AE·MIC
AEMIC CORPORATION,

# Model AE-162D Ultra-high Speed and High Accuracy, Key Switch Type Digital Resistance

Optimum for the on a sorting machine, taping machine and painting conveyor for chip, MELF and lead type resistor of D,F,G,J,K and M class.

- ■High stability by the improvement of noise immunity for the isolated circuit between analog circuit and digital circuit.
- ■This device is correspond to the minimum chip.(Low measurement power force)
- ■Ultra-high speed : 0.7msec.【TYP】
- ■High accuracy and high stability by the measuring method rejected thermoelectromotiv force.
- ■High stability by the improvement of noise immunity.
- ■Available to make the ultra-high speed and stable measurement by the setting function of average on measuring value for each range.
- ■Range of measurement for absolute value : 0.00mΩ～200.00MΩ
  for % : 5mΩ～109MΩ【±99.99%】
- ■Available to select the function for contact check before or after the measurement or function of non-contact check.
- ■RS-232C and Centronics interface are built-in as standard equipment.【GP-IB is option】
- ■Transfer function of setting data is built-in as standard equipment.
  (Available to transfer the same setting data to another set of AE-162D)
- ■The checking circuit of the abnormal measuring current and voltage is built-in.


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# Model AE-162D Ultra-high Speed and High Accuracy, Key Switch Type Digital Resistance Checker

## SPECIFICATIONS

### Measuring range and Accuracy (at 23℃±5℃)、180days after calibration【1year after calibration : 2times】

| Measuring Range | Test Current | Accuracy* | |
|---|---|---|---|
| | | SLOW | FAST |
| 5mΩ～100mΩ | 100mA | within±0.02%±2α±2d | within±0.03%±3α±2d±[2/(1+n)]d |
| 100.1mΩ～ 1Ω | 100mA | within±0.02%±α±1d | within±0.02%±α±2d±[2/(1+n)]d |
| 1.001Ω～ 10Ω | 50mA | | |
| 10.01Ω～ 100Ω | 10mA | within±0.02%±1d | within±0.02%±2d±[1/(1+n)]d |
| 100.1Ω～ 1kΩ | 5mA | | |
| 1.001kΩ～ 10kΩ | 0.5mA | | |
| 10.01kΩ～100kΩ | 50μA | | |
| 100.1kΩ～ 1MΩ | 5μA | | within±0.05%±2d±[1/(1+n)]d |
| 1.001MΩ～ 10MΩ | 0.5μA | within±0.03%±1d | within±0.2%±4d±[1/(1+n)]d |
| 10.01MΩ～109MΩ | 0.05μA | within±0.1%±2d | --- |

d : digit n : Averaging time(msec.), α=[100/setting value(mΩ)]×0.01%, In case of the measurement of absolute value, add ±1digit,
* The above accuracy is under the condition shielded completely.

| | |
|---|---|
| Test terminal open voltage | below 15V |
| EOC[End of comparison]pulse width | 1～250msec. or continuative |
| Measuring method | 2 or 4 terminal measurement |
| Comparator set range | 4 1/2 digit(20000) both for high and low limit / %range:±99.99%、 |
| Operation condition | Temp.:0℃～+50℃、 Humidity:below 80% |
| Power supply | AC85V～265V、50～60Hz、about 50VA |
| Outer dimension | 333(W)×99(H)×300(D)mm【excluding protruding parts such as rubber legs, etc.】 |
| Weight | about 3.5kg |

### Measuring time

| Remote start | | Free running | |
|---|---|---|---|
| SLOW | FAST | SLOW | FAST |
| About 18msec.～400msec. | About 0.7msec.～400msec. | About 30～2times/sec. | About 60～2times/sec. |

### Option

- GP-IB
- Data cable
- Short termination(Zero ohm standard resistor)

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