Patch Panel Surge Protector for Data/Telecom

RAK Series



The RAK series are patch panel DC signal line surge protectors that are designed to protect your sensitive telephone, datacom, and instrumentation equipment against harmful lightning surges and electrical transients. They are available in multiple configurations and protocols including 1000Base-T Ethernet, Mode A and Mode B Power-Over-Ethernet, CCTV, RS232, RS422, RS485, ISDN, T1, Leased Lines, Telco and other customized interfaces. The RAK Series utilize fast clamping silicon avalanche diodes with response times of <1 ns.

These units automatically reset after each surge event and are connected either with a RJ to RJ or ATT110 to RJ interface. The RAK are available in U1 or U2 sizes and mounted via flush mount or stand-off. Replacement modules are available.

CITEL part number	RAKxx-E-C5E RAKxx-E-C6	RAKxx-E-C6-60V	RAKxx-T	RAKxx-B	RAKxx-G	RAKxx-POE-A	RAKxx-POE-B	RAK16-BNC	RAK16-CMS
Max. data rate	1,000 Mbps	1,000 Mbps	100 Mbps	40 Mbps	40 Mbps	100 Mbps	100 Mbps	1,000 Mbps	1,000 Mbps
Max. DC Supply Voltage	7.5 Vdc	60 Vdc	18 Vdc	60 Vdc	240 Vdc		Pin 1,2,3,6: 7.5 Vdc Pin 4,5,7,8: 60 Vdc	7.5 Vdc	90 Vdc
Max. DC Supply Current	750 mA	750 mA	750 mA	750 mA	750 mA	750 mA	750 mA	750 mA	750 mA
Peak Pulse Current (10/1000µs at Max DC Supply Voltage)	132 A (-C5E) 100 A (-C6)	45 A	60 A	50 A	75 A	50 A	Pin 1,2,3,6: 132 A Pin 4,5,7,8: 50 A	132 A	20 kA (8/20µs waveform)
Max. Shunt Capacitance	<40pF (-C5E) <8pF (-C6)	<15pF	<40pF	<75pF	<95pF	<25pF (ethernet lines only)	< 25pF (ethernet lines only)	<30pF	<1pF
Number of Ports available (xx)	16 or 32	16 or 32	16 or 32	16 or 32	16 or 32	16 or 32	16 or 32	16	16
Stand-Off Option (for 16ports)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Applications	100/1000Base T RS422 RS423 Ethernet	High Voltage Ethernet	RS232 RS485	ISDN T1 DDN	Dial-up Modem Fax	Power over Ethernet, Mode A	Power over Ethernet, Mode B	CCTV	Cable TV, Satellite
Figure	А	А	А	A or C	А	А	А	В	В
Connections: - Input - Output	RJ45 Female Connectors BNC (Female) F (Female) RJ45 Female Connectors BNC (Female) F (Female) F (Female)								
Pinout	8 wires per connector N/A N/A								N/A
Installation	Flush Mount (16ports only) or Stand-Off								
Ground Connection	Screw Lug or Mounting Flange								
Standard Compliance	UL497B IEEE 802-3af (transmission)								

