

ACM8000T Automatic Calibration Module

The ACM contains two RF connectors for connection to VNA test ports, Mini-USB control port, several different transmission and reflection impedance states and electronic changeover switches. ACM8000T has ten reflection states (five for each port) and a Thru. The precise S-parameters of the calibration impedance states are stored in the ACM memory (factory characterization data).



Measurement Range ¹

Impedance	50 Ohm
Number of ports	2
Frequency range	100 kHz to 8 GHz
Number of characterization points	up to 1601

Hardware Configurations ¹

Model	Connector type	
	Port A	Port B
ACM8000T - 011	type N, female	type N, female
ACM8000T - 012	type N, male	type N, female
ACM8000T - 111	3.5 mm, female	3.5 mm, female
ACM8000T - 112	3.5 mm, male	3.5 mm, female

Dimensions ¹

Length	115 mm
Width	40 mm
Height	25 mm
Weight	0.35 kg (12 oz)

Effective System Data ^{1,2,3}

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 8 GHz	
Directivity	46 dB
Source match	40 dB
Load match	46 dB
Reflection tracking	0.04 dB
Transmission tracking	0.06 dB

Environmental Specifications ¹

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

Port Input ¹

Max power	-5 dBm
Max DC voltage⁴	10 V
Damage level⁵	+18 dBm
Damage DC voltage⁵	35 V

Interface & Power ¹

Interface	USB 2.0
Connector type	Mini USB B
Support standart	USBTMC-USB488
Power consumption	0.2 W

[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 -5dBm output. [4] Exceeding max values reduces VNA measurement accuracy. [5] Exceeding limit values results in ACM failure. Rev. 2019Q4

