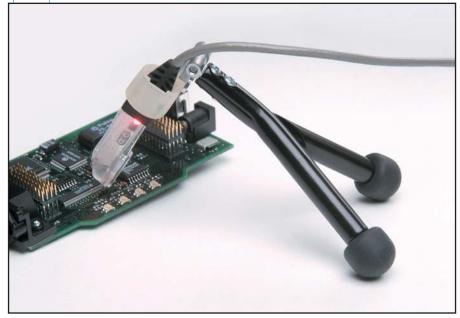
# Probing Solutions

# HFP1000 HFP1500 HFP2500

**Active Probes** 

# **LEADING SPECIFICATIONS**

- 1 GHz to 2.5 GHz Bandwidth
- 0.7 pF Input Capacitance
- ±8 V Dynamic Range
- ±12 V Offset Range (except HFP1000)
- 5 Interchangeable Tips for Probing a Variety of Test Points
- Replaceable Probe Tip Socket
- Hands-Free Probing with FreeHand
  Probe Holder
- AutoColor ID Feature
   Matches the Probe Color to the Trace Color



HFP probe with ingenious FreeHand probe holder.

Engineers are using an ever-increasing variety of devices and test points in their designs. In order to access these test points conveniently, today's probing solutions need to be versatile, small and lightweight, while still maintaining a high bandwidth. LeCroy's new HFP series of probes is designed to meet these challenges.

#### **Convenient Hands-Free Probing**

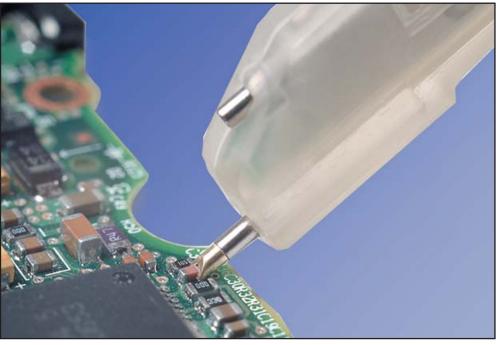
Five different styles of tips make probing easier then ever. In addition to a traditional Straight Tip, a Sharp Tip allows easier access to tightly-packed test points and circuit vias. The Bent Sharp Tip — made out of titanium — is ideal for making contact on devices that are spaced close together and prevent the probe from being oriented perpendicular to the circuit. The IC Lead Tip has insulation on

one side so it can be wedged between small-geometry IC leads without shorting the test points. The Discrete SMD Tip is designed to fit tightly on surface mount capacitors, resistors and other components.

In conjunction with these innovative probe tips is the LeCroy FreeHand probe holder, which holds the probe on test points. This means several probes can be used at the same time on a variety of test points while maintaining short signal paths to preserve signal fidelity. The end result of "HFP hands-free probing" is the enhanced ability to analyze waveforms instead of focusing on keeping the probe in place.

In addition to these new attachment techniques, traditional IC clips, wire leads, and square pin adapters are available.



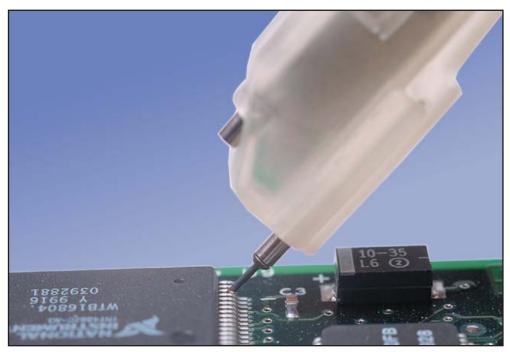


HFP Probe with Discrete SMD Tip on circuit board

# **Easy To Use**

When the probe is connected to an oscilloscope channel, our new patent-pending AutoColor ID feature automatically illuminates the probe head in that channel's trace color. Users no longer need to manually apply plastic rings or colored tape to determine which channel the probe is connected to.

With the ProBus® interface, the HFP probes become an integral part of the oscilloscope. The probe offset is controlled from the oscilloscope's front panel.



HFP Probe with IC Lead Tip on circuit board

# Use With Other Test Instruments

When used in combination with the ADPPS adapter for ProBus and power supply, the HFP1000 can be used on <u>any</u> manufacturer's oscilloscope or other test instrument. However, the AutoColor ID feature will not function with non-LeCroy oscilloscopes.

