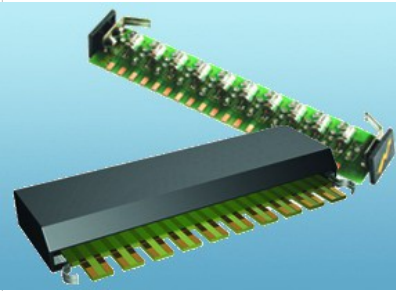
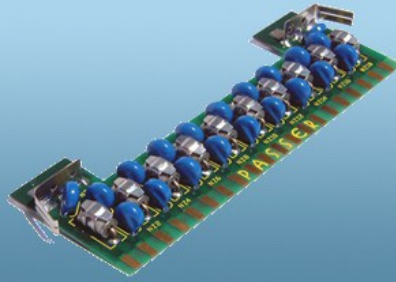
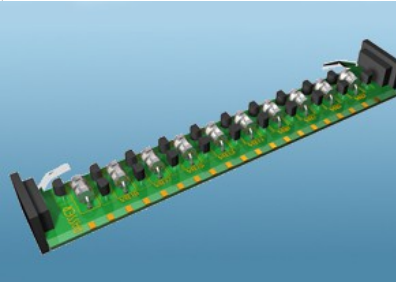
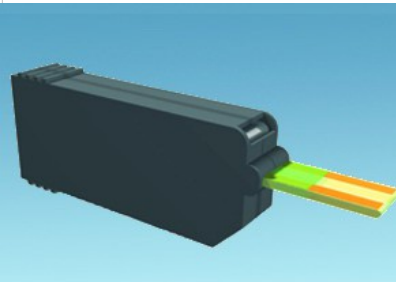
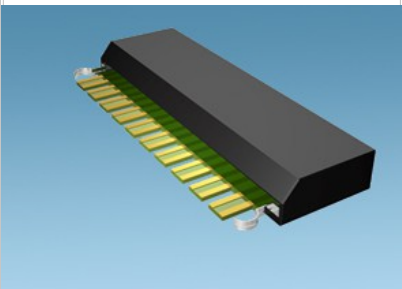
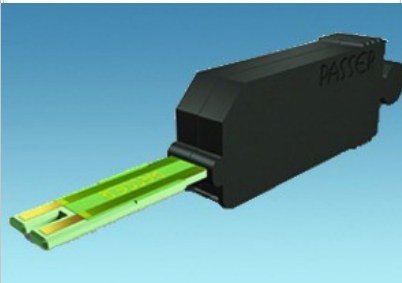




PROTECTION MODULES CATALOG

Product	Appearance	Application	Type
TOPx-y		<ul style="list-style-type: none"> • Analog lines • Keraunic level $K < 30$ • Underground shielded cables unexposed to interferences • Reichle - De Massari modules: VS83 Modular 10x2 and 12x2, VS92 Standard 10x2, VS Compact 10x2, 16x2 and 20x2; Krone modules: LSA Plus 10x2 and LSA Profile 10x2 	<ul style="list-style-type: none"> • Group one-stage overvoltage • Three-pole gas discharge tubes with fail-safe clip • Response time $Tr < 500ns$
TOPxV-y		<ul style="list-style-type: none"> • Analog lines and low rate digital transmission • Underground unshielded cables - keraunic level $K < 30$ and underground shielded cables - keraunic level $K < 50$ • Reichle - De Massari modules: VS83 Modular 10x2 and 12x2, VS92 Standard 10x2, VS Compact 10x2, 16x2 and 20x2; Krone modules: LSA Plus 10x2 and LSA Profile 10x2 	<ul style="list-style-type: none"> • Group two-stage overvoltage • Three-pole gas discharge tubes with fail-safe clip and varistors • Response time $Tr < 25ns$
TOPxD-y		<ul style="list-style-type: none"> • Analog lines and digital transmission • Underground unshielded cables - keraunic level $30 < K < 50$ and underground shielded cables - keraunic level $50 < K < 60$ • Reichle - De Massari modules: VS83 Modular 10x2 and 12x2, VS92 Standard 10x2, VS Compact 10x2, 16x2 and 20x2; Krone modules: LSA Plus 10x2 and LSA Profile 10x2 	<ul style="list-style-type: none"> • Group two-stage overvoltage • Three-pole gas discharge tubes with fail-safe clip and varistors • Response time $Tr < 1ns$
COP1-1y		<ul style="list-style-type: none"> • Analog lines and digital transmission • Overhead and underground unshielded cables - keraunic level $K < 30$ and underground shielded cables - keraunic level $K < 50$ • Reichle - De Massari modules: VS83 Modular, VS92 Standard; Krone modules: LSA Plus and LSA Profile 	<ul style="list-style-type: none"> • One pair one-stage overvoltage and overcurrent resettable • Three-pole gas discharge tubes with fail-safe clip and PTC thermistors • Response time $Tr < 500ns$

<p><u>COP10-1KLP</u></p>		<ul style="list-style-type: none"> • Analog lines and digital transmission • Overhead and underground unshielded cables - keraunic level $K < 30$ and underground shielded cables - keraunic level $K < 50$ • Krone modules: LSA Plus and LSA Profile 	<ul style="list-style-type: none"> • Group one-stage overvoltage and overcurrent resetable • Three-pole gas discharge tubes with fail-safe clip and PTC thermistors • Response time $Tr < 500ns$
<p><u>TPM1-x/L</u></p>		<ul style="list-style-type: none"> • Analog lines and digital transmission • Overhead and underground unshielded cables - keraunic level $30 < K < 50$ and underground shielded cables - keraunic level $50 < K < 60$ • Reichle - De Massari modules: VS83 Modular, VS92 Standard; Krone modules: LSA Plus and LSA Profile 	<ul style="list-style-type: none"> • One pair two-stage overvoltage and overcurrent • Three-pole gas discharge tubes with fail-safe clip, varistors and inductive elements • Response time $Tr < 25ns$
<p><u>TPM1-x/DTR</u></p>		<ul style="list-style-type: none"> • Analog lines and digital transmission • Overhead and underground unshielded cables - keraunic level $50 < K$ and underground shielded cables - keraunic level $60 < K$ • Reichle - De Massari modules: VS83 Modular, VS92 Standard; Krone modules LSA Plus and LSA Profile 	<ul style="list-style-type: none"> • One pair two-stage overvoltage and overcurrent resetable • Three-pole gas discharge tubes with fail-safe clip, diodes and PTC thermistors • Response time $Tr < 1ns$
<p><u>APM2-RJ45</u></p>		<ul style="list-style-type: none"> • Latest generation digital equipment • Overhead and underground unshielded cables - keraunic level $50 < K$ and underground shielded cables - keraunic level $60 < K$ • Equipment and cables with RJ45 connectors 	<ul style="list-style-type: none"> • One pair two-stage overvoltage and overcurrent resetable • Three-pole gas discharge tubes with fail-safe clip, diodes and PTC thermistors • Response time $Tr < 1ns$