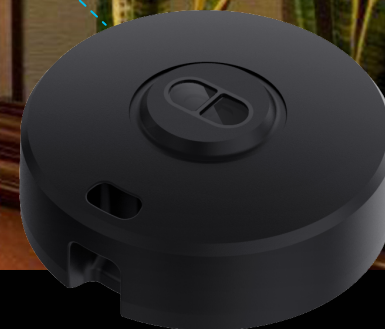




# Compact | Durable

## S02R ToF Range Sensor



The S02R ToF range sensor, a Bluetooth Beacon that utilizes Time-of-flight technology to achieve distance measurement. It is based on BLE 5.0 and designed to be compact and IP67 waterproof, making it suitable for real-time usage monitoring by attaching it to soap dispensers, tissue boxes, or trash cans. It can also be deployed in restrooms for real-time occupancy monitoring to reduce regular maintenance costs.

With its 600mAh large battery and periodic working mechanism, the product guarantees a lifespan of more than 3 years, making it the preferred choice for IoT-enabled smart offices, factories and plaza.

### Key point



IP67  
waterproof



3 years  
battery life



Compact  
design



Up to 3m  
ranging distance



Millimeter  
ranging accuracy



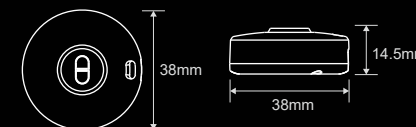
Periodic  
working mechanism

### General specs

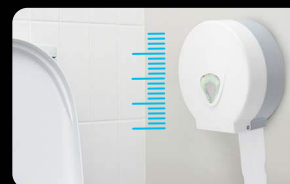
Connectivity:	BLE 5.0
Dimensions:	Φ38.0*14.5mm
Color:	Black
Material:	PC
Weight:	25g
IP rating:	IP67
Battery capacity:	600mAh   Replaceable
Battery lifespan:	3 years - Short range mode(<1m) 1 year - Long range mode(1m-3m)
Operating temperature:	-20°C to 60°C
Transmission range:	150m (in open area without obstacles)
Installation:	3M sticker
Certification:	FCC   CE   RoHS   REACH

### ToF Sensor specs

Max. distance:	3000mm
Min. distance:	40mm
Ranging error①:	±10mm in short range (<0.1m) ±5% in medium range (0.1m-1m) ±1% in long range (1m-3m)
Field-of-view(FOV):	27°



### Application scenarios



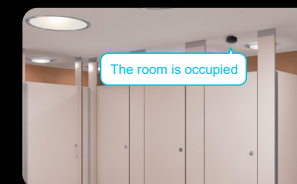
#### Office/Supermarket

- Trash bin fill level detection
- Paper and towel dispenser fill level detection



#### Warehouse

- Stock count
- Inventory level monitoring



#### Toilet

- Occupancy detection
- Soap dispenser fill level detection

\*① Adv interval = 1000ms, Standby duration = 0, Tx Power = 0dBm, without accelerometer sensor.