

## WIRELESS TRANSMITTER FOR PASSAGE MONITORING



PASSAGE



SMART BUILDING

Ref : PIR-LAB-13NS



+ 20 years 

15km\* 

IP55  
(Outdoor use) 

Local or Public  
Network compliant 

\*Depending on the  
operating conditions

THIS SENLAB™ M SMART WIRELESS DEVICE, FEATURING  
THE LORAWAN™ CONNECTIVITY PROTOCOL, INTEGRATES  
A PASSIVE INFRARED SENSOR FOR PASSAGE DETECTION.

Designed for outdoor use, this Senlab offers a ruggedized IP55 casing and robust wireless connectivity for continuous monitoring in harsh and challenging environments.

This Senlab offers the best in class features as :

- Battery Life time
- Rich data content thanks to datalogging (24 datas / radio transmission)
- Radio performances
- Advanced set of functionalities

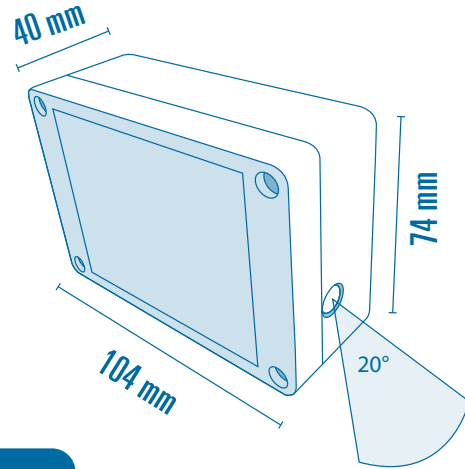
### TYPICAL APPLICATIONS

- Compile traffic statistics to predict attendance in public sites, stores...
- Manage cleaning services systems
- Optimize workspace comfort

### TYPICAL SPECIFICATIONS

Physical specifications	Dimensions	74 X 104 X 40 mm
	Weight	170 gr
	Operating temperature	-20°C to +70°C
RF specifications	RF sensitivity	-137dBm
	RF power	+14dBm (25mW)
	Radio band	868 MHz
EC Conformity : Compliant with Directive 2014/53/UE (RED)	EMC	Final draft EN 301 489-3 v2.1.1 Draft EN 301 489-1 v2.2.0
	Radio	EN 300 220-2 v3.1.1
	Magnetic field exposure	EN 62479
	Safety	IEC 60950-1, EN 60950-22

**DIMENSIONAL DRAWING**



**TECHNICAL FEATURES FOCUS**

**Plug & Play installation**

- Product fixing with double sided tape or screw mounting
- LED indication of passage detection during 1 hour after activation
- Activation with magnet (LED feedback)

**Advanced application feature**

- Set/Reset of passage number
- Log and transmit mode for battery lifetime enhancement **(up to 24 compressed logs per transmission)**
- Stream mode (timestamp of each detection) for attendance profile analysis
- Reconfiguration possible over the air

**Network configuration**

- LoRaWAN parameters (OTAA or ABP activation mode, initial datarate,...)
- Encryption keys customizable by client
- Standard LoRaWAN retries support
- Radio collisions avoidance by pseudo-randomization of transmissions
- Advanced transmission reliability mechanisms (redundancy of data, recovery of lost messages, ...)

**BATTERY LIFE DURATION ESTIMATION**

This following matrix provides the estimated battery lifetime depending of the average Spreading factor used by Senslab and the transmission period.

Battery life (years)	10 min	15 min	30 min	1 h	2 h	4 h	6 h	8 h	12 h	24 h
SF7	5,5	5,8	6,1	6,2	6,3	6,3	6,4	6,4	6,4	6,4
SF8	5,0	5,4	5,8	6,1	6,2	6,3	6,3	6,4	6,4	6,4
SF9	4,3	4,8	5,5	5,9	6,1	6,3	6,3	6,3	6,3	6,4
SF10	3,3	4,0	4,9	5,5	5,9	6,2	6,2	6,3	6,3	6,3
SF11	2,4	3,0	4,1	5,0	5,6	6,0	6,1	6,2	6,2	6,3
SF12	1,6	2,1	3,1	4,2	5,1	5,7	5,9	6,0	6,1	6,3

**Given Only as preliminary information**