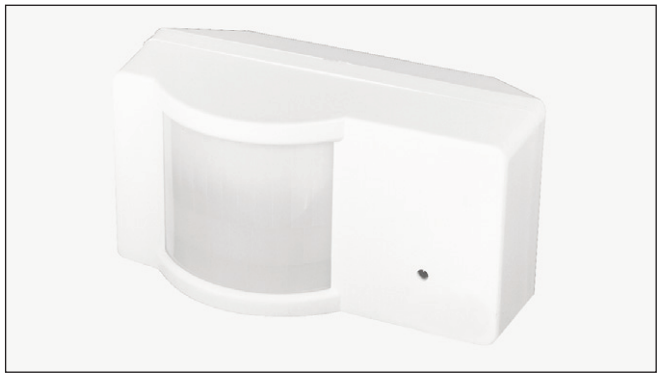
PIR Sensor
Type G 8910 1127

Dupline®
Fieldbus Installationbus



- **Passive infrared detector (PIR)**
- **Detects movement by e.g. a person**
- **Indoor applications**
- **Dupline® output**
- **Operating distance: 10 m**
- **Built-in transmission time: 12 s to 10 min**
- **Operating angle: 90°**
- **Walk test: LED indication**
- **Switch for NO/NC, transmitting channel output**
- **Channel coding by GAP 1605**
- **Supplied by Dupline®**

Product Description

Non-powered Dupline® passive infrared detector with built-in transmitter. For detection of movement by e.g. a person. Used for burglar alarm, light control etc. Built-in timer for delay on operate and transmission time.

Ordering Key

G 8910 1127

Type: Dupline®
Type

Type Selection

Supply	Ordering no. 1 channel PIR detector
By Dupline®	**G 8910 1127**

Supply Specifications

Power supply Rated operational current	Supplied by Dupline® < 2.6 mA with walktest on < 1.9 mA with walktest off

Input Specifications

Inputs	PIR on I/O 1
Lens	Dual detecting zones
Segments	24
Levels	3
Angle	90°
Operating distance	≤ 10 m (see radiation diagram)
Wave length	7 to 14 µm
Input detection speed	0.5 to 5 pulses/s
Transmission delay	
Switch 4	Delay on/off
Delay on release	12 s to 10 min *)
Switch 2 OFF	12 s to 2 min
Switch 2 ON	1 to 10 min
Default channel status	
Switch 3 OFF	NO
Switch 3 ON	NC
Output	
LED output	red LED on I/O 5
Tamper signal	on I/O 2

*) The transmission time starts when the respective channel changes its status. The channel returns to its default status when the time has elapsed. Each detection by the PIR will retrigger the timer.

General Specifications

Power ON delay	Typ. 1 min. It is therefore advisable to keep the unit connected to Dupline®
Walk test indication Switch 1 ON Switch 1 OFF	LED, red Walk test ON Walk test OFF
Delay time adjustment	Potentiometer (Transm. timer) controls the range selected by switch 2
Environment	
Degree of protection	IP 40 For indoor applications
Operating temperature	-10° to +50°C (+14° to +122°F)
Storage temperature	-30° to +70°C (-22° to +158°F)
Connection Terminal D+. Terminal D-	Screw terminals Dupline signal Dupline signal
Material	
Housing Colour	White
Lens	Polyethylene
Dimensions (WxHxD)	104 x 55 x 57 mm
Weight	Approx. 150 g

Mode of Operation

G 8910 1127 is a 1-channel monostable transmitter with a PIR detector, which operates by means of a dual-element detector.

The transmitter is activated if the temperature suddenly changes (most often it will be heat radiation from a person) in relation to the background radiation. Consequently, the transmitter can be used for ON/OFF switching of lighting, air conditioning, burglar alarm etc. If a person moves within a detection zone, G 8910 1127 is activated.

Transm. Timer
Potentiometer (Transm. timer) is made to control the time range selected by switch 2.

Switch 4 ON
When the status of the selected channel changes, the transmission time begins, and the timer runs for the preselected time (12 s to 10 min). If the PIR is activated during this time period, the transmission time starts all over again.

Switch 4 OFF
No transmisison delay.
Transmission follows the red LED.

If the walk test (switch 1) is ON, the LED turns ON when the PIR is activated and remains ON for approx. 2 s. Then a non-trigger time period of 2 s will follow before the PIR and LED can be activated again.

If the default channel status switch (3) is in the OFF position, the PIR changes the channel status to ON if it detects a change in temperature. If the default channel status switch (3) is in the ON position, the PIR changes the channel status to OFF if it detects a change in temperature.

Slow movements between zones resulting in a detection speed of less than 0.5 pulses/sec will not be detected. Nor will rapid movements resulting in a detection speed of more than 5 pulses/sec be detected. As G 8910 1127 is a passive device, several detectors can be placed in the same room without interfering with each other.

The tamper signal can be coded on I/O 2. It is active when Dupline Signal wires and PIR sensor are connected.

The module should not be installed in the following places:
a) Outdoors.

b) In places exposed either to sunlight or to motor vehicle headlights pointing directly at the sensor.

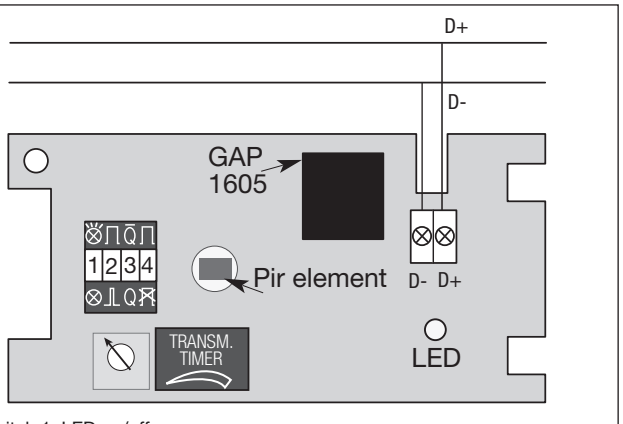
c) In places exposed to direct air flow from a heater or air conditioner.

d) In places where rapid temperature changes occur.

e) In places exposed to severe vibration.

f) Close to glass or other objects which might reflect the infrared radiation.

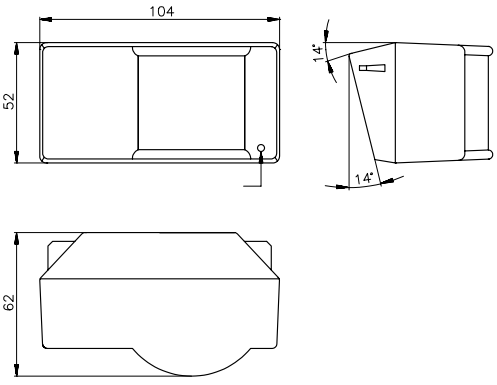
Wiring Diagram



Switch 1: LED on/off
Switch 2: Delay time selection *
Switch 3: Channel status. NO or NC
Switch 4: Delay on/off *

*) Note: Switch 2 is related with Switch 4 and potentiometer “transm. timer”.
When Switch 4 is on and Switch 2 is off, you can use the potentiometer to set the delay time from 12 sec to 2 min.
When Switch 4 is on and Switch 2 is on, you can use the potentiometer to set the delay time from 1 min to 10 min.
When Switch 4 is off, the delay function is not in use.

Dimensions (mm)



Radiation Diagram (m)