



## SL 90 STRIP LINE 90 $\Omega$



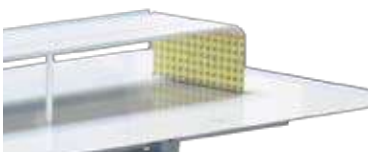
- **EMC tests for vehicle components immunity to RF fields**
- **Conformity with the requirements of ISO 11452-5**
- **Efficient power conversion provides high field with minimum power**

The transversal electromagnetic mode which can be developed in the SL 90 strip line, provides the opportunity for doing EMC testing inside the strip line. The geometrical dimensions having a line impedance of  $Z = 90 \Omega$ . At the end, the line is matched by a  $90 \Omega$  termination. Typical for this strip line is the low power request for high field strength values. The strip line is specified in ISO 11452-5 'Road Vehicles electrical disturbances through radiated narrow-band electromagnetic energy: Measurement procedure for components part 5: Strip Line'. The SL 90 allows testing electrical/electronic sub modules (EUB) and their associated cables. Standards like BMW GS 95002 allow both emission and immunity testing with the strip line. Although emission testing is derived from ISO 11452-5 where the strip line is exclusively used for immunity tests. BMW GS 95002 provides additional hints. The limit line is given as interference voltage level in  $\mu\text{V}$ .

The SL 90 consists of two parallel metal plates. The EUT is arranged in the middle between these plates. The largest outer dimension of the EUT should not be more than 1/3 of the plate distance. The ground is on the lower plate and the isolated upper plate is supplied with RF energy. Between the plates, an electromagnetic field will be established. A typical test configuration consists of signal generator, power amplifiers, power meters and SL 90. To avoid interactions with the environment, the test should be run in an anechoic test chamber.

### Technical specifications

Height of the septum:	150 mm
Frequency range:	DC to 1000 MHz
Max. input power::	150 W
Input power for 10 V/m:	approx. 50 mW (17 dBm)
Typical impedance:	90 $\Omega$
Resistor termination:	90 $\Omega$ , max. 150 W
RF input connector type:	N (female), 50 $\Omega$
Environment:	indoor
Dimensions (L x W x H in m):	3.5 x 0.9 x 1.17
Weight:	approx. 80 kg



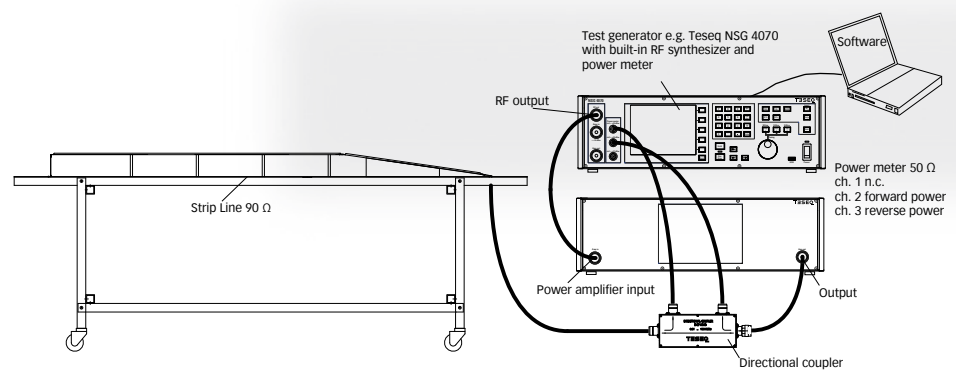
SL 90 Termination

### Model No. and options

Part number	Description
245801	Strip Line SL 90

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## Example of a typical set-up



## Typical impedance measured with TDR