# **Electrical Characteristics**

**Bandwidth (probe only):** 

 $\begin{array}{lll} \text{HFP1000} & 1 \text{ GHz} \\ \text{HFP1500} & 1.5 \text{ GHz} \\ \text{HFP2500} & 2.5 \text{ GHz} \\ \text{Input Capacitance:} & 0.7 \text{ pF} \\ \textbf{DC Input Resistance:} & 100 \text{ k}Ω \\ \end{array}$ 

**Input Dynamic Range:** 

HFP1000, 1500, 2500 ±8 V

**Probe Offset Range:** 

 $\begin{array}{lll} \text{HFP1000} & \text{N/A} \\ \text{HFP1500, 2500} & \pm 12 \, \text{V} \\ \text{Attenuation Accuracy:} & \pm 1\% \\ \text{Output Zero:} & < 4 \, \text{mV, referred} \\ \end{array}$ 

to input

Offset Accuracy: ±1%, ±4 mV,

referred to input

#### **General Characteristics**

Cable Length: 1.3 m

**Probe Head Size:** 

61 mm (L) x 7.3 mm (W) x 13.1 mm (H)

**Input Sockets:** 

Signal and ground sockets compatible with 0.025" (0.635 mm) square pins, 0.036" (.91 mm) maximum diameter (for round pins)

Warranty: 1-year

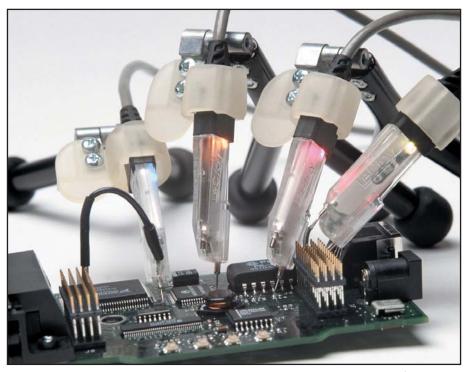
#### **Standard Accessories**

HFP1000 includes:

- 4 Straight tips
- 4 Sharp Tips
- 1 Square Pin Ground Spring
- 1 Short Single Lead
- 1 Long Single Lead
- 1 Right-Angle Short Single Lead
- 1 Right-Angle Long Single Lead
- 2 Clips (0.8 mm)
- 1 Replacement Cartridge

Instruction Manual

Certificate of Calibration



Hands-free Probing

#### HFP1500 includes:

- 4 Straight Tips
- 4 Sharp Tips
- 4 Bent Sharp Tips
- 4 SMD Discrete Tips
- 4 IC Lead Tips
- 1 Square Pin Ground Spring
- 1 Ground Spring with Hook
- 2 Short Single Leads
- 2 Long Single Leads
- 2 Right-Angle Short Single Leads
- 2 Right-Angle Long Single Leads
- 2 Clips (0.8 mm)
- 1 FreeHand Probe Holder
- 1 Replaceable Cartridge
- 1 Soft Accessory Case

Instruction Manual

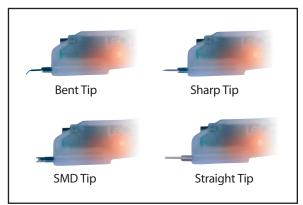
Certificate of Calibration

HFP2500 includes:

all HFP1500 Standard Accessories, and

2 Micro Clips (0.5 mm)

1 Low C Tip Cartridge



Interchangeable HFP Probe Tips

Ordering Information	Product Code
1 GHz Active Voltage Probe	HFP1000
1.5 GHz Active Voltage Probe	HFP1500
2.5 GHz Active Voltage Probe	HFP2500
Straight Tip	PACC-PT001
Sharp Tip	PACC-PT002
IC Lead Tip	PACC-PT003
SMD Discrete Tip	PACC-PT004
Bent Sharp Tip	PACC-PT005
FreeHand Probe Holder	PACC-MS001
Replaceable Cartridge	PACC-MS002
Low C Cartridge	PACC-MS003
Short Right-Angle Lead	PACC-LD003
Long Right-Angle Lead	PACC-LD004
Short Single Lead	PACC-LD005
Long Single Lead	PACC-LD006
0.8 mm Clips	PK006-4
Micro Clip	PACC-CL001
Ground Spring Hook	PACC-LD001
Square Pin Ground Spring	PACC-LD002
Soft Accessory Case	SAC-01
HFP1000 Instruction Manual, English	HFP1000-OM-E
HFP1500 Instruction Manual, English	HFP1500-OM-E
HFP2500 Instruction Manual, English	HFP2500-OM-E

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