

3G  
Wi-Fi  
BLE



## P110 presenceSensor™

Unlocking the value of location data

3G, Wi-Fi and Bluetooth  
Sensor with integrated  
Wireless Backhaul and GPS

### Introducing the ip.access presenceSensor™

Fast and simple to deploy, the presenceSensors sit alongside the existing network without consuming valuable network connection resources, and with no need for complex network management and integration.

presenceSensors do not connect into the core network, but are designed to capture critical user information including location, dwell time, IMSI and range, to support Data Monetisation and Safe Cities applications.

### "Always On" Location

Unlike location systems with only Wi-Fi or Bluetooth, which require users to turn on, opt-in and download an app, presenceSensors use the cellular network protocol to capture information from passing handsets - automatically, securely, and with no user intervention required.

The collected data can be enriched, anonymised and fed to other partners, unlocking valuable new revenue opportunities for the mobile operator.



P110 presenceSensor

### Targeted, fine-grain LBS

presenceSensors can be configured and optimally located to serve smaller, much more targeted areas than is possible using cellular Location Based Services (LBS). Depending on the application, they can be configured to cover areas of interest such as shop entrances, promotions areas, security check points and passport control desks.

### Application examples

- Retail and public spaces
- Footfall tracking
- Dwell time measurement
- m-commerce
- Security & fraud protection
- Push SMS vouchers
- Big Data analytics
- Optimising merchandising
- Border control points
- Crowd monitoring
- Utilities infrastructure security

**P110 presenceSensor™**

**presenceSensor coverage**

Configurable handset detection radius, 2m - 50m depending on environment  
 Handset detection time of 20 seconds (typical)  
 Logs Timestamp, IMSI, IMEI, Range, Dwell Time

**presenceSensor unit**

Operates in 3G UMTS/HSPA+ UMTS Band 1  
 Network Listen for 2G/3G bands 1 to 8  
 WiFi 802.11ac, 5GHz or 2.4GHz  
 Bluetooth Classic (V1.x, V2.x) or Smart (Low-energy V4.x)  
 GPS/GNSS  
 Internal antennas  
 Interactive white OLED display with four buttons  
 Audio for button beep and alarm on power interrupt

**Built-in Backhaul options**

Integrated Wireless Backhaul (WBH) - used by default  
 Wired Ethernet (RJ45 Ethernet port, up to 1Gbps)

**Security**

User data: Secure Hashing, EU Data Privacy compliant  
 Backhaul: TLS1.2 and X509 certificate authentication with CRL

**Handset compatibility**

Air interface requires 3G support (UMTS WCDMA)  
 Handset state in 2G/3G/4G idle  
 Subscriber networks allowed are presenceSensor operator's PLMN, international roaming, and supported MVNOs

**Integrated Wireless Backhaul**

Operating modes  
 3G UMTS/HSPA+ with GSM/GPRS/EDGE fallback  
 Max RF output Power  
 250 mW (UMTS)  
 2W (GSM 850/900)  
 1W (GSM 1800/900)  
 3G UMTS bands  
 1, 2, 5/6, 8, 19  
 GSM/GPRS/EDGE bands  
 850, 900, 1800, 1900  
 SIM card socket  
 Standard 2FF Mini-SIM

**Environmental & physical**

Dimensions  
 225.8 x 139.3 x 37.6mm  
 Weight  
 0.45kg  
 Temperature range  
 0° to 40°C  
 Operating humidity  
 10 to 70% non-condensing  
 Ingress protection  
 IP30  
 Mounting  
 Free standing, wall mounted or ceiling mounted

**Power**

AC adapter input  
 100-240V AC, 50/60 Hz  
 AC adapter output  
 12V DC, 18W maximum  
 P110 power draw  
 16W maximum

**Presence System**

