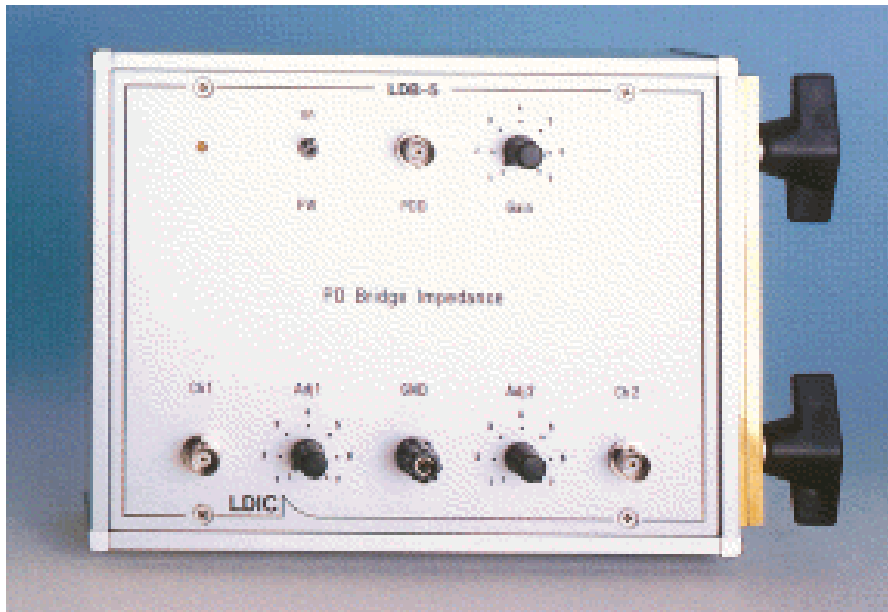


BRIDGE IMPEDANCE

LDB-5



The bridge impedance LDB-5 serves for the design of the bridge circuit according to IEC 60270 or DIN VDE 0434, respectively.

The advantage of this circuit is the improvement of the signal-to-noise ratio, resulting in a higher measuring sensitivity compared to the conventional straight PD circuit. This allows PD detection also in a very noisy environment. Thereby PD measurements are not only possible in well screened test laboratories, but even on-site in power plants and sub-stations.

Optimal measuring conditions are obtained if both, the measuring and reference arm, are identical, i.e. the capacity of the reference arm should be as close as possible to the capacity of the test object. Also by replacing the reference object by a coupling capacitor a sufficient signal-to-noise ratio can be obtained, even if the capacity is not fully adapted to the test object. It should be noticed that the reference arm must be PD-free up to the maximum test voltage.

The bridge impedance has to be connected between the ground leads of both, the test object and reference object. The signal can be transmitted to the PD detector either a BNC cable or via a fibre optic link.

Specification

Maximum AC current for each channel	5 A
Electrical signal transmission	50 Ω - BNC-cable or fibre-optic link
Compensation ratio of the capacitive non-symmetry of the test and reference object	1 : 5
Common mode rejection at symmetrical bridge circuit	> 30 dB
Operating voltage	9 V battery (6LR61)