



## ROITHNER 450

- **Blue Laser Pointer**
- **450 nm, <5 mW**
- **Direct emitting laser diode**
- **Laser Class 3R**



### Description

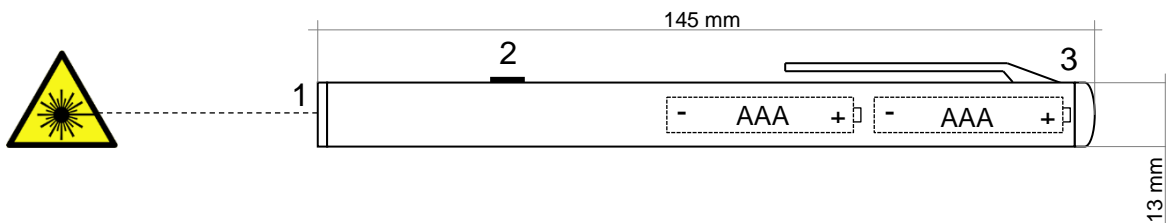
**ROITHNER 450** is a diode laser pointer emitting at typically **450 nm** with rated output power of **<5 mW**, utilizing a **direct emitting 450 nm laser diode**. An integrated **Automatic Power Control (APC)** unit with direct 450 nm feedback loop ensures excellent output power stability. **ROITHNER 450** features an indicator LED for safe operation, and is run by **2 x 1.5V AAA alkaline batteries**. It comes in a polished chrome metal housing. → **Transport case and batteries included**

### Specifications

Parameter	Values			Unit
	Min.	Typ.	Max.	
Wavelength	440	450	460	nm
Output Power	3		5	mW
Laser Class	3R			
Operating Temperature	10		60	°C
Operating Humidity (rel.)	40		70	%
Storage Temperature	-20		60	°C
Body Material	brass, polished chrome finish			
Lens Material	PMMA			
Weight (incl. batteries)	70			g
Power Source	2 x 1.5 V AAA alkaline batteries			



### Outline and Components



No.	Function
1	laser beam outlet
2	laser push button (ON/OFF)
3	battery compartment



## Safety Instructions

- **This laser is intended for pointing out details on objects/blackboards during lecturing**
- **Laser radiation, direct and indirect can be dangerous to the naked eye**
  - Before operating the laser pointer make sure nobody is in or near the projection area
  - Do not look into the laser beam
  - Do not point the laser into the sky
  - Do not point the laser towards other humans or animals
  - Do not point the laser towards vehicles
  - Do not point the laser at mirrors or any reflective surfaces
- **Do not expose the laser pointer to high temperature, moisture, or vibration**
- **Do not give the laser pointer to unauthorized persons**
- **Do keep the laser pointer out of the reach of children**
- **Do not open the device. Maintenance must only be carried out by qualified personnel**
- **This product is a class 3R laser device (EN 60825-1:2007)**



## Insertion/Replacement/Disposal of Batteries

- Do only use brand new 1.5V AAA (micro) batteries of good quality
- Make sure batteries are inserted with correct polarity
- Batteries must not be short circuit or thrown into the fire
- Do not attempt to recharge the batteries
- Do not mix batteries of different charge state



As the end user, you are required by law, to return all flat batteries to your local waste collection place. Disposal of batteries in the household waste is prohibited

→ **Protect your environment**

## Operation



### **Do never point the laser beam directly at persons/animals/vehicles**

- The laser pointer is switched ON and OFF by means of a push button (2)
- If the push button (2) is pressed, the laser radiation emits through the laser outlet (1)
- If the push button (2) is released, the laser radiation is stopped



- **This laser pointer has been designed for intermittent use. If operated over 3 minutes continually, the temperature of the laser diode may exceed critical threshold, thereby negatively affecting the laser pointers performance and life time**

## Disposal



Disposal of an unserviceable product has to be made in accordance with the relevant statutory regulations effective in your country