Signal Samplers, HM series

Resistive Design
DC - 5 GHz

- 5 to 15 Watt Average Power Rating
- Minimal RF Insertion Loss
- High Reliability
- N Standard, BNC, TNC, SMA optional

Microlab Model HM series resistive samplers consist of a resistive attenuator coupled to a short length of 50 transmission line. A small portion of the RF energy in the main line is coupled through the attenuator to the auxiliary output, the balance being transmitted to the output with negligible reflection or loss. The coupling is fixed, non-directional and independent of frequency over an extremely broad bandwidth.

The unit consists of a low-loss main line with both terminals available, and a coupling arm incorporating an L-type fixed attenuator. The series resistor reduces the power flow into the coupled arm and minimizes the discontinuity effect on the main line. The shunt resistor then optimizes the output VSWR of the sampled signal output.

Options for non-standard coupling levels, custom housings, different polarity or alternate connectors are available on request. (12/09)

Coupling Levels, dB:	10, 15, 20, 25 or 30
Coupling accuracy:	±1 dB
Impedance:	50Ω nominal
Standard Connectors:	
Main Line	male to female
Sample Port:	female standard
Temperature Range:	-55°C to +125°C
Finish: Housing:	Silver or tri-plate
Connector:	Silver or tri-plate

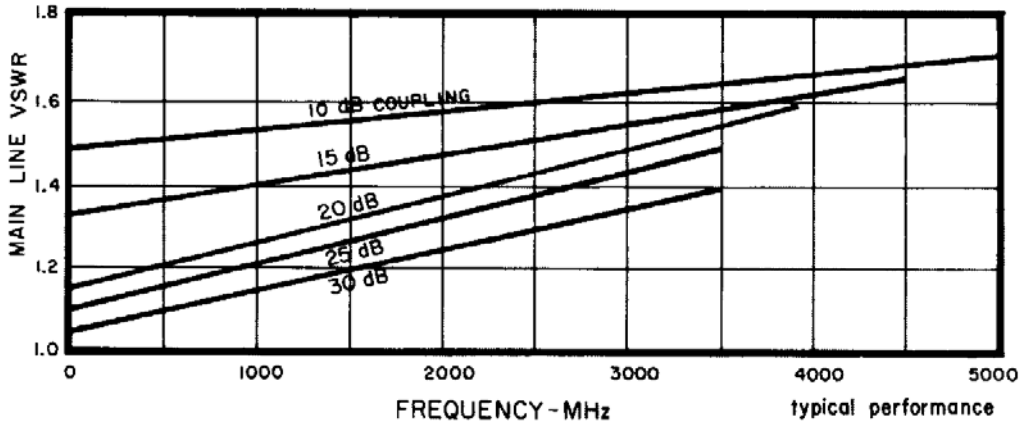
Connector Variations

Connector/Suffix		Length in (mm)	Height in (mm)	Weight oz (g)
N type	N	2.7 (69)	1.9 (48)	3.8 (106)
BNC*	B	2.5 (64)	1.7 (43)	1.5 (42)
TNC*	T	2.5 (64)	1.7 (43)	1.5 (42)
SMA*	F	2.5 (64)	1.7 (43)	1.5 (42)

*special order

Model Number	Coupling* nom.	Frequency Range, GHz	Main Line VSWR	Main Line Loss, dB	Power Avg.
HM-10N	10dB	DC - 5.0	<1.8:1	<2.5	<5W
HM-20N	20dB	DC - 4.0	<1.6:1	<1.5	<8W

*15, 25 and 30 dB coupling models available to special order



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