OPTICAL RECEIVER

LDO-5

The Optic Receiver LDO-5 is applicable for potential-free signal transmission from the DIFFERENTIAL LEMKE PROBE LDP-5 to the scope for monitoring PD events. It converts the optical signals derived from the LDP-5/BOA into electrical signals useable for post-processing with an additional scope or a XY-recorder.

In order to install the fibre optic transmission link, the “BNC-Opto-Adaptor BOA” has to be connected to the output “CHARGE” of the PD Probe LDP-5. One end of the fibre optic cable has to be connected to this adaptor BOA, whereas the other end has to be connected to the input “FOL” of the Optical Receiver LDO-5. This device contains a pulse amplifier and a peak detector.

For monitoring of PD events, the scope has to be connected to the output “Scope” of the LDO-5, where a DC coupling and a sensitivity of 0.5 V/Div. is recommended. Furthermore, the LDO-5 contains an output jack “Recorder” for recording of the time dependence of the PD level. The maximum output voltages of the LDO-5 are about 4 Volt.

For optimum working condition the potentiometer “Offset” should be adjusted in such a way, that a voltage offset of 0.5 V is obtained at the output “Scope” of the LDO-5 under operation condition, i.e. if the fibre optic cable is connected to the LDP-5, which has to be switched on.

The LDO-5 is powered by a 9 V battery, type 6LR61. The current consumption is less than 10 mA. The battery has to be installed at the bottom of the LDO-5.