

STRIPLINE FOR IMMUNITY TESTS Mod. STPL-50



Description

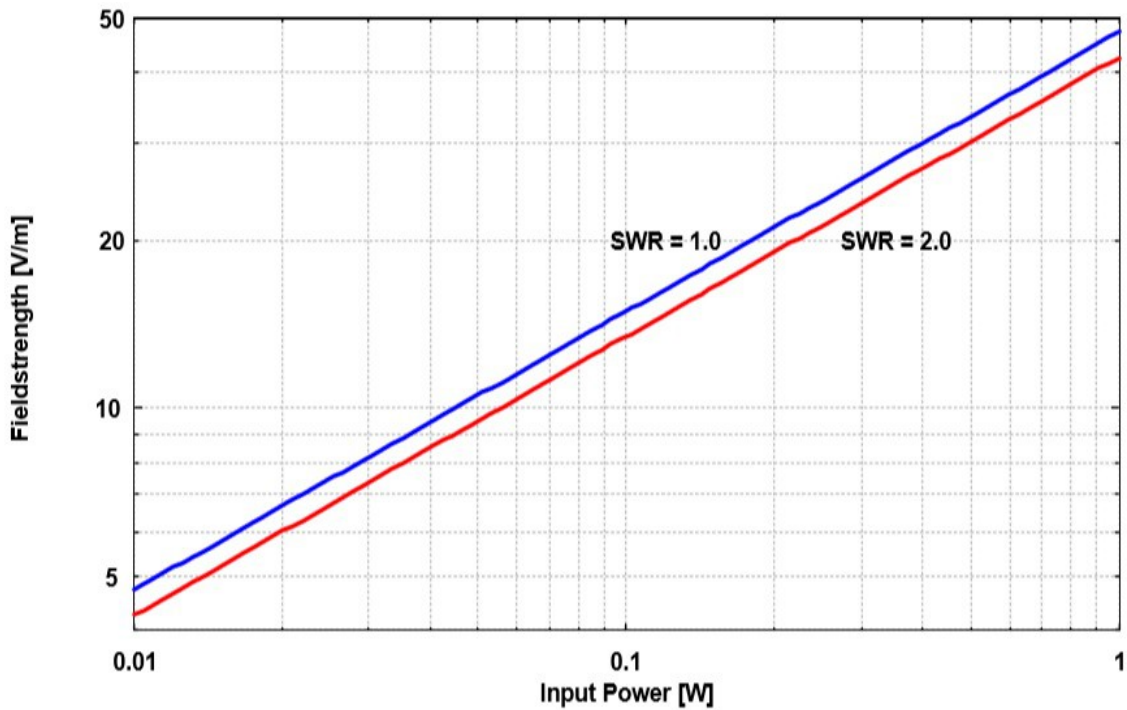
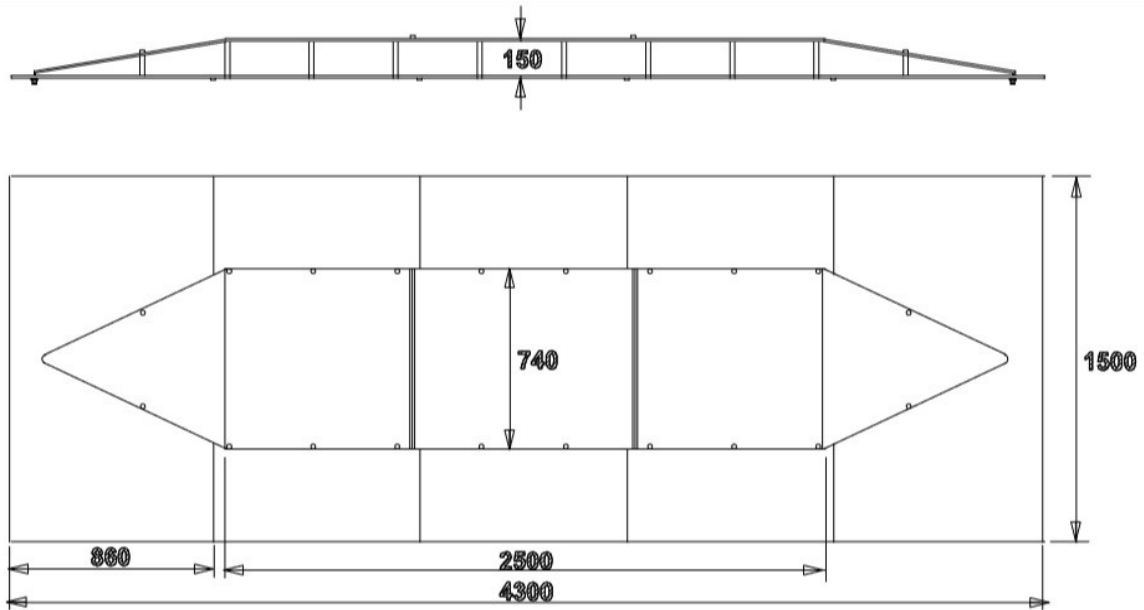
The EMC-STPL striplines are designed for automotive immunity testing of components according to the standards ISO 11452-5 and SAE J1113-23. Striplines are a variation of TEM lines which allow an application of electromagnetic fields with a good homogeneity in the test volume.

