

TSB 504020 Shielded Box for mobile phone qualification tests

The T-Network's absorber lined stainless steel test box is suitable for qualification tests of mobile phones and notebooks which comprise 880-2500MHz transceivers.

Three mobile phones or any usual size notebook placed into the test box can communicate only via two built in antennas connected to the coaxial connector assembled on the box's front side and right side. Watching mobile phones' display as well as handling their keyboard is possible thru the novel lattice window on the box cover. When notebook is tested this lattice, the bottom honeycomb vent and the fiber structure absorber lining under the notebook ensure free air flow. Forced cooling can be achieved putting the enclosed ventilator assembly over the upper lattice. Sufficient isolation from the environmental RF signals is the result of the solutions as follows:

- filtering of all wires led into the interior of the test box,
- double row of finger springs in the gap between the box and its cover,
- 50mm long lattice window (rectangular waveguide array under 8GHz cut-off frequency)
- 25mm thick honeycomb vent at the bottom.



Technical specification

Frequency band of tests	880÷2500MHz
Outer box dimensions	500x400x200 [mm]
Internal dimensions	450x350x100 [mm]
Built in 2 antennas	isotropic
Antenna connectors	2 x N female 50Ω
RL at N connectors	6dB min.
Isolation (typical)	60dB
3 x USB(2.0) ports	USB A socket
LAN(100BaseT) port	Shielded RJ45 socket
12VDC input	Ø4mm banana socket
Inner 3x12VDC	car cigar lighter sockets
Ventilator assembly	12VDC 2.6W 72m ³ /h