

CALIBRATOR TESTER

LDT-5



The CALIBRATOR TESTER LDT-5 was designed for measuring the pulse charge PD calibrators. The device is easy to handle. The measured pulse charge is indicated by a LCD-display.

The calibrator under test has to be connected to the input jack "IN CAL" via a BNC-cable of 1 m maximum length. The integrated signal at the output "OUT SCOPE" may be observed by means of a digital oscilloscope, which should include an internal readout option for the peak value.

The polarity switch "+/-" will be used for adapting the LDT-5 to the pulse polarity of the PD calibrator under test.

The measuring range of the LDT-5 may be chosen between either 5...50 pC or 50...500 pC, which is indicated by the measuring range switch.

The device is ready for operation after switching on by the bottom "POWER", which is indicated by both LED (red and green). If only the red LED is bright, the internal batteries become weak and have soon to be replaced. Please consider the correct polarity of the new installed batteries.

Using the indication by the digital display, the measuring deviation is less than $\pm 3\%$. If a measuring deviation within $\pm 1\%$ is desired, the peak detector of an oscilloscope must be used.

Scale factors:

- In the range of 5...50 pC an output amplitude of 1 V corresponds to a charge of 10 pC.
- In the range of 50...500 pC an output amplitude of 1 V corresponds to a charge of 100 pC.

Parameters:

Measuring ranges	5 to 50 pC (10 pC / 1 V) 50 to 500 pC (100 pC / 1 V)
Pulse polarity	positive and negative
Measuring accuracy	
- by measurement via peak detector of oscilloscope	$\pm 1\%$, $\pm 0,5$ pC
- by indication via the internal digital display	$\pm 3\%$, ± 1 pC
Pulse repetition rate	
- maximum	approx. 800 Hz
- minimum	approx. 50 Hz
Indication	internal LCD-display external scope
Power supply	3 x 9 V batteries (6LR61)