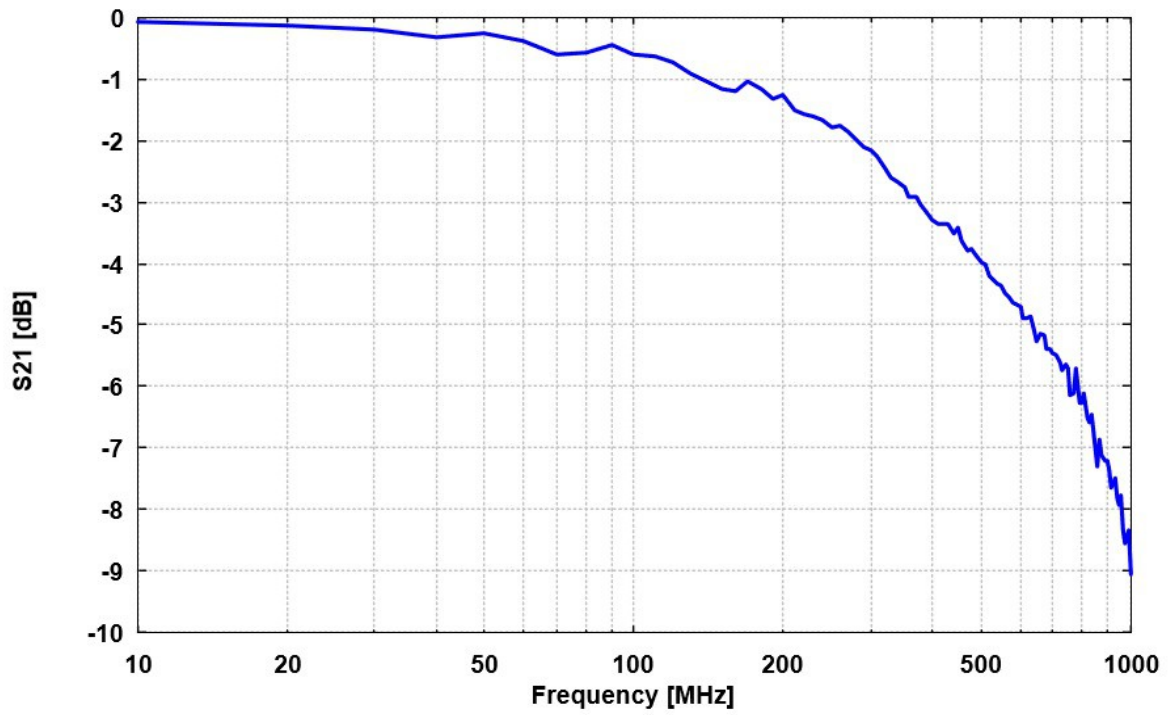
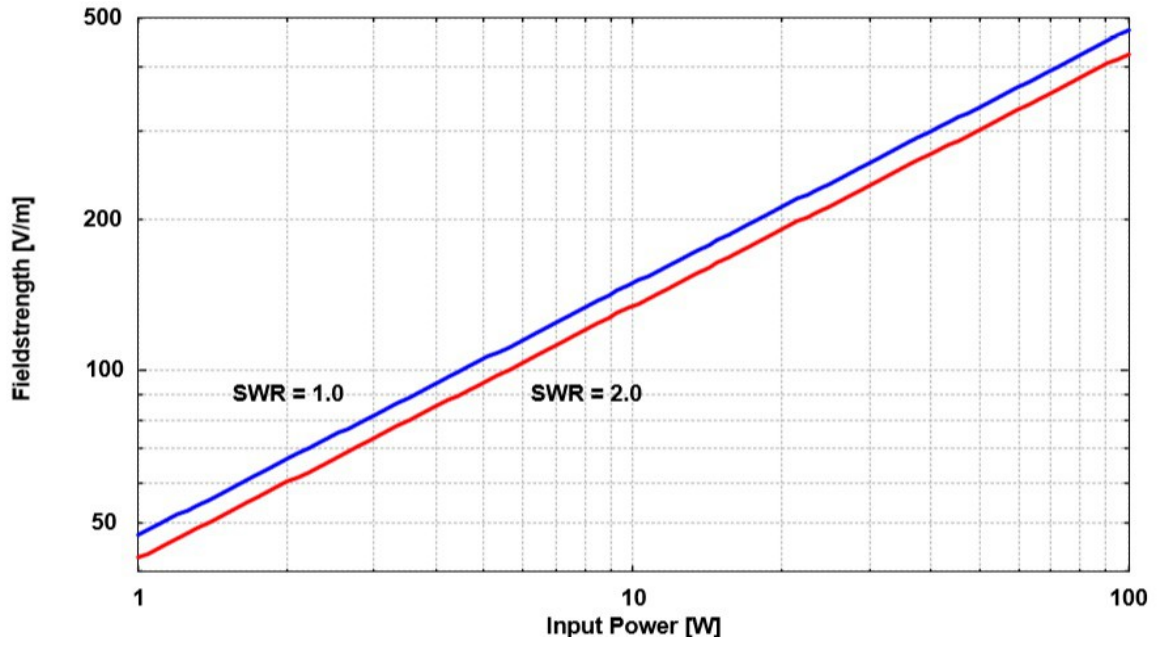
The stripline is fixed on a table and it is easy to move. It is assembled on 2 joined table with foldable legs in order to reduce the occupied space when storage or during the transport. It is the only stripline on the market able to carry out test up to 1 GHz with excellent return loss. Manufactured in hot galvanized steel and aluminum with Alodine treatment and Teflon dielectric supports. The Striplines are available with 50 Ohm impedance.

