



PC-100 Scanning Head

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This manual provides instructions for using the product. Please read it before use.

1 Introduction

The PC-100 is a portable sensing head with TTL output. It is designed to detect LED flashes in meters, such as electricity meters. The device features a small, lightweight housing made of rugged ABS and Polycarbonate filter material. This product is compatible with all devices that have an LED flash pulser.

2 How to use

2.1 Recognizable Colors

The PC-100 has the ability to detect common LED colors, including:

- Red
- Orange
- Yellow
- Green
- Infrared

2.2 Conversion Ratio from Input to Output Pulses

The sensor's output TTL pulse is a specific ratio of the input optical pulse (LED flash). This ratio can be 1:1, 10:1, or 100:1 (input : output).

- **1:1 mode:**
In this mode, each output pulse is equivalent to 1 input optical pulse (LED flash).
- **10:1 mode:**
In this mode, each output pulse is equivalent to 10 input optical pulses (LED flashes).
- **100:1 mode:**
In this mode, each output pulse is equivalent to 100 input optical pulses (LED flashes).

The conversion ratio can be set by the user using a button. The LED color indicates the current status of the ratio, as shown in the table below.

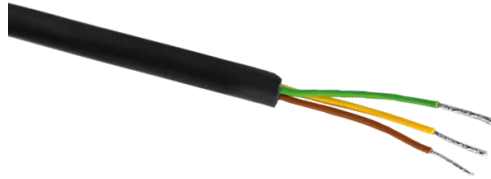
| LED Color | Ratio (Input/output) | Maximum Optical Pulse Frequency |
|-----------|----------------------|---------------------------------|
| Green | 1:1 | 10 Hz |
| Red | 10:1 | 100 Hz |
| Orange | 100:1 | 1000 Hz |



Additionally, the sensor stores the current status in its internal memory after each conversion ratio change and resumes operation with the same conversion ratio upon restart.

2.3 Connector

The PC-100 does not feature a connector, but instead utilizes a three-wire cable as outlined in the table below.



| Wire colors | Old wire colors | Wire Name | Description |
|-------------|-----------------|-----------|------------------|
| Green | Blue | POUT | Output TTL Pulse |
| Brown | Red | VCC | +5 V DC |
| Yellow | Black | GND | Ground |

The customer can order the desired connector.