

design|line

performance|line

 **Guardall**

**Guardall *DesignLine* & *PerformanceLine*  
detector series 2015**

Peace  
of mind



# Peace of mind

The Guardall sensor range comprises two series of motion sensors intended for use in residential and light commercial applications:

- DesignLine series
- PerformanceLine series

## designline

The DesignLine series is a range of motion sensors using PIR technology or dual technology (PIR and microwave) and is suitable for residential and light commercial environments.

This series builds value by meeting customers' security needs while respecting budget constraints. This range is quick to install and comes with a stylish housing. Both ranges of DesignLine motion sensors show we have listened and are responding to end users' needs. These motion sensors deliver easy solutions for installers providing flexibility in installing height.





## performance line

The **PerformanceLine** series is the line of legacy Guardall motion sensors (PQ15 and DT15-series) and both series are intended for the protection of residential and commercial premises.

When quality, reliability, detection performance and false alarm immunity are paramount to you and your customers, the microcontroller-based PQ15 provides all the elements.

DT15-series incorporates a highly effective X-band microwave together with well-proven PIR technology. This pairing produces a superb dual technology sensor that greatly improves false alarm immunity.

Besides both entry models PQ15 and DT15, there are three variants to choose in case you require an anti-mask solution.





## Stylish solutions for residential and light commercial applications

The DesignLine series consists out of two product lines:

- A range of Fresnel PIR's
- A range of Dual Technology motion sensors

Both ranges are quick to install, come with a stylish housing and offer solutions for wall or ceiling mounting. Both product lines are available across the EMEA region and are the ideal security solution for residential and light commercial applications. These product lines provide detection for a variety of ranges, including up to 360° of coverage for ceiling mount applications and variants with anti-masking functionality using active infrared technology. It even has variants with smart pet immunity up to 35 kg, making this series all the more attractive. The non-AM variants of the Fresnel PIR's are equipped with a standard 3k3 EOL resistor and providing flexibility in installing height.

The PIR/AM and all variants using dual technology have an additional built-in EOL resistor value for use in combination with control panels of the Guardall range. All products of the DesignLine Series hold the European EN50131 standard and have on top several other security approvals.

A wall and ceiling mount bracket is available providing flexibility to install and aim the detector where required. In addition the standard built-in lens of the wall mount PIR's can be taken out and replaced by a long range lens or a curtain lens.

### Accessories

A wall and ceiling mount bracket is available providing flexibility to install and aim the detector where required. In addition the standard built-in lens of the wall mount PIR's can be taken out and replaced by a long range lens or a curtain lens.

#### Feature differences

##### Fresnel PIR (65XX-series)

- Passive Infra Red Technology
- Built-in EOL resistor of 3.3kΩ
- AM variant with an additional EOL resistor of 4.1kΩ
- EN50131-2-2 certified Grade II & Grade III variants available

##### Dual technology (66XX-series)

- Dual technology (PIR and K-band Microwave)
- Several Built-in EOL resistor values for easy combination with NX and Guardall control panels
- EN50131-2-4 certified Grade II & Grade III variants available

#### Common features

- Coverage 12>15m + ceiling mount + variant with AM functionality
- Digital signal processing
- Unique stylish design
- Quick to install
- Holds several European security approvals



## Specifications

PIR technology	6540		6540PI	6550	6550AM	6530CM
Detection range	12m			15m		diameter of 9.3m at 3.6m mounting height
Optics	Fresnel lens		Optics holographic Fresnel lens	Fresnel lens		
Pet immunity	-		Pulse count 1: up to 20kg Pulse count 2: up to 35kg	-		
Mounting height	1.5 to 3.1m		1.5 to 2.3m	1.5 to 3.1m		2.4 to 3.6m
Anti-masking technology	-			active infrared	-	
Power supply	9 to 15VDC					
Current consumption	(nom.) 8.7mA			(nom.) 21.5 mA	(nom.) 8.7mA	
Alarm relay	<24VDC, 50mA, NC					
Tamper relay	<24VDC, 50mA, NC					
Trouble/fault	-			<24VDC, 50mA, NC	-	
Target speed range	30cm/s to 3m/s					
Dimensions	(HxWxD) 123x66x42mm				(diameter x H) 116x33mm	
Weight	94g			97g	98g	
Operating temperature	-10 to +55°C					
Relative humidity	max. 95%					



## Specifications

Dual technology (PIR & microwave)	6640		6640PI	6650AM	6630CM-N
Detection range	12m			15m	diameter of 9.3m at 3.6m mounting height
Optics	Fresnel lens		Optics holographic Fresnel lens	Fresnel lens	
Frequency	24GHz (K-band)				
Pet immunity	-		Pulse count 1: up to 20kg Pulse count 2: up to 35kg	-	
Mounting height	1.5 to 3.1m		2.3m	1.5 to 3.1m	2.4 to 3.6m
Anti-masking technology	-			active infrared	-
Power supply	9 to 15VDC				
Current consumption	(nom.) 21mA			(nom.) 36.3mA	(nom.) 21mA
Alarm relay	<24VDC, 50mA, NC				
Tamper relay	<24VDC, 50mA, NC				
Trouble/fault	-			<24VDC, 50mA, NC	-
Target speed range	30cm/s to 3m/s				
Dimensions	(HxWxD) 123x66x42mm				(diameter x H) 116x33mm
Weight	112g			115g	110g
Operating temperature	-10 to +55°C				
Relative humidity	max. 95%				