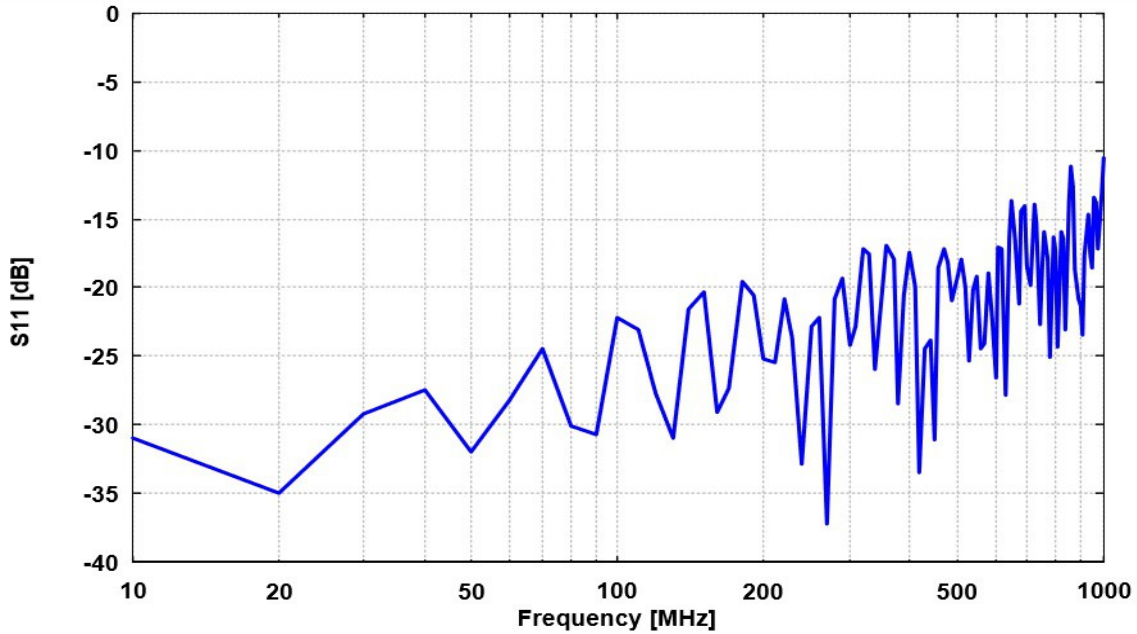
Technical Specifications	STPL-50
Frequency range	DC to 1 GHz
Max. input power	1000W
Wave impedance	377 Ohm
Impedance	50 Ohm +/- < 5 Ohm
Typical VSWR	Better than 1.3
Return Loss	Better than -16dB
Connector type	N female up to 250W or 7/16"
Typical CW input power for 10V/m	0.1W (20dBm)
Net Power for 10V/m as computed according to ISO 11452-5	0.045W (16.5 dBm)
Voltage/Field strength relation	1V=6.67 V/m
Maximum field strength	500V/m
Field strength ripple	< +/- 2dB
Field homogeneity	About 2x0.37x0.05m (LxWxH)
Height of the septum	15cm over the Ground Plane.
Size (LxWxH)	430x150x90cm (service position)
Height of the table	80cm
Weight	Approx. 140Kg
Options	Filter box
	Dummy Load: 150W-250W-500W-1KW

