

HTP500 Passive Probe Customizable Interconnect Solution



INTRODUCTION

The HTP500 Passive Probe family is a part of our full lineup of customizable interconnect solutions that is a standard, commercial off-the-shelf system engineered to deliver consistent, repeatable, and dependable results.

The Passive Probe provides an industry-leading combination of high bandwidth and high voltage in a rugged, general purpose probing solution, while the small UL-approved probe body and compact head enable access to small geometry circuit elements.

FEATURE	BENEFIT	
500 MHz bandwidth & 1,000 V CAT III, 600 V CAT IV	 A combination of high bandwidth and high voltage reduces the number of probes needed for a variety of applications, simplifying the toolkit and lowering costs 	
1X, 10X, & 100X configurations	Multiple configurations give the flexibility to choose the passive probe that fits your application	
Third-party certified; exceeds UL61010-31, IEC61010-31	Superior product quality and safety greatly reduces risk in high-voltage applications	
Small, compact probe head & body	 Ability to view small, dense geometry circuit elements with ease Good contact with Device-Under-Test (DUT) ensures correct and accurate probing 	

SUGGESTED APPLICATIONS

- » Low power device services
- » Manufacturing engineering
- » Test research & development
- » Relative low-frequency measurement

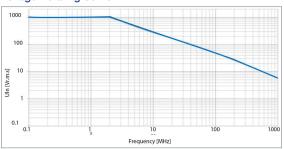
- » Low frequency computer & telecom measurements
- » Power supplies
- » Inverter design

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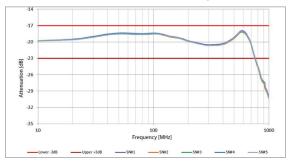
SPECIFICATIONS & PERFORMANCE

Parameter	TM50-0012-00 (1X)	TM50-0013-00 (10X)	TM50-0014-00 (100X)
Bandwidth	DC to 50 MHz	DC to 500 MHz	DC to 500 MHz
Attenuation Ratio	1:1	10:1	100:1
Max Input Voltage (V)	*CAT III 600V, CAT IV 300V, 50 MHz	*CAT III 1000V, CAT IV 600V, 500 MHz	*CAT III 1000V, CAT IV 600V, 500 MHz
Input Resistance	Impedance of measuring instrument	10 ΜΩ	100 ΜΩ
Input Capacitance (pF)	42 pF	12 pF	4.5 pF
Compensation Range	N/A	10 - 25 pF center @ 15 pF	10 - 25 pF center @ 15 pF
Rise Time	Instrument spec + 6 ns	<1 ns	<1 ns
Safety	Conformance to Low Voltage Directive (LVD) 73/23/EEC, Amendment 93/68/EEC;		
Operating Temp.	0 °C to 60 °C, 80% RH		
Storage Temp.	-40 °C to 71 °C		
Operating Altitude	Up to 3,000 m		
Storage Altitude	Up to 15,000 m		

Voltage Derating Curve



TM50-0013-00 Passive Probe 10:1, 500 MHz (20dB) 1.2 m (N5171B @ 0 dB m, MSO-S104A set @ 1 M , avg. 16, w/50 load)



ORDERING INFORMATION

Model	Description		
TM50-0012-00	1X High-Voltage Probe Kit		
TM50-0013-00	10X High-Voltage Probe Kit		
TM50-0014-00	100X High-Voltage Probe Kit		
Kit Includes:	» Probe» Grabber Hook» Insulating Tip Cap» BNC Adapter	 » RF Ground Spring » Adjusting Screw Driver » Alligator Ground Lead » Instruction Manual 	















See our line of T&M products at:

CarlislelT.com/markets/test-measurement

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^{*}Max input voltage frequency dependent, see Voltage Derating Curve.