## Ordering information

Part No.	Description
6540	12m Fresnel PIR motion sensor
6540PI	12m Fresnel PIR motion sensor with Pet Immunity functionality
6550	15m Fresnel PIR motion sensor
6550AM	15m Fresnel PIR motion sensor with AM functionality
6530CM	360° Fresnel PIR motion sensor PIR
6640	12m Dual Technology motion sensor

Part No.	Description
6640PI	12m Dual Technology motion sensor with Pet Immunity functionality
6650AM	15m Dual Technology motion sensor with AM functionality
6630CM-N	360° Dual Technology motion sensor
6545-BP	Swivel-mount bracket for 65XX and 66XX series (10-pack)
6545-LR	Long range lens for 6540 (10-pack), 26m
6545-CL	Curtain lens for 6540 (10-pack), 12m, 6°





## High-end solutions for residential and commercial applications

The PerformanceLine Series has for the moment:

- A range of PIR motion sensors PQ15-series,
- A range of PIR/MW motion sensors DT15-series.

The PQ15-series design features make installation fast and straightforward with adjustment-free optics allowing mounting between 2.1 and 2.5m height and providing 15m of volumetric coverage.

The anti-mask variant PQ15 AM - using active infra red technology - has even in addition selectable end of line resistances. Four detection modes (including pulse count) are available to suit most environments, and are DIL switch selectable for simplicity.

DT15-series incorporates a highly effective X-band microwave together with well-proven PIR technology.

This pairing produces a superb dual technology sensor that greatly improves false alarm immunity. Supervision circuitry provides continuous monitoring and converts to a single technology, pulse count PIR or microwave only unit, in the unlikely event of failure in either the microwave or the PIR. It has been designed to be simple to install with three LEDs within the sensor to facilitate efficient analysis of the technologies. This series offers two variants of anti-masking using active infra red technology or microwave technology.

### Accessories

A wall and ceiling mount bracket is available providing flexibility to install and aim the detector where required.

#### PQ15-series

##### Standard features

- Quad pyro detector
- 15m volumetric coverage
- Enhanced PIR processing
- Redesigned housing shared across platform range
- Varifocal lens design
- Adjustment-free optics
- PQ15 AM: selectable end of line resistances / active IR anti-masking

#### DT15-series

##### Standard features

- Quad pyro detector and X-band microwave.
- 15m volumetric coverage
- Enhanced DT processing
- Redesigned housing shared across platform range
- Anti-stealth technology™
- Varifocal lens design
- Adjustment-free optics
- DT15+ and DT15 AM: selectable end of line resistances
- DT15+: microwave anti-mask
- DT15 AM: active IR anti-masking



## Specifications

PIR technology			
		PQ15	PQ15AM
Power	Voltage	12VDC (9VDC - 16VDC)	
	Current	9mA quiescent @ 12VDC 11mA max @ 12VDC	12mA quiescent @ 12VDC 17mA max @ 12VDC (LED on)
	Max. ripple	2V peak to peak @ 12VDC	
Microwave power		-	
Frequency		-	
Alarm output		Normally closed, voltage free, solid state relay rated @ 30VDC, 50mA	
Tamper output		Normally closed voltage free switch contacts rated @ 24VDC, 50mA	Normally closed voltage free switch contacts
Alarm period		Approximately 3 seconds	
Temperature range		-10°C to 55°C / 14°F to 130°F	
Microwave range adjustment		-	
PIR coverage adjustment		± 5° adjustment horizontally when corner mounted	
Walk test LED's		Red... Alarm	
Remote LED enable		Control of LED indication using test line	
Anti-masking	Indication	-	Indicated on Aux output and LED if selected
	Technology	-	Active Infrared
Latching		-	Standard (L-type) latching
Microwave / PIR trouble		-	Indicated on Aux output and LED if selected
Packed weight		approx. 110g	approx. 115g
Dimensions (H x W x D)		110 x 66 x 42mm	



## Specifications

Dual technology (PIR and microwave)				
		DT15	DT15+	DT15AM
Power	Voltage	12VDC (9VDC - 16VDC)		
	Current	13mA quiescent @ 12VDC 18mA max @ 12VDC (all LED's ON)	13mA quiescent @ 12VDC 21mA max @ 12VDC (all LED's ON)	15mA quiescent @ 12VDC 23mA max @ 12VDC (all LED's ON)
	Max. ripple	2V peak to peak @ 12VDC		
Microwave power		0.011uw/cm <sup>2</sup> @ 1m (average)		
Frequency		10.587 GHz (X-band)		
Alarm output		Normally closed, voltage free, solid state relay rated @ 30VDC, 50mA		
Tamper output		Normally closed voltage free switch contacts		
Alarm period		Approximately 3 seconds		
Temperature range		-10°C to 55°C / 14°F to 130°F		
Microwave range adjustment		50% to 100% of range via easily accessible potentiometer		
PIR coverage adjustment		± 5° adjustment horizontally when corner mounted		
Walk test LED's		Red... Alarm - Green... Microwave channel - Yellow... PIR channel		
Remote LED enable		Control of LED indication using test line		
Anti-masking	Indication	-	Indicated on Aux output and LED's if selected	
	Technology	-	Microwave	Active Infrared
Latching		-	Standard (L-type) latching	
Microwave / PIR trouble		Indicated on LED's if selected	Indicated on Aux output and LED's if selected	
Packed weight		approx. 135g		
Dimensions (H x W x D)		110 x 66 x 42mm		

## Ordering information

Part No.	Description
W76555	PQ15 15m
W76558	PQ15 AM 15m
W76561	DT15 15m
W76570	DT15 AM 15m

Part No.	Description
W76567	DT15+ 15m
W72321	LPB2 low profile wall bracket
W72977	CMB1 ceiling mount bracket

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