

REFERENCE CALIBRATOR

LDC-5/R



Field of application

The REFERENCE CALIBRATOR LDC-5/R generates well producible charge pulses of high accuracy where the pulse magnitude can be adjusted continuously between 1 pC and 2000 pC. The main field of application is the calibration of PD calibrators. For this purpose a complex calibrating system can be delivered, which includes beside the LDC-5/R additionally the PULSE-INTEGRATOR LDC-5/E and a precisely oscilloscopic pulse peak detector.

Operating instruction

After the power has been switched on by "Pow. On" the LDC-5/R is immediately ready for operation and the charge pulses appear at the BNC-jack "Charge Pulse". The pulse repetition rate amounts approx. 100 Hz. If requested, this value can be changed to 120 Hz. It can be synchronized by the power frequency, if the photo diode "Sync." is radiated by a power frequency supplied lamp. After setting the suitable measuring range by the switch "Range" the desired pulse charge magnitude can be adjusted fine by the potentiometer "Adjust". The internal stop pulse can be displayed by connecting a fast oscilloscope to the BNC jack "Step Pulse". For assessment the accuracy of the internal digital display a digital voltmeter can be connected to the BNC jack "DC Voltage".

If a battery sign appears on the digital display, the battery on the rear of the digital display is discharged and has to be replaced. Mind the correct polarity of the inserted batteries. If the maximum charge pulse magnitude of the corresponding measuring range (20 pC; 200 pC; 2000 pC) is not longer obtained, then also the other three batteries have to be substituted. Mind the correct polarity if new batteries are inserted.

Technical parameters

Measuring ranges	2 ≤ q < 20 pC 20 ≤ q < 200 pC 200 ≤ q < 2000 pC
Adjustment	Resolution < 1 % of the selected measuring range
Uncertainty	< ± (0,03 q + 0,5 pC)
Internal calibrating capacitor	(100 ± 0,5) pF
Rise time of the internal stop pulse	< 10 ns
Pulse repetition rate	100 Hz (if requested, this value can be changed to 120 Hz)
Batteries	9 V (type 6LR61) - 4 pieces
Current consumption	< 30 mA