



# Bluetooth® Low Energy Beacon LOC-EX 01 FULLY IBEACON PROT.

- Compatible with Bluetooth® Low Energy from version 4.0
- Range inside buildings up to 30 m, outdoors up to 200 m (Geolocation)
- Possibility to change important operating parameters "over the air"
- Open firmware for individual BLE profile development (TI CC2541)
- UV-resistant housing according to IP64 (can also be used outdoors)

Loc-Ex® 01, DIV 1 and Zone 1/21



## Function

The intrinsically safe Bluetooth® Low Energy beacon Loc-Ex® 01 can be mounted directly on a suitable surface or easily adapted to the optional mounting plate, which facilitates the replacement of the beacons' batteries.

The Bluetooth Low Energy standard makes the beacons compatible with today's popular smartphones and tablets. They can be detected by these devices from a distance of up to 200 meters (outdoors). The beacon signals can be interpreted by the mobile device through custom applications, interacting with the user or other programs.

iBeacon sensors create a small, concentrated area of detection. Within the transmission zone, customized notifications can be sent to iBeacon-enabled apps on iPhone, iPad, or Apple Watch devices that support current Bluetooth technology. Customers can be alerted to everything from special offers and discounts to personalized messages and details about a display.

## Technical Data

<b>General specifications</b>	
Color	black
<b>Electrical specifications</b>	
Battery type	2x Saft, LS14500 3.6 V, 2600 mAh AA / Mignon / R6 Li-SOCI2
Operating duration	approx. 4 years (with factory setting)
<b>Interface</b>	
Interface type	Bluetooth® Low Energy (from 4.0)
Transmitter frequency	1000 ms
Transmitter radiated power	max. 8 dBm
Detection range	30 m range in buildings, max. 200 m outdoors
Protocol	iBeacon (UUID, Major ID, Minor ID, RX Power)
<b>Approvals and certificates</b>	
CE conformity	CE0102
<b>Ambient conditions</b>	
Ambient temperature	-20 ... 55 °C (-4 ... 131 °F)
Storage temperature	-30 ... 30 °C (-22 ... 86 °F)
<b>Mechanical specifications</b>	
Degree of protection	IP64
Mass	approx. 180 g (including batteries)
Dimensions	
W x H x D	111 mm x 102 mm x 48 mm
<b>Data for application in connection with hazardous areas</b>	
ATEX approval	
ATEX certificate	EPS 16 ATEX 1 043 X

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## Technical Data

ATEX marking	<ul style="list-style-type: none"> <li>Ⓔ II 2G Ex ia IIC T4 Gb IP64</li> <li>Ⓔ II 2D Ex ia IIIC T125°C Db IP64</li> </ul>
<b>International approvals</b>	
IECEX approval	
IECEX certificate	IECEX EPS 16.0019X
IECEX marking	Ex ia IIC T4 Gb IP64 Ex ia IIIC T125°C Db IP64
NEC/CEC approval	
NEC/CEC certificate	70105641
NEC/CEC marking	Class I, II, III, Division 1 Groups A-G, T4 Class I, Zone 1, AEx ia IIC T4 Gb Ex ia IIC T4 Gb Class II, Zone 21, AEx ia IIIC T125°C Db IP64 Ex ia IIIC T125°C Db IP64
<b>General information</b>	
Note	Use of the Works with Apple iBeacon badge means that a product has been designed and certified by the manufacturer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this product with iPod, iPhone, or iPad may affect wireless performance.
Scope of delivery	Loc-Ex® 01 Batteries Documentation

## Accessories

Accessories for this product can be found on the internet at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).