

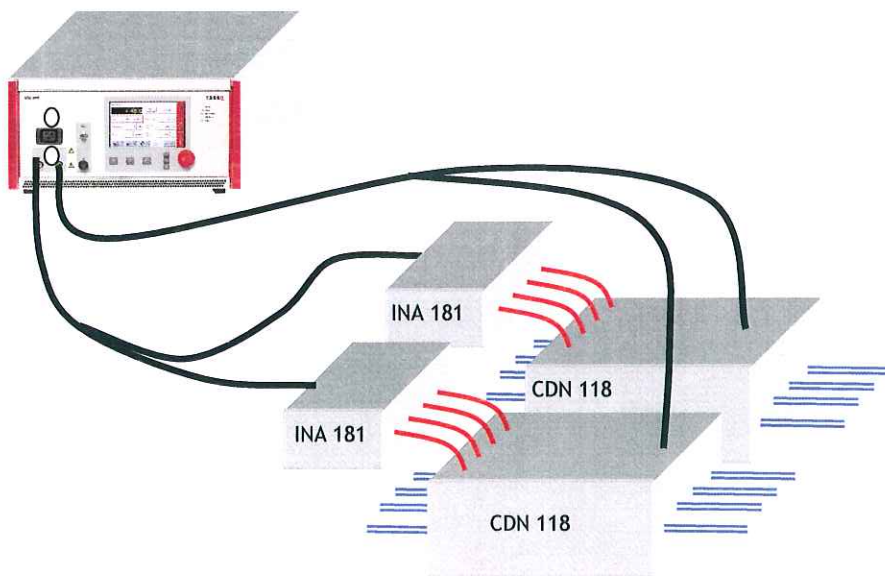


Yes! We can...

Teseq China sold an 8 lines telecom coupling network to Lenovo (Chengdu). Lenovo is a major player in the PC market, with operations in a wide variety of fields, including investment, distributor/reseller of IT products.

The solution consists of two CDN 118 sets with two new resistor boxes and special cabling to fulfil the standard recommendation. The additional resistor boxes and Y-cables were specially tailored for this new application in Teseq Berlin.

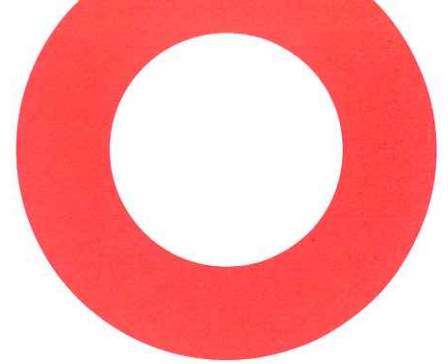
Just remember, the CDN 118 device is used on unscreened (or unshielded), symmetrically driven telecommunication lines. The network enables asymmetric (line to ground) coupling of 1.2/50 μ s and 10/700 μ s pulses into pairs of conductors. There is a very large decoupling choke to cope with the large voltage-time characteristic of the 10/700 μ s pulse.



Depending on the pulse to couple, 10/700 μ s or 1.2/50 μ s and on lines to use, the coupling resistor will change. So therefore new resistor boxes with other values compared to the 4 line version has been made such as the INA 180, INA 181, INA 1812, INA 183 and the HV-Y cable to connect both CDN together with the generator.

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Therefore the whole CDN 118 coupling assembly set for Lenovo consists of:

- 2 pce CDN 118
- 1 pce INA 182 matching resistor network, 2 x 50 Ω
- 1 pce INA 183 matching resistor network, 2 x 80 Ω
- 1 pce INA 172 matching resistor network, 4 x 100 Ω
- 1 pce INA 175 matching resistor network, 4 x 160 Ω
- 2 pce INA 180 matching resistor network, 4 x 200 Ω
- 2 pce INA 181 matching resistor network, 4 x 320 Ω

- 8 pcs INA 170 coupler with spark-gap only
- 8 pcs INA 171 coupler with spark-gap and capacitor
- 2 pce INA 173 short-circuit plug (Fischer)

- 8 pcs INA 370 coax cable, 0.8 m with connectors (Fischer/Fischer)
- 2 pcs INA 184 Y-coax cable, with connectors (Fischer/Fischer)

- 16 pcs safety laboratory plugs, black
- 4 pcs safety laboratory plugs, yellow/green
- 1 operating manual

Pulse	2 Lines		4 Lines		8 Line	
	Number	Type	Number	Type	Number	Type
1.2/50 μs	1	CDN118	1	CDN 118	2	CDN 118
	1	INA 183	1	INA 175	2	INA 181/184
10/700 μs	1	CDN118	1	CDN 118	2	CDN 118
	1	INA 182	1	INA 172	2	INA 180/184

As in the basic set included, there are as well additional plugs like the INA 171 which is used for signal frequencies of under 5 kHz while the INA 170 is used as the coupling element for over 5 kHz.

Either symmetrical or asymmetrical coupling can be achieved by using the various connectors on the CDN 118 and INA 172/175. Symmetrical coupling requires a differential (earth-free) generator, of course.

An unavoidable high frequency oscillation occurs when the spark gap in the INA 171 or INA 170 is triggered. This can disrupt an EUT which has an electronic memory.

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