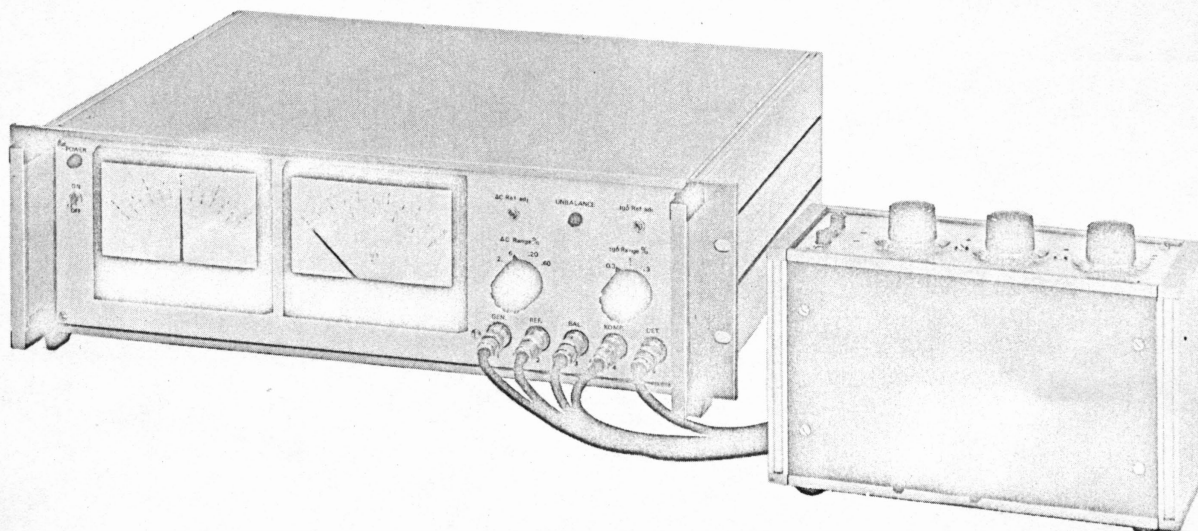


DANBRIDGE
DENMARK

new product information



1 MHz

CAPACITANCE DEVIATION BRIDGE TYPE CDB 1

The CDB 1 is a self-contained capacitance bridge with built-in standards for 1 MHz measurements of capacitance and Dissipation Factor on capacitors in the range from 0.01 pF to 10 nF.

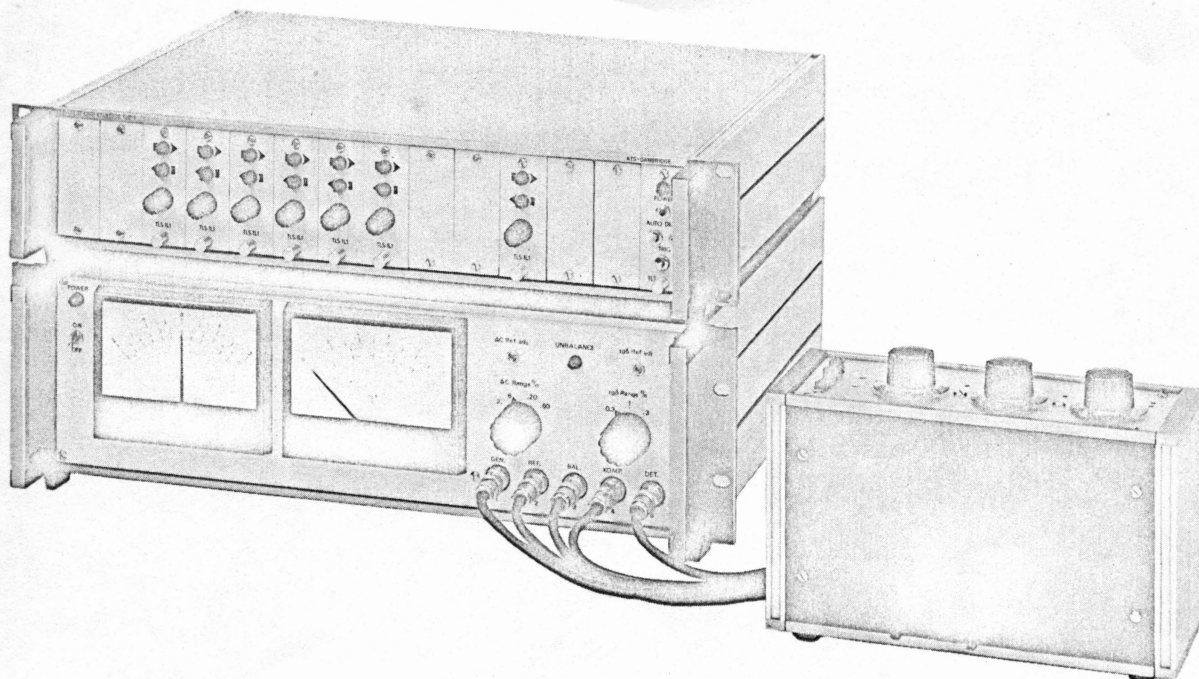
Capacitance deviation (%) and Dissipation Factor (absolute) are indicated on separate panel meters. Analog outputs are provided for both meters for use with classifying equipment, e.g. the Danbridge TLS 1 Test Limit Selector.

A four-terminal bridge circuit is employed to eliminate lead errors, and in order to obtain high measuring accuracy the complete bridge circuit with standards and measuring terminals is a separate module connected to the main instrument by coaxial leads. This module can

be placed as convenient for manual sorting applications and provision is made for connecting various test fixtures as required for different components.

Provision is made for balancing stray capacitance across the test fixture and a fifth terminal, ground, is provided for screening purposes when required.

The CDB 1 Capacitance Deviation Bridge is designed for continuous operation for measuring and sorting capacitors in production quantities. Obviously the Bridge needs calibration but the need for recalibration is reduced to a minimum - i-c's are used intensively ensuring high reliability and stability.



Both for manual and automatic applications the Danbridge TLS 1 Test Limit Selector facilitates classification of capacitors. The setup shows the CDB 1 together with a TLS 1 with 7 TLS 1L1 Limit Modules. 6 TLS 1L1 Limit Modules are used for classification according to capacitance deviation and a single Limit Module rejects capacitors with

Dissipation Factor higher than a preset limit. The limits can be preset at any value within full scale deflection of the meters and any number of modules up to a maximum of 13 can be plugged into the TLS 1. Relay contact closures and voltage outputs are available in addition to the light signals on the individual Limit Modules.

PRELIMINARY SPECIFICATIONS

TEST FREQUENCY

1 MHz $\pm 0.1\%$

TEST VOLTAGE

30 mV on 10 nF range, 300 mV on 1 nF range, and 3 V on 100 pF range.

CAPACITANCE RANGE

3 ranges: 0 - 111 pF, 0 - 1.11 nF, 0 - 11.1 nF.

ACCURACY OF STANDARDS

$\pm 0.1\%$ of setting $\pm 0.01\%$ of maximum capacitance on the two lowest ranges, $\pm 1\%$ of setting on highest range.

CAPACITANCE DEVIATION

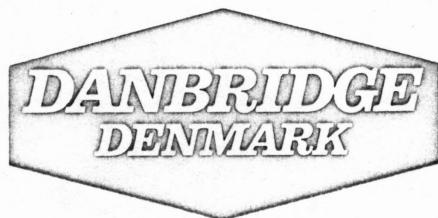
4 ranges: $\pm 2\%$, $\pm 6\%$, $\pm 20\%$, and $\pm 60\%$ f.s.d.
Deviation Accuracy: $\pm 3\%$ of f.s.d.
Resolution: 0.1%

DISSIPATION FACTOR

4 ranges: 0 - 0.3%, 0 - 1%, 0 - 3%, and 0 - 10%.
Accuracy: $\pm 3\%$ of f.s.d.
On 10 nF range $\pm 0.1\%$ absolute $\pm 3\%$ of f.s.d.
Resolution: 0.01%.

ANALOG OUTPUTS

1 volt DC for f.s.d. on meters
Min. load: 10 k Ω .



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**WE RESERVE THE RIGHT TO DEVIATE
FROM THIS SPECIFICATION**