

**NEW**

# WATER & SOIL INSTRUMENTS



## Portable Ultrasonic Flaw (Inclusion) Detector

- ✓ 640 MHz Sampling Frequency
- ✓ 800 x 480 WVGA Resolution
- ✓ High Signal to Noise Ratio
- ✓ Zoom Function
- ✓ Waveform Color Change for Optional Alarm
- ✓ Standard Dynamic DAC and AVG Curve Functions
- ✓ Continuous Store Function
- ✓ Auto-Calibration
- ✓ USB Port

The HFD-1 is a digital ultrasonic flaw (inclusion) detector with 800 x 480 WVGA display for superior visibility in all lighting conditions, including direct sunlight.

Using the advanced tunable squarewave excitation technology, the HFD-1 provides excellent material penetration and a high signal to noise ratio when detecting special composite materials, highly attenuated or thick work pieces.

The zoom function for the in-gate waveform allows users to observe the waveform detail conveniently with an optimized height to width rate to insure a higher resolution. The HFD-1 has different color change of the waveform for visual and an optional alarm function.

The auto calibration includes fast calibrating material velocity, probes time delay and angle of signal.

The USB port allows access for updating the software, downloading and printing of the data.



HFD-1 comes complete with carrying case, operator's manual, handheld unit with two transducers (standard and angle probes), power adaptor and lithium battery.

**HFD-1**


HFD-1 shown smaller than actual size.

### Specifications

- Accuracy:**  $\leq 3\%$  vertical linearity  
**Operating Frequency:** Broadband 0.5 to 20 MHz, or narrowband 1.5 to 3 MHz  
**Pulse Width:** 50 to 800 ns with 5 ns increments  
**Resolution:**  $\geq 36$  dB  
**Suppression:** 0 to 90%  
**Enclosure:** NEMA 3 (IP54)  
**Temperature Range:** -30 to 50°C (-22 to 122°F)  
**Humidity:** 20 to 90% RH  
**Communications:** USB port  
**Power:** Lithium battery (included)  
**Weight:** 0.9 kg (2 lbs)

HFD-1-CP contact probe (included).



HFD-1-AP angle probe (included).

HFD-1-PA power adaptor (included).



**Dimensions:** 215 L x 126 W x 53 mm H (8.5 x 5 x 2")

**To Order Visit [omega.com/hfd-1](http://omega.com/hfd-1) for Pricing and Details**

Model No.	Description
HFD-1	Handheld ultrasonic flaw meter
HFD-1-NB	Handheld ultrasonic flaw meter with narrowband

### Accessories

Model No.	Description
HFD-1-PA	Replacement power adaptor
HFD-1-LB	Replacement lithium battery
HFD-1-CAB	Replacement probe cable
HFD-1-ACAB	Replacement AC power cable
HFD-1-CP	Replacement 2.5P20 contact probe
HFD-1-SEP	Replacement BH-50 standard probe
HFD-1-AP	Replacement 2.5P 13X13K1 angle probe

Comes complete with carrying case, operator's manual, handheld unit with two transducers (standard and angle probes), power adaptor and lithium battery.

**Ordering Example:** HFD-1, handheld ultrasonic flaw meter.

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