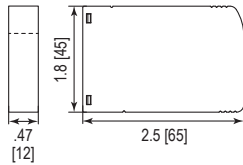
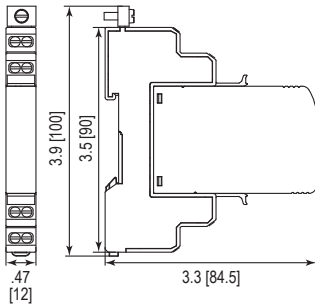
# RayDat SPI-4 Series

## Legend

- DB Diode Block
- GDT Gas Discharge Tube
- PG Protective Grounding
- R Resistor



## Dimensions & Packaging



### SPI-4 Series

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#### Dimensions

Weight per Unit	2.40 oz [68g]
Dimensions DIN 43880	2/3 TE
Packaging Dimensions (Single Unit)	3.4 x .59 x 4" [87 x 15 x 102mm]
Minimum Package Quantity	15 pieces

### SPI-4-xxM Series

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#### Dimensions

Weight per Unit	1.05 oz [30g]
Packaging Dimensions (Single Unit)	3.4 x .59 x 4" [87 x 15 x 102mm]
Minimum Package Quantity	15 pieces

inches  
[mm]

Information contained in this document is subject to change at any time without notice.

