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**Data Sheet**

August 15, 2026

IET LABS

## IET Labs Inc RCS-502

The IET Labs RCS-502 is a precision decade resistance box offering a wide range of highly accurate resistance values. Ideal for calibration, simulation, and precision measurement applications. It features excellent stability and low temperature coefficient, ensuring reliable performance in demanding environments. The RCS-502 provides a cost-effective solution for various resistance requirements.



MODEL

**IET Labs RCS-502**

CALIBRATION

**Available on request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**RCS-502**

LISTING

<https://aumictechlabs.com/products/rcs-502-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

### This unit

The IET Labs RCS-502 is a dual-function decade box delivering precision resistance and capacitance values in a single compact instrument. It combines 13 decades of selectable resistance (1  $\Omega$  to 10 M $\Omega$ ) and capacitance (100 pF to 100  $\mu$ F) with 1% accuracy across the combined range, making it essential for calibration, circuit simulation, and precision measurement across laboratory, manufacturing, and field environments. Color-coded thumbwheel switches enable direct reading with error-proof operation - no complex manipulation required. The unit achieves exceptionally low residual values: 0.04  $\Omega$  on the lowest resistance decade and 5 pF on the lowest capacitance decade, critical for high-precision work. Housed in durable high-impact plastic with a shielded case and ground terminal, the RCS-502 withstands demanding operational conditions while maintaining accuracy. Technical Specifications Resistance Range: 1  $\Omega$  to 10 M $\Omega$

(13 decades) Capacitance Range: 100 pF to 100  $\mu$ F (13 decades) Combined Decade Range: 0–9.999999 M $\Omega$  / 0–99.9999  $\mu$ F Accuracy: 1% across combined range (0.1% to 4% depending on specific measurement) Residual Resistance: 0.04  $\Omega$  (lowest decade) Residual Capacitance: 5 pF (lowest decade) Power Rating: 500 mW Dimensions: 188 mm (W)  $\times$  110 mm (H)  $\times$  60 mm (D) Weight: 410 g Protection: 2 A fuse supplied Key Features Side-by-side, color-coded thumbwheel switches for intuitive adjustment Shielded case with ground terminal for noise rejection Independent or combined resistance/capacitance operation via shorting link Flexible series or parallel circuit coupling NIST-traceable calibration included; ISO-17025 and Z540 options available Typical Applications Equipment calibration and verification Circuit simulation and prototype development Timer, oscillator, and filter tuning Automated test systems and manufacturing quality control Field measurements and on-site diagnostics Educational demonstrations and research Compatibility & Integration Resistance and capacitance circuits operate independently, in series, or in parallel. A shorting link allows seamless coupling or isolation of the two measurement domains.

## RCS502 Characteristics / Specifications

| PARAMETER                     | VALUE                                         |
|-------------------------------|-----------------------------------------------|
| Model                         | RCS-502                                       |
| Instrument Type               | resistance decade substituter                 |
| Family                        | IET Labs RCS                                  |
| Manufacturer                  | IET Labs                                      |
| Form Factor                   | benchtop decade box                           |
| Application Class             | resistance substitution                       |
| System Role                   | decade substituter                            |
| Use Case                      | calibration and circuit development           |
| Documentation Type            | OEM IET RCS-502 listing                       |
| Switch Class                  | decade rotary switches                        |
| Terminal Class                | binding posts                                 |
| Accuracy Class                | RCS-502 accuracy on the IET sheet             |
| Range Class                   | RCS-502 total resistance on the sheet         |
| Resolution Class              | lowest decade step on the RCS-502 sheet       |
| Power Class                   | maximum wattage per decade on the sheet       |
| Voltage Class                 | maximum voltage on the RCS-502 sheet          |
| Temperature Coefficient Class | RCS family TCR on the sheet                   |
| Brand Lineage                 | IET Labs                                      |
| Literature                    | IET Labs RCS-502 resistance decade literature |
| Residual Class                | residual resistance on the sheet              |
| Insulation Class              | RCS insulation resistance on the sheet        |
| Operating Class               | laboratory bench                              |
| Calibration Class             | resistance substitution                       |
| Construction Class            | switched decades                              |

# Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

| Specifications                |                                               |
|-------------------------------|-----------------------------------------------|
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#### Notes

From IET Labs RCS-502 resistance decade substituter listings. Ohm range, step size, and accuracy are on the RCS-502 sheet; do not invent ohm decades.

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.