

# Ultraman-3170

## Ultrasonic Concrete Tester

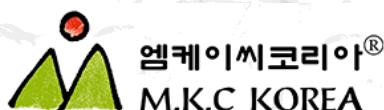


### Superb in Stable reading, Repeatability and Accuracy!

The Ultraman-3170 ultrasonic concrete tester, manufactured and supplied by Q-see man International oscillates ultrasonic waves from 20kHz to 1,000kHz. Inspects the density, elasticity, homogeneity, presence or absence of voids or cavities, chemical damage, deterioration and carbonation due to aging of materials including concrete, stone and wood. In particular it is widely applied to strength testing and hardening measurement of concrete. Ultraman-3170 minimizes noise while using a high voltage of 1,200V or 600V in the analog circuitry, demonstrating excellent performance in stable reading, repeatability and accuracy from thin materials such as stone or metal to thick concrete.

#### Features of Ultraman-3170

- The combination of a high-output pulser (1,200V/600V) that generates strong ultrasonic energy, a receiver with high reception sensitivity and a high-efficiency ultrasonic transducer designed to transmit ultrasonic waves most efficiently in concrete provides excellent performance even in thick or highly attenuative materials.
- Separate menus for direct method, indirect method and crack depth measurement, colored display for viewing measurement results at a glance.
- Safety diagnosis and maintenance of concrete installations, strength measurement of wood and stone. Compact design convenient for use in the field and laboratory for aging inspection of stone and earthen cultural assets.
- Software that allows to transfer measured data to a laptop and create a report and a program that allows to analyze the transmitted waveform. (optional)
- Mode to use scout transducer and crack depth measurement. (transducer is optional)



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## Composition of Ultraman-3170

- Ultrasonic tester main body and a pouch
- 54kHz ultrasonic transducer (2ea)
- RG58 cable with BNC to XTR-9 (2ea)
- Ultrasonic couplant
- Reference block
- Instruction manual - USB card
- Portable aluminum bag



Main body



Pouch



Ultrasonic Transducer



Cable



Ultrasonic couplant



Reference block



Instruction manual



Aluminum bag

## Specifications of Ultraman-3170

- Measuring Range of Ultrasonic Transit time:  $0.1\mu s \sim 6,530\mu s$
- Display: 800 x 480 TFT Color LCD
- Frequency range of use: 10kHz ~ 1,000kHz
- Measurement period: 5Hz fixed
- Display cycle: 2Hz
- Receiver sensitivity:  $250\mu V$
- Connector: BNC/BNC
- ADC Sampling Frequency: 1.8MHz
- Temperature of use:  $-10 \sim 50^{\circ}C$
- Power: Two rechargeable Li-Ion 21700 batteries (7.4V, 5,000mA)
- Battery usage time: 8hours at 1,200V continuous use
- Software operating system: Windows 7 or higher
- Software installation space: 1GB or more SSD or HDD
- Size: 105(h) x 172(w) x 68mm(d)
- Weight: 1.2kg (main body including battery)
- Warranty: 1year

