

- ◆ 500 Watt Average Power Rating
- ◆ Minimal RF Insertion Loss
- ◆ High Reliability
- ◆ N Standard, BNC, TNC, or SMA options
- ◆ Custom miniaturized versions to special order



Microlab Models HX, HY and HZ series reactive samplers consist of a probe loosely coupled to a short length of 50 coaxial transmission line. A small portion of the RF energy in the main line is coupled by the probe to the auxiliary output, the balance being transmitted to the output with negligible reflection or loss. The coupling between probe and main line is continuously adjustable and may be locked at any convenient position. The coupling value is dependent on frequency falling at the rate of 6 dB per octave as frequency increases.

Units consist of a low-loss main line with both terminals available. The HY series uses a loop to electromagnetically couple to the magnetic field of the main line. The loop coupling provides a DC return in the branch line. The HZ series couples with an electrostatic probe, which is useful when a DC return is not required in the branch line.

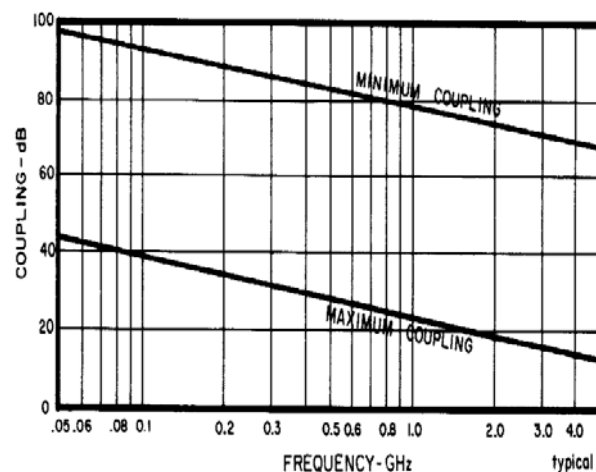
Options for fixed coupling levels, custom housings, different polarity or alternate connectors are available on request. See HZ-15N for Adjustable Signal Tap designed for wireless applications. (12/09)

Coupling Method	Basic Model Variations		Model Number
	DC Return	Coupled Output	
Electromagnetic	Yes	RF	HY-10N
Electrostatic	No	RF	HZ-10N

\*Resistive models in HM series

Frequency Range: 50 to 4,000 MHz.  
 Insertion Loss: 0.2 dB max.  
 Impedance: 50Ω nominal.  
 Main Line VSWR: 1.2:1 max. in the coupling range, shown in graph.  
 Power Rating: 500W avg., 5kW peak.  
 Standard Connectors:  
     Main Line: male to female  
     Sample Port: BNC (female) standard  
 Temperature Range: -55°C to +150°C  
 Finish: Silver or tri-plate

**Coupling Range**



Main Line Connector Variations				
Connector/Suffix		Length in (mm)	Height in (mm)	Weight oz (g)
N type	N	2.7 (69)	2.2 (56)	3.3 (92)
BNC*	B	2.5 (64)	2.1 (53)	1.7 (48)
TNC*	T	2.5 (64)	2.1 (53)	1.8 (50)
SMA*	F	2.5 (64)	2.1 (53)	1.8 (50)

\*special order