

**TECHNICAL MANUAL**

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND**

**GENERAL SUPPORT MAINTENANCE MANUAL**

**DIGITAL  
VOLTMETER  
AN/GSM-64A**

TECHNICAL MANUAL }  
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HEADQUARTERS  
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Operator's, Organizational, Direct Support, and  
 General Support Maintenance Manual  
 DIGITAL VOLTMETER AN/GSM-64A

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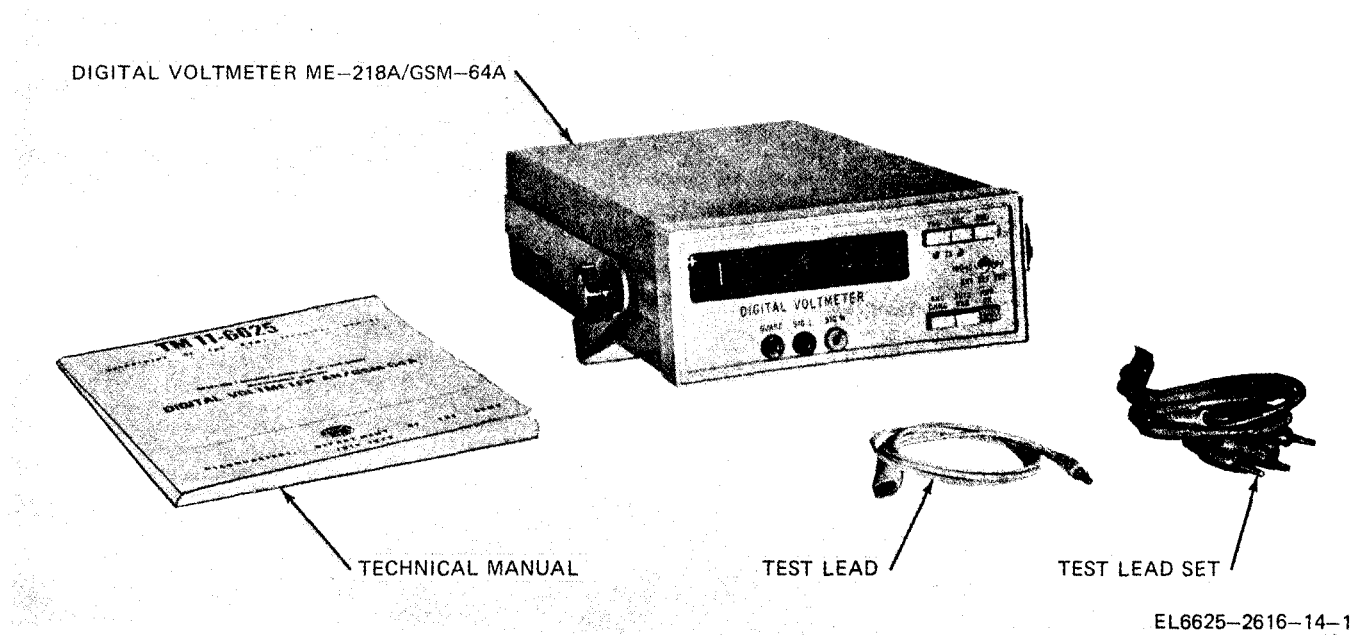


Figure 1-1. Digital Voltmeteter AN/GSM-64A.

## CHAPTER 1

### INTRODUCTION

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#### Section I. GENERAL

##### 1-1. Scope

This manual describes Digital Voltmeter AN/GSM-64A and covers its installation and operation, operator, organizational, and general support maintenance. It includes operation under usual conditions, cleaning, and inspection of the equipment, replacement of parts available to the operator and organizational repairman, and instructions appropriate to general support for troubleshooting, testing, calibration, and repairing the equipment.

##### 1-2. Indexes of Publications

*a. DA Pam 310-4.* Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

*b. DA Pam 310-7.* Refer to DA Pam 310-7 to determine whether there are modification work orders (MWO'S ) pertaining to the equipment.

##### 1-3. Forms and Records

*a. Reports of Maintenance and Unsatisfactory Equipment.* Use equipment forms and records

in accordance with instructions given in TM 38-750.

*b. Report of Packaging and Handling Deficiencies.* Fill out and forward DD Form 6 (Report of Packaging and Handling Deficiencies) as prescribed in AR 700-58 (Army) /NAVSUP PUB 378 (Navy) /AFR 71-4 (Air Force)/ and MCO P4030.29 (Marine Corps).

*c. Discrepancy in Shipment Report (DISREP) (SF 361).* Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-38 (Army) /NAVSUP PUB 459 (Navy)/AFM 75-34 (Air Force)/ and MCO P4610.19 (Marine Corps).

*d. Reporting of Equipment Publication Improvements.* The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications) and forwarded direct to Commander US Army Electronics Command, ATTN: AMSEL-MA-C, Fort Monmouth, N.J. 07703.

#### Section II. DESCRIPTION AND DATA

##### 1-4. Purpose and Use

*a.* Digital Voltmeter AN/GSM-64A (fig. 1-1) is a five-digit digital voltmeter used to measure dc voltages in three ranges from  $\pm 0.0001$  volt to  $\pm 1000.0$  volts, and dc voltage ratio (with  $\pm 1$  volt to  $\pm 10$  volts reference input) in three ranges from 000,000 to  $\pm 11999.9$  percent or (with  $\pm 10$  volts to  $\pm 100$  volts reference input) in three ranges from 00.0000 to  $\pm 1199.99$  percent.

*b.* Although not part of the basic equipment, AN/GSM-64A will internally accept AC/DC conversion, data output, and remote control ac-

cessories. The instrument will also accept rack-mounting adapters for mounting in a standard 19-inch mounting rack.

##### 1-5. Technical Characteristics

Dc voltage measurements:

|                 |       |                                          |
|-----------------|-------|------------------------------------------|
| Ranges          | ----- | 00.0000 to $\pm 11.9999$ volts           |
|                 | ----- | 000.000 to $\pm 119.999$ volts           |
|                 | ----- | 0000.00 to $\pm 1000.0$ volts            |
| Ranging         | ----- | Automatic or manual                      |
| Polarity        | ----- | Automatic                                |
| Accuracy        | ----- | $\pm 0.01\%$ of reading or $\pm 1$ digit |
| Resolution      | ----- | $\pm 1$ digit                            |
| Input impedance | ----- | Greater than 10 megohms                  |