

# TC2000A Impulse Force Hammer

## Specification

By measuring the force pulse generated by the impact of a hammer on a structure, and measuring the response signal with a velocity of acceleration transducer, it is possible, using an FFT analyser to determine the dynamic response of a structure. This is a useful measurement that can be used to analyse changes in state of a structure and to identify anomalies. The force range and weight of this hammer are particularly suited to the assessment of concrete foundations and is supplied as standard with the TDR2 pile integrity testing system.

The head of the impulse force hammer incorporates a low impedance force sensor. The wiring runs within the hammer head and inside a tough fibreglass handle. It is supplied with a one metre lead, permanently fixed into the handle with integral strain relief, without any vulnerable BNC type connectors. The hammer is a rugged design, designed for use on construction sites and in the industrial environment.

Technical Data	TC2000A
Nominal Sensitivity	0.16 mV/N
Measurement Range	10,000 N
Frequency Range (Steel Tip)	5000 Hz
Frequency Range (Black Tip)	1000 Hz
Operating Temperature Range	-20 to +70 °C
Discharge Time Constant	≥ 2000 sec
Excitation Voltage	20 to 30 VDC
Constant Current Excitation	2 to 20 mA
Output Impedance	≥ 100 Ω
Output Bias Voltage	8 to 14 VDC
Hammer Head Diameter	50 mm
Hammer Head Length	100 mm
Hammer Length	335 mm
Hammer Head Weight	600 g
Cable Type	Plain (illustrated) / Curly / As Specified
Cable Connector	Free / BNC / As Specified



- **Integral cable and strain relief**
- **Quartz ICP® force sensor**
- **Long term reliability**
- **Rugged design**

