

## suparule

## Cable Height Meter

- Fast measurement
- Inherently safe
- High accuracy
- Easy to use
- Proven reliability


## DESCRIPTION

The Suparule Cable Height Meter is a handheld meter for measurement of cable sag, cable height distance, and overhead clearance of conductors. It is a modern alternative to telescopic measuring poles. The Suparule Cable Height Meter utilises ultrasonic signals to determine the height of overhead cables up to 23 m (75feet).

Used by line operators within the utilities industries, e.g. electricity and telecommunications, the CHM190 measures the height of a single wire, the CHM 300 and CHM300E measure up to 3 wires, while the CHM600 and CHM600E models measure up to 6 wires.

## HOW IT WORKS

The Cable Height Meter emits short bursts of sound which originate from the cone-shaped transmitter. The microprocessor in the instruments calculates the elapsed time for the bursts of sound to be reflected from the cable back to the instrument. The result can be displayed in either feet and inches (imperial), or meters (metric) format.

To account for the fact that speed of sound varies with temperature, a temperature sensor, mounted at the front of the instruments, senses the actual air temperature, and automatically compensates.

## OPERATION

The Cable Height Meter is capable of measuring up to six cables (provided they are within range). This is accomplished by standing directly beneath the cable and aligning longitudinally (looking down the line). Simply press the "ON" button to power up the instrument, and allow the temperature to stabilize. Press the 'MEASURE' button and, if necessary, gently "rock and tilt" the instrument until a stable reading is obtained.

## APPLICATIONS

Applications include height measurement of:

- Telephone lines
- Distribution lines
- Transmission lines
- Cable television
- Street lighting
- SAG (lowest point to ground)
- Clearances on construction sites

The unit also provides a safer way to measure cable heights on highly congested roadways. Additionally the Cable Height Meters offer an easy way to check whether the device has remained in calibration since its purchase date. Switching to 'CAL' mode also allows the instruments to be used indoors.

## FEATURES AND BENEFITS

- Quick Measurement - saves time and money
- Inherently safe - No physical connection to cables or wires required to obtain measurement
- Extremely Accurate - measures to accuracy of 0.5\%
- Ease-of-use - Simple, three-button operation ensures fast, effective measurements with a minimum of operator training
- Compact size - Its light-weight and hand-held portability allows easy transport and multiple measurements
- Maintenance-free - proven reliability in the field, no adjustments required


## SPECIFICATIONS

| Ambient Temperature $=20^{\circ} \mathrm{C}$ | 190 | 300 | 300E | 600 | 600E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Range ( 25 mm cable min) | 3-15m (10-50ft) | 3-15m (10-50ft) | 3-23m (10-75ft) | 3-15m (10-50ft) | $3-23 m$ (10-75ft) |
| Range ( 12 mm cable min) | 3-15m (10-50ft) | $3-15 \mathrm{~m}(10-50 \mathrm{ft})$ | 3-15m (10-50ft) | $3-15 \mathrm{~m}$ (10-50ft) | $3-15 \mathrm{~m}(10-50 \mathrm{ft})$ |
| Range ( 5.5 mm cable min) | $3-12 \mathrm{~m}$ ( $10-40 \mathrm{ft}$ ) | 3-12m (10-40ft) | $3-12 m(10-40 \mathrm{ft})$ | $3-12 m(10-40 \mathrm{ft})$ | $3-12 m(10-40 f t)$ |
| Range ( 2.5 mm cable min) | 3-10m (10-33ft) | $3-10 \mathrm{~m}$ (10-33ft) | $3-10 \mathrm{~m}$ (10-33ft) | $3-10 \mathrm{~m}$ (10-33ft) | $3-10 \mathrm{~m}(10-33 \mathrm{ft})$ |
| No. of wires measured | 1 | 3 | 3 | 6 | 6 |
| Accuracy | 0.5\% $\pm 2$ digits |  |  |  |  |
| Resolution (range <10m) | 5 mm |  |  |  |  |
| Resolution (range $>10 \mathrm{~m}$ ) | 10 mm |  |  |  |  |
| Minimum gap between wires | 150 mm |  |  |  |  |
| Operating Temperature Range | $-10^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C}$ |  |  |  |  |
| Battery Life (Long Life Alkaline type) | 50,000 measurements |  |  |  |  |
| Measurement units | Imperial (feet/inches) or metric (meters) |  |  |  |  |
| Auto power off delay | 3 minutes |  |  |  |  |
| Dimensions | $205 \mathrm{~mm} \times 100 \mathrm{~mm} \times 70 \mathrm{~mm}$ (8.5 inches $\times 4$ inches $\times 3$ inches) |  |  |  |  |
| Weight | 0.5 kg (1.1lb) |  |  |  |  |

PERFORMANCE


ORDERING INFORMATION

| Item | Order No. |
| :--- | :---: |
| Cable Height Meter, 1 Wire, Range $15 \mathrm{~m}(50 \mathrm{ft})$ | CHM190 |
| Cable Height Meter, 3 Wire, Range $15 \mathrm{~m}(50 \mathrm{ft})$ | CHM300 |
| Cable Height Meter, 3 Wire, Range $23 \mathrm{~m}(75 \mathrm{ft})$ | CHM300E |
| Cable Height Meter, 6 Wire, Range $15 \mathrm{~m}(50 \mathrm{ft})$ | CHM600 |
| Cable Height Meter, 6 Wire, Range $23 \mathrm{~m}(75 \mathrm{ft})$ | CHM600E |
| Rubber Boot | RB |
| Holster | HOL |

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