

IMPULSE HAMMERS FOR STRUCTURAL DYNAMIC BEHAVIOR ANALYSIS

IH101 Series

All Models
\$870



- ✓ Ideal for Generating Known Impulse Forces for Structural Analysis
- ✓ Acceleration Compensated for Accurate Force Measurement
- ✓ Calibration Certificate Supplied
- ✓ Includes Aluminum, Plastic, and Rubber Impact Tips

OMEGA's IH101 impulse hammer imparts motion to a test structure with the hammer tip, while simultaneously measuring the magnitude of the impact. This allows for analysis of the dynamic response of the structure being tested. Accelerometers mounted at various locations on the test structure measure the response of the structure. If a spectrum analyzer or a computer is used, input/response data can display transfer functions and perform modal analysis. The hammer is acceleration compensated, which means that it responds solely to force and is unaffected by the vibration in the hammer head after impact.

SPECIFICATIONS

Excitation: 2 mA nominal

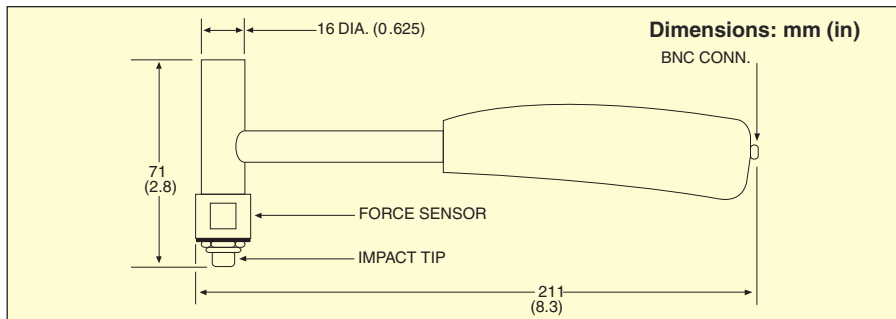
@ 18 to 30 Vdc, constant current

Rated Output: 5V nominal FS

Resonant Frequency (@ No Load): 50 kHz

Discharge Time Constant:

5 s (IH101-10), 20 s (IH101-50),
50 s (IH101-100), 170 s (IH101-500),
300 s (IH101-1K)



Maximum Force:

1000 lb (IH101-50)
1000 lb (IH101-100)
1000 lb (IH101-500)
2000 lb (IH101-1K)

Stiffness: 8.0 lb/ μ in

Amplitude Linearity: $\pm 1\%$ FS (BSFL/0)

Temperature Range:

-75 to 120°C (-100 to 250°F)

Temperature Sensitivity Effect:

0.054% FS/ $^{\circ}$ C (0.03% FS/ $^{\circ}$ F)

Output Impedance: 100 Ω

Bias Voltage: 10V nominal

Head Weight: 100 g

Total Weight: 190 g nominal

Material:

Sensor: 17-4 SS

Head: 303 SS

Handle: Fiberglass with rubber grip

Overall Length: 210 mm (8.3")

Impact Tip Diameter: 6.3 mm (0.25")

Head Diameter: 16 mm (0.62")

Connector: BNC (cable sold separately; order model no. **ACC-CB4-6**)

Calibration: Dynamic comparison by impact against NIST force sensor

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

MODEL NO.	PRICE	RANGE (lb)
IH101-50	\$870	0 to 50
IH101-100	870	0 to 100
IH101-500	870	0 to 500
IH101-1K	870	0 to 1000

Comes complete with calibration certificate and operator's manual.

Ordering Example: IH101-50, impact hammer, ACC-PS1, power supply, ACC-CB4-6, extension cable, ACC-CB6, BNCM/pigtail cable, \$870 + 205 + 55 + 15 = \$1145.

Note: See pages K-20 through K-22 for accessories.

ACCESSORIES

MODEL NO.	PRICE	DESCRIPTION
ACC-CB4-6	\$55	1.8 m (6') BNC to BNC cable required
ACC-PS1	205	Battery power supply
ACC-CB6	15	178 mm (7") coaxial cable (BNCM/pigtail)



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