



Attenuation and switching matrices

These matrices allow you to connect multiple base stations (GSM, UMTS, LTE, Radio, DVBH, DAB) to multiple user equipments using RF cables and creating a well controlled environment. This system allows to adjust the levels that each user equipment receives from each base station. In this way it is possible to carry out tests on the base stations, tests on the user terminals and interworking tests between them.

An example of the technical features of our matrices

Number of connections to the base stations	15
Number of connections to the user terminals	5
Operating Frequencies	From 80 to 2600 MHz
Bi-directional signal	Yes, suitable for cellular communication systems
Input or output mismatching	The system is insensitive to mismatching, including short-circuits and open circuits
Down link level to the connectors of the DUT	-60dBm (when the variable attenuation is set to 0 dB)
Variable attenuation range	From 0 dB to -65 dB in 1 dB steps
Accuracy of attenuation	1 dB due to the on site calibration of the system
Cabling calibration	Included in the calibration of the system
Type of calibration	Separated in bands of operation
Calibration Period	Once during the installation, to be repeated if the cables are changed
Control system	By means of a dedicated PC that can be positioned even at a distance
Control Software	Simple with excellent visibility and easy settings
Automatic variation of levels	Yes, upon customer request every function of level attenuation over time can be implemented
User Configurations	In the user interface the following can be configured: names of the base stations, names of the user terminals, rate of automatic level change

System with separated level controls in the two directions can be supplied on request.

The control software can be integrated on any control PC already present in the laboratory, if requested.

