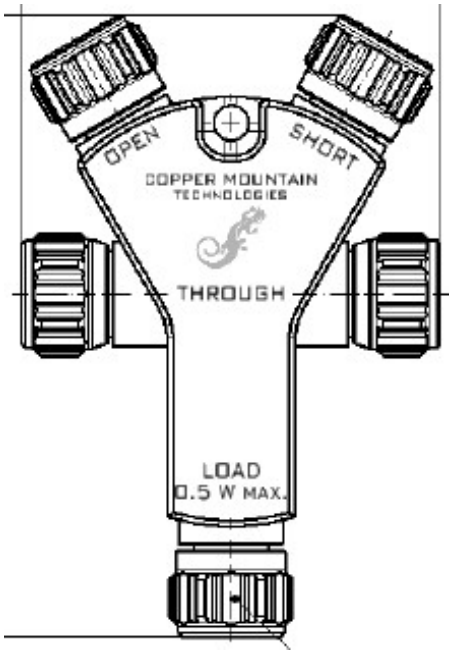
COPPER MOUNTAIN® TECHNOLOGIES
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CMNM18 Calibration Kit



Frequency range	DC to 18 GHz

Revision 26.00 16.11.2026

U.S.: +1.317.222.5400
Latin America: +1.954.495.3459
Singapore: +65.63.23.6546
EMEA: +44 75 03 69 21 13

Hardware Specifications

CMNM18

*This data is preliminary and is subject to change at any time.

Radio Frequency Characteristics

Interface type	N plug per IEC 61169-16
Frequency range	DC to 18 GHz
Characteristic impedance	50 Ω
THRU	
Return loss, min.	
DC to 4 GHz	38 dB
4 to 8 GHz	34 dB
8 to 18 GHz	28 dB
Insertion loss, max.	0.035 dB x $\sqrt{f\,(GHz)}$
OPEN	
Reflection phase accuracy, min.	
DC to 6 GHz	2.0 deg.
6 to 9 GHz	3.0 deg.
9 to 18 GHz	4.0 deg.
SHORT	
Reflection phase accuracy, min.	
DC to 6 GHz	1.5 deg.
6 to 9 GHz	2.5 deg.
9 to 18 GHz	3.5 deg.
LOAD	
DC-resistance	50 Ω ± 0.5 Ω
Return loss, min.	
DC to 6 GHz	42 dB
6 to 9 GHz	35 dB
9 to 18 GHz	32 dB
Average power rating	0.5 W

Calibration Data

Format		CMT/ Keysight / Anritsu	Rohde & Schwarz
THRU	Electrical Delay/Length	245.383 ps	73.56 mm
OPEN	C0	8.471 x 10^{-15} F	8.471 fF
	C1	-2513 x 10^{-27} F/Hz	-2.513 fF/GHz
	C2	171.3 x 10^{-36} F/Hz^2	0.1713 fF/$(GHz)^2$
	C3	-1.47 x 10^{-45} F/Hz^3	-0.00147 fF/$(GHz)^3$
	Offset	85.954 ps	25.77 mm
SHORT	L0	41.01 x 10^{-12} H	41.01 pH
	L1	-13740 x 10^{-24} H/Hz	-13.74 pH/GHz
	L2	1386 x 10^{-33} H/Hz^2	1.386 pH/$(GHz)^2$
	L3	-41.56 x 10^{-42} H/Hz^3	-0.04156 pH/$(GHz)^3$
	Offset	86.021 ps	25.79 mm
Offset loss	0.82 GΩ/s		

Mechanical Characteristics

Inner conductor material/surface coating	CuBe age hardened, copper alloy/gold-plated
Outer conductor material/surface coating	copper alloy/gold-plated
Dielectric material	cross linked polystyrene, PMP
Other parts material/surface coating	aluminum/anodized (blue) copper alloy/CuSnZn-plated
Weight, approx.	0.25 kg
Marking	laser engraving

Environmental Specifications

Operating condition	
Ambient temperature range	+18 to +28°C
Relative humidity, max.	95% (non-condensing)
Storage condition	
Ambient temperature range	-40 to +70°C
Relative humidity, max.	95% (non-condensing)