

Product Datasheet - Technical Specifications



More information in our Web-Shop at ► www.meilhaus.com and in our download section.

Your contact

**Technical and commercial sales, price information,
quotations, demo/test equipment, consulting:**

Tel.: **+49 - 81 41 - 52 71-0**

FAX: **+49 - 81 41 - 52 71-129**

E-Mail: sales@meilhaus.com

Downloads:

www.meilhaus.com/en/infos/download.htm

Meilhaus Electronic GmbH | Tel. **+49 - 81 41 - 52 71-0**
Am Sonnenlicht 2 | Fax **+49 - 81 41 - 52 71-129**
82239 Alling/Germany | E-Mail sales@meilhaus.com

Mentioned company and product names may be registered trademarks of the respective companies. Prices in Euro plus VAT. Errors and omissions excepted.
© Meilhaus Electronic.

www.meilhaus.de

ACM4509 Automatic Calibration Module¹

The ACM contains four RF connectors for connection to VNA test ports, Mini-USB control port, several different transmission and reflection impedance states and electronic changeover switches. ACM4509 has 16 reflection states (four for each port) and Thru. The precise S-parameters of the calibration impedance states are stored in the ACM memory (factory characterization data).

Measurement Range

Impedance	50 Ohm
Number of ports	4
Frequency range	100 kHz to 9 GHz
Number of characterization points	up to 1601

Hardware Configurations

Model	Connector type	
	Port A/C	Port B/D
ACM4509 - 01111	type N, female	type N, female
ACM4509 - 01212	type N, male	type N, female
ACM4509 - 11111	3.5 mm, female	3.5 mm, female
ACM4509 - 11212	3.5 mm, male	3.5 mm, female

Effective System Data^{2,3}

100 kHz to 1 MHz	
Directivity	36 dB
Source match	32 dB
Load match	36 dB
Reflection tracking	0.15 dB
Transmission tracking	0.15 dB
1 MHz to 9 GHz	
Directivity	46 dB
Source match	40 dB
Load match	46 dB
Reflection tracking	0.04 dB
Transmission tracking	0.06 dB

Port Input

Max power	-5 dBm
Max DC voltage ⁴	10 V
Damage level ⁵	+18 dBm
Damage DC voltage ⁵	35 V



Interface & Power

Interface	USB 2.0
Connector type	Mini USB
Support standart	USBTMC-USB488
Power consumption	0.6 W

Dimensions

Length	115 mm
Width	74 mm
Height	25 mm
Weight	0.55 kg (19 oz)

Environmental Specifications

Operating temperature	+5 °C to +40 °C (41 °F to 104 °F)
Storage temperature	-50 °C to +70 °C (-58 °F to 158 °F)
Humidity	90 % at 25 °C (77 °F)
Atmospheric pressure	70.0 kPa to 106.7 kPa

[1] All specifications subject to change without notice. [2] VNA maximum effective parameters after calibration. [3] All parameters are determined in the temperature range of 23±5 °C with the temperature variation after calibration of no more than ±1 °C and output power of -5 dBm output. [4] Exceeding max values reduces VNA measurement accuracy. [5] Exceeding limit values results in ACM failure. Rev. 2019Q4