Usefull tool for monitoring the fieldstrength inside the stripline is the isotropic E-field meter i.e. EP-600 family sensor made by PMM Narda. The unit is connected via a fibre optical link to PC. For positioning of the EUT it is recommended a support of dielectric low density material, e.g. foam or polystyrene plastics. This is placed to keep the EUT within 1/3 of the stripline height.

ANNEX

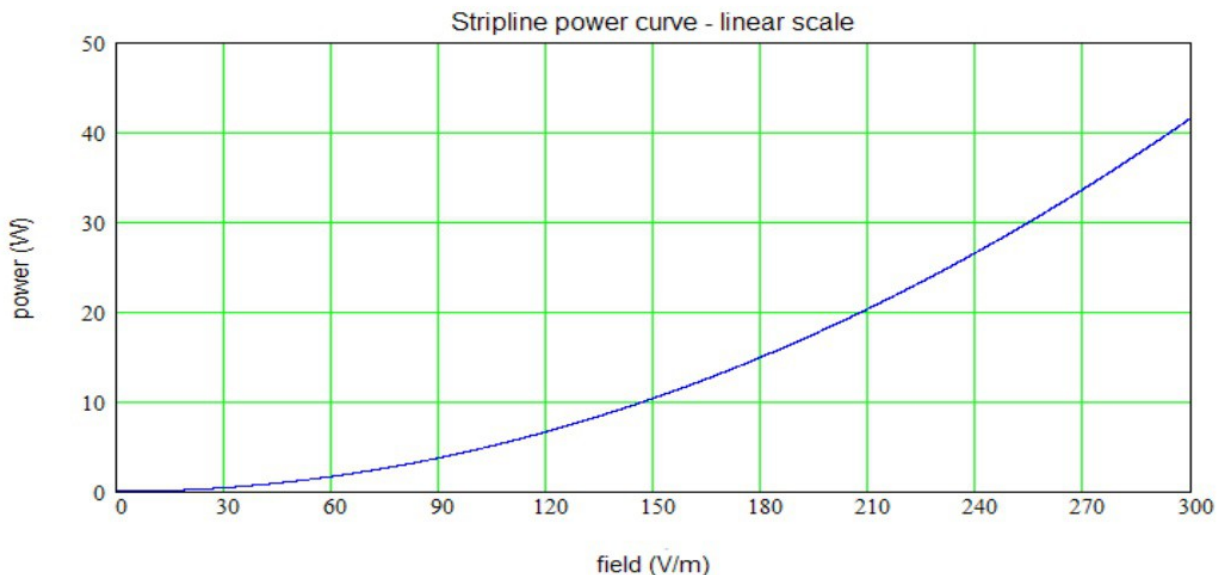


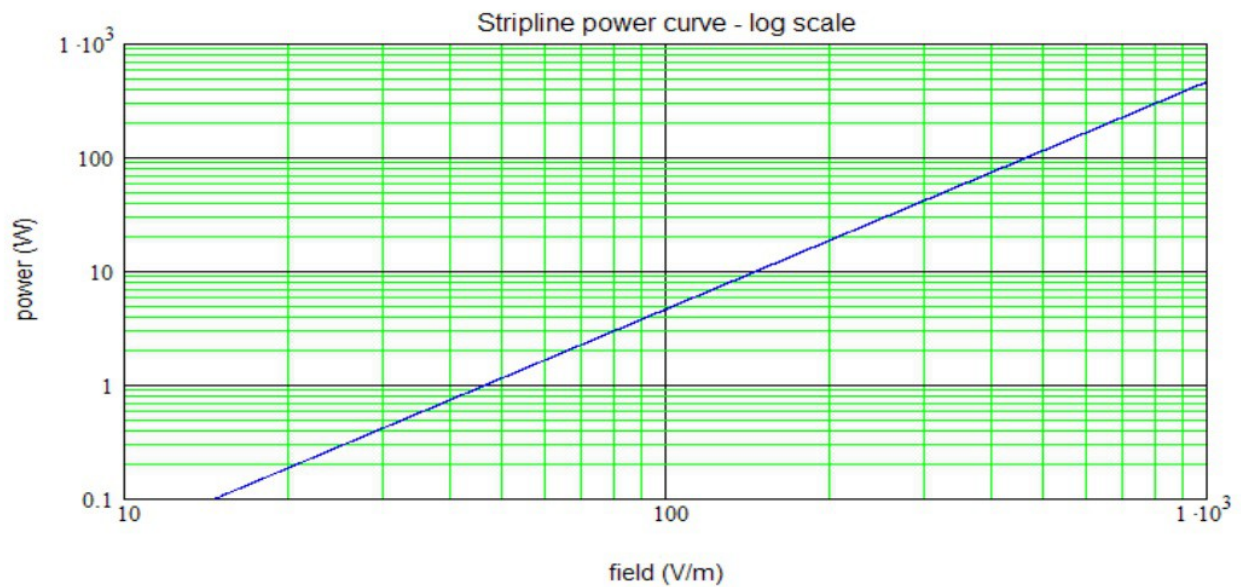




Striplines – Typical power requirements

The following diagrams show the power requirements of the amplifiers for a VSWR of 1:4 (without modulation, no accessories and without computing the mismatch of the dummy load). The calculated values are referred at the field in the centre of the test area. (For the STPL-90 the calculation doesn't take into account the losses of an optional impedance adapter from 50 to 90 Ohm).





STRIPLINE TERMINATIONS

Dummy Load - Mod. 150W, 250W, 500W, 1000W

Specifications

Type	50 Ohm Termination on Aluminium Heath sink
Frequency range	DC to 3GHz
Maximum input power	Models with: 150W - 250W - 500W - 1000W
Input impedance	50 Ohm
Connectors	N female up to 200W, and 7/16" over.
VSWR	Better than 1:1,3
Size	150x200x100mm
Weight	3 Kg