

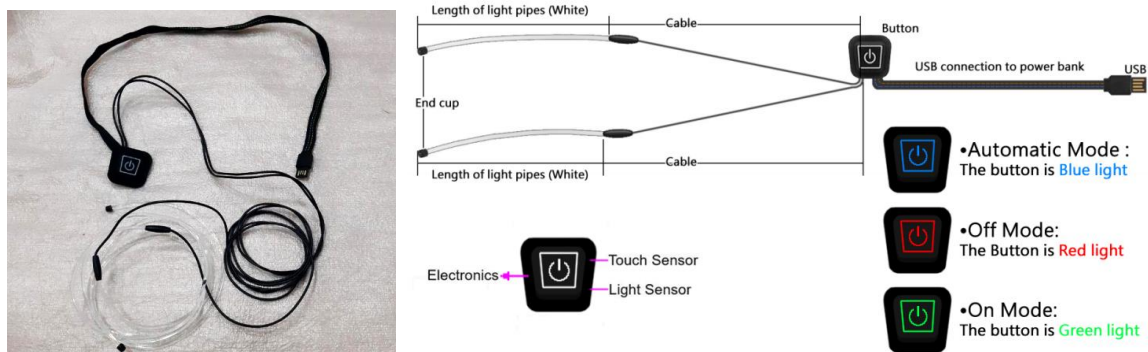
## LED lighting system with touch sensor

# System specification

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## Introduction

All the given information are based on standard system. Customization can change specifications!  
 The basis for the specification is **Aitex LED lighting system with touch sensor** as mention in Figure 1:



*Figure 1: Standard with Touch-Button and two LED light pipes*

### 1. General

**Protection class:** IP67; can be adapted to IP68

**Service life:** ≥ 15000 hours

**Function:** Automatic permanent LED light ON via USB connection to power bank. Light-guiding over the entire light guide distance.

**Washability:** if IP68 washable with 30 °C

**Operating temperature range:** -20 °C to 45 °C

**Cable length:** Length of electric cables and light guides can be customized

### 2. Light guide

**Material LED light guide:** PMMA (Polymethylmethacrylat)

**Bending radius:** 5 cm (minimal)

**Light guide Ø:** 3 mm (+ 5%)

**Light guide color:** transparent

**Max light guide length:** 80 cm

**Can be cut off /length customization:** Yes

**End cap:** possible, standard black

### 3. LED / LED Dispatcher

**LED:** high power LEDs - White Osram GW JTLPS1.EM

**LED color:** white with ~4000 K (or 5000 K possible; OQ 10.000pcs)

**Potential LED dispatcher:** 1, 2, 3, 4 pieces possible

**LED Dispatcher:** plastic molding

### 4. Electronic /Distributor

**Electronic Housing:** connection of USB cable and LED dispatcher

**Control:** enables different Light functions (permanently on or flashing; with button both functions can be enabled)

**Operation Voltage:** 5V

**Electro cables:** 2x 1,5mm

**Molding Material:** PVC

**Sealing Material:** PVC liquid, low- temperature injection method to seal

**Connection to Powerbank:** USB 2.0 Typ A

### 5. Power Consumption / Power bank

With two LED sources based on standard system approach the potential consumptions and operation times are:

**Power consumption:**

- Light ON: 240 mA - Standby: 12 mA

**Operating time at 4000 mAh capacity of the power bank:**

- Light ON: 10 hours - Standby: 200 hours

**Power bank:** is not included. Use only CE-certificated power bank. Optional use (researchable) battery package with 5V output voltage. Please remove the power bank before washing - don't wash the power bank or the battery package!

### 6. Certification

**CE:** available (test report)

**EMC:** available (test report) with following tests:

- EMC radio disturbance acc. to CISPR 15 / EN 55015
- EMC immunity acc. to IEC / EN 61547

**RoHS:** fulfills directive