

D42 detector heads

D42 detector heads are used with R2M analyzers to detect and measure electromagnetic wave power passing through DUT when measuring transmission coefficient modulus. The D42 detector is a wideband amplitude detector of two-diode circuit design. Microwave connectors are made of durable materials capable to withstand at least 3000 connect/disconnect cycles. Each D42 detector is individually calibrated at factory, which provides precision measurement of absolute power level.



Specifications

	D42-18-01	D42-18-11	D42-20-03	D42-20-03	D42-50-05
Connectors	type III (male)	type N (male)	type IX, ver. 3 (male)	3.5 mm (male)	2.4 mm (male)
Frequency range	10 MHz ... 18 GHz		10 MHz ... 20 GHz ¹		10 MHz ... 40 GHz
Power measurement range, dBm ²	-55 ... +15		-55 ... +13		-55 ... +7
Frequency response flatness ³	± 0.3 dB ... 12 GHz ± 0.5 dB ... 18 GHz		± 0.3 dB ... 12 GHz ± 0.5 dB ... 20 GHz		± 0.5 dB ... 20 GHz ± 2.0 dB ... 40 GHz
VSWR, max	1.2				1.5
Wave impedance, Ohm	50				
Maximum input power, dBm	+23				

¹ Measurements up to 18 GHz are regulated by OT for R2M-18A.

² Power measurement range, supplied with R2M analyzers.

³ Flatness without considering calibration data.

NOTE For complete information on combined loads, microwave cables and coaxial adapters, refer to Section 2. Microwave accessories.