

Digital laser Measure

- **Measurement Range:** The minimum and maximum distances the laser can measure (e.g., 2" to 200' or 0.05m to 60m).
- **Accuracy:** How precise the measurement is (e.g., $\pm 1/16"$ or $\pm 2\text{mm}$).
- **Laser Class:** Typically, Class II (<1mW output, 630-670nm wavelength), safe for general use.
- **Units of Measurement:** Selectable between feet (ft), inches (in), meters (m), or combinations (ft+in).
- **Display:** LCD screen, often with backlighting, reverse contrast for visibility, or even a color camera display for bright conditions.
- **Power:** Battery type (Li-ion, AA) and life (e.g., 3,000+ measurements) or USB-C charging.

Functions:

- **Single/Continuous Measurement:** Real-time tracking.
- **Area/Volume Calculation:** Calculates dimensions for rooms.
- **Pythagorean (Indirect) Measurement:** Measures height or length indirectly.
- **Bluetooth Connectivity:** Syncs with smartphone apps for floor plans, data storage, and sharing.
- **Memory:** Stores recent measurements.

Physical Features: Traditional tape blades (for 2-in-1 models), belt clip, durable casing (PC/ABS, rubber), and portability.

Digital colorimeter for color measurement

Key Specification Categories

- **Wavelength Range & Filters:** Specific wavelengths (e.g., 420, 520nm) or a range (400-700nm), often with multiple filters.
- **Light Source:** LED, Pulsed Xenon Lamp, Tungsten.
- **Detector:** Silicon Photocell/Photodiode.
- **Accuracy & Repeatability:** Measured in Absorbance (e.g., ± 0.03 Abs) or color difference (ΔE^*ab) (e.g., < 0.07).
- **Resolution:** Display precision (e.g., 0.01 Abs).

Physical & Power:

- **Dimensions & Weight:** For portability (e.g., 102x217x63mm, 550g).
- **Power:** Battery (AA, Li-ion) or AC adapter.
- **Display:** Backlit LCD, Dot-matrix, showing various values.
- **Durability:** IP rating (waterproof), rugged case, operating temp.

Functionality & Data:

- **Modes:** Absorbance (ABS), % Transmission (T), Concentration, Kinetics, various Color Spaces (CIE L*a*b*, XYZ, etc.).
- **Data Storage:** Internal memory (e.g., 1000+ samples) with time/date stamp.
- **Connectivity:** USB, Bluetooth, RS-232 for data export.
- **Software:** Included software for analysis, custom programs.

Sample Handling

- **Cuvette/Sample Holder:** For liquids, solids, pastes; compatibility (1-inch, 16mm vials).
- **Illumination/Viewing:** Diffuse/Wide-area (d/8) or $0^\circ/180^\circ$.

Digital coating thickness gauge

Key Specifications

- **Type:** Contact (lever/spindle), Ultrasonic (for through-coating/material), Laser, or Eddy Current.
- **Range:** The minimum and maximum thickness you need to measure (e.g., 0-10mm, 0-220mm).
- **Resolution:** The smallest increment the gauge can display (e.g., 0.01mm, 0.001mm).
- **Accuracy:** How close the measurement is to the true value (e.g., $\pm 10\mu\text{m}$, $\pm 1\% \text{ H} + 0.1\text{mm}$).
- **Measuring Force:** The pressure applied during measurement, crucial for soft materials (e.g., $\leq 1.5 \text{ N}$).
- **Display:** Digital LCD for easy reading, often with backlight.
- **Features:** Data Hold, Zero/Absolute settings, MM/Inch conversion, Data Output (USB/Bluetooth), Auto Power Off, Preset.
- **Anvil/Contact Points:** Ceramic, steel, or other materials, often interchangeable for different surfaces