

# TAKEX



## SECURITY SENSORS

TAKEX is a leading Japanese manufacturer of Security Sensors, specialising in Active Infrared Beams for Perimeter Protection, and Outdoor PIR for CCTV activation and Intruder Detection. With more than 50 years of engineering experience, we are proud to be specified at the highest level of Royal, Government and Military organisations worldwide.

TAKEX EUROPE LIMITED

## TWIN BEAMS

Featuring our patented 'double modulation' technology for unsurpassed immunity to sunlight and artificial light sources, Twin Beams are ideal for protecting windows, doors, fence lines, entrances, and driveways.



PB-30TK	PB-60TK	PB-100TK
up to 30m	up to 60m	up to 100m

- 2 x synchronised high power beams
- double modulation for unsurpassed light immunity
- auto-gain control (AGC)
- 50,000 lux sunlight immunity
- IP55 housing



PB-20TE	PB-40TE	PB-60TE
up to 20m	up to 40m	up to 60m

as PB-30TK/60TK/100TK, plus:

- 4 selectable beam channels to prevent crosstalk
- vivid internal body stickers aid beam alignment procedure



## QUAD BEAMS

The professional choice in outdoor protection, our Quad Beam detectors synchronise sixteen beam paths for maximum stability in severe weather conditions, perfect for long range perimeter intruder detection.



PB-50FA	PB-100FA	PB-200FA
up to 50m	up to 100m	up to 200m

- 4 x synchronised high power beams
- double modulation for unsurpassed light immunity
- auto-gain control (AGC)
- 50,000 lux sunlight immunity
- IP55 housing



PB-IN-50HFA	PB-IN-100HFA	PB-IN-200HFA
up to 50m KH	up to 100m KH	up to 200m KH

as PB-50FA/100FA/200FA, plus:

- 4 selectable beam channels to prevent crosstalk
- environmental monitoring circuit
- vivid