



**ohmic instruments co.**

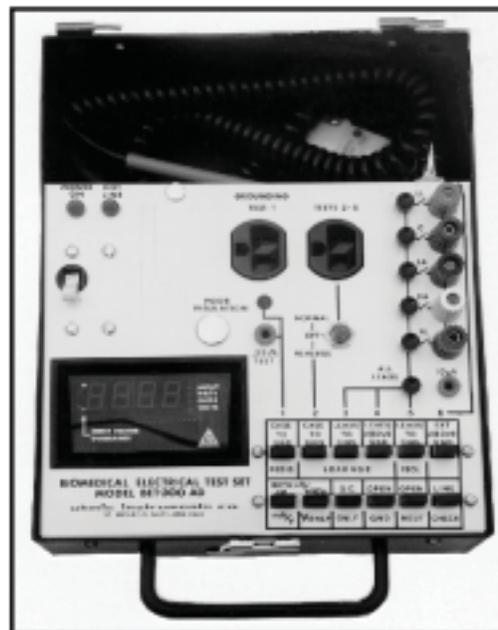
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**INDUSTRIAL & ENVIRONMENTAL SENSORS, INSTRUMENTS & CONTROLS SINCE 1969**

**BIOMEDICAL ELECTRICAL SAFETY TEST SET - BET-300AD(L)  
TEST ELECTRICAL EQUIPMENT & MEDICAL INSTRUMENTS TO AAMI, UL & NFPA CODES**

- **LEAKAGE CURRENT: 0 to 1999  $\mu$ A and 0 to 19.99 mA**
- **GROUND RESISTANCE: 0 to 19.99  $\Omega$**
- **MEETS AAMI & UL STANDARDS**
- **OPEN GROUND & NEUTRAL TEST SWITCHES**
- **PATIENT LEAD JACKS**
- **LEAD SELECTOR SWITCHES**
- **OPTIONAL ISOLATED POWER SYSTEM TESTS**
- **3-1/2 DIGIT LED DISPLAY**
- **INTERNAL CIRCUIT PROTECTION FUSES**
- **OVERLOAD PROTECTION FOR TEST LOAD**
- **15 AMP THERMAL BREAKER**
- **LINE VOLTAGE, POLARITY AND RECEPTACLE GROUND TEST**
- **POLARITY SWITCH FOR TEST RECEPTACLE**
- **EXTERNAL TEST PROBE**
- **ALUMINUM CASE, ACCESSORY BIN & HANDLE**
- **COMPACT & PORTABLE**



**INSURE BIOMEDICAL INSTRUMENTATION & EQUIPMENT MEET SAFETY CODES**

OHMIC Instruments' Model BET-300AD performs electrical safety tests for compliance to AAMI, UL-544 and NFPA-99 standards. This Biomedical Electrical Test Set was engineered and field-tested by hospital and biomedical engineers for ease of operation, ruggedness and portability. The unit performs safety tests on electrical equipment and instrumentation including grounded and isolated power supplies (Model BET-300ADL). A digital auto-ranging readout, and function indicator lights quickly indicate fault and electrical risk conditions. The meter simulates probable fault conditions such as loss of equipment ground and reverse power wiring.

Functions include leakage current, voltage above or reference to ground and resistance tests with respect to ground. In order to minimize any shock hazard to the operator and limit high frequency interference from external sources the test set is earth grounded. Current leakage tests are performed utilizing the AAMI standard

load which provides a flat response for frequencies from DC to 1KHz and -20dB per decade greater than 1KHz. The equipment under test is simply plugged into one of two front panel test receptacles for either the grounding resistance/poor insulation or current leakage tests. An external probe connected to a coiled cordset is supplied for external chassis leakage and resistance tests. Five color coded jacks enable the simultaneous leakage testing of patient leads. Each lead adapter is supplied with an individual switch. BET-300ADs are equipped with a built in 10 $\mu$ A reference current source and a 0.25 $\Omega$  resistance standard for verifying the operation and calibration of the unit. The optional Model BET-300ADL indicates fault currents in isolated systems.

BET-300ADs provide the standard electrical safety testing required for maintenance and biomedical departments in health care facilities. Each unit is supplied with a certificate of calibration and backed by OHMIC's engineers.

**WARRANTY:** All products manufactured by OHMIC Co. are warranted to be free of defects in material and workmanship for one year after delivery. Any equipment found to be defective within this period will be repaired or replaced free of charge.

## SPECIFICATIONS MODEL BET-300 AD(L)

### LEAKAGE CURRENT

|                     |   |
|---------------------|---|
| RANGE               | 0 to 1999 $\mu$ A and 0 to 19.99 mA   |
| ACCURACY            | $\pm$ 2% of Full Scale  |
| TEST LOAD IMPEDANCE | AAMI Load, 1K $\Omega$ $\pm$ 5%; Response Flat to -3dB at DC to 1KHz and -20dB per Decade from 1 to 10KHz |
| CALIBRATION TEST    | 10 $\mu$ A dc Regulated Current Source  |

### GROUNDING RESISTANCE

|                  |                         |
|------------------|-------------------------|
| RANGE            | 0 to 19.99 $\Omega$     |
| ACCURACY         | $\pm$ 3% of Full Scale  |
| TEST CURRENT     | 10 mA dc                |
| CALIBRATION TEST | 0.25 $\Omega$ Test Jack |

### INSULATION TEST

|              |   |
|--------------|---|
| INDICATOR    | Poor Insulation Lamp Indicates DC Resistance From GROUND to HOT and NEUTRAL < 1M $\Omega$ |
| TEST VOLTAGE | 100 Vdc, $\pm$ 5%   |
| TEST CURRENT | 250 $\mu$ A Max   |

### LINE VOLTAGE TEST

|          |          |
|----------|----------|
| ACCURACY | $\pm$ 3% |
|----------|----------|

### LINE ISOLATION TEST (BET-300ADL)

|               |             |
|---------------|-------------|
| FAULT CURRENT | 0 to 5.5 mA |
|---------------|-------------|

### MECHANICAL/ELECTRICAL

|                       |  |
|-----------------------|--|
| TEST RECEPTACLES      | Heavy Duty Hospital Grade (Only Energized for Leakage Tests)                       |
| LINE POWER            | 120 Vac $\pm$ 10%, 50-60Hz   |
| DIGITAL DISPLAY       | 3-1/2 Digit Red LED, 0.5" High   |
| OVERLOAD PROTECTION   | 2-Pole, 15A Thermal Trip Circuit Breaker   |
| LINE CORD             | 6 Ft., Supplied with Standard 3-Prong Plug   |
| EXTERNAL TEST PROBE   | Hand Held with 4 Ft. Coiled Cord for External Chassis Leakage and Resistance Tests |
| PATIENT LEAD ADAPTORS | Five Color Coded Screw Terminal/Banana Jacks                                       |
| CASE DIMENSIONS       | 9" x 11" x 5"  |
| WEIGHT                | 10 Lbs. Net, 14 Lbs. Shipping  |

**ENGINEERING SUPPORT:** OHMIC Instruments Co. designs and manufactures a full line of environmental and bio-medical sensors, instruments and controls. Many of our products are custom designed to meet specific requirements. Our engineers will be pleased to discuss your application.



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