

## AUTOMATIC CALIBRATION MODULES

The modern level of VNA measurement accuracy requires performing complex calibration procedure. For this purpose, the sets of calibration standards are usually employed, and each set can include several standards and adapters. Calibration standards are precision devices, and consequently are quite expensive. Each standard must be connected to the test port in the process of calibration, and this leads to quick wear of both the standards and the ports. An excellent solution in this situation might be use of an **Automatic Calibration Module**.

**PLANAR Automatic Calibration Module** characterizes four calibration standards (OPEN, SHORT, LOAD, and THRU). All the characterized values are saved as S2P files of S-parameters.



**PLANAR Automatic Calibration Modules** allow:

- Increasing the measurement accuracy;
- Simplifying the calibration procedure;
- Decreasing the expenses on calibration standards.

The **Automatic Calibration Module** can be connected to a VNA or the PC controlling a virtual VNA via USB 2.0.

All our **Automatic Calibration Modules** are compatible with our **Vector Network Analyzers** (both virtual and handheld).

The following options of the Automatic Calibration Module are available:

	SCP8000T 2-port						SC8000T 2-port		
<b>Frequency range, MHz</b>	0.009- 0.3	0.3- 10	10- 1000	1000- 3000	3000- 6000	6000- 8000	0.3- 10	10- 4000	4000- 8000
<b>Directivity, dB*</b>	45	45	51	51	49	45	40	46	40
<b>Source match, dB*</b>	35	35	44	41	38	37	30	40	36
<b>Reflection tracking, ± dB*</b>	0.05	0.05	0.03	0.03	0.03	0.03	0.05	0.04	0.05
<b>Transmission tracking, ± dB*</b>	0.1	0.07	0.05	0.05	0.06	0.06	0.1	0.06	0.1
<b>Load match, dB*</b>	40	40	46	46	43	40	40	46	40

	SC8000R reflect. coefficients calibration (M and F connectors)			SC4000T 2-port		SC4000R reflect. coefficients calibration (M and F connectors)	
<b>Frequency range, MHz</b>	0.3- 10	10- 4000	4000- 8000	0.3- 10	10- 4000	0.3- 10	10- 4000
<b>Directivity, dB*</b>	40	46	40	40	40	40	40
<b>Source match, dB*</b>	30	40	36	30	35	30	35
<b>Reflection tracking, ± dB*</b>	0.05	0.04	0.05	0.1	0.05	0.1	0.05
<b>Transmission tracking, ± dB*</b>				0.15	0.1		
<b>Load match, dB*</b>				40	40		

\* VNA effective parameters (after calibration).

- All the parameters apply over the temperature range of 23°C ± 5°C, with less than 1 °C deviation from the full two-port calibration temperature (except for SC8000R, whose parameters apply over the temperature range of -10°C to +55°C).
- Calibration Modules are available with the following connectors: type N, type 3.5 mm, UHF, F, 7/16 DIN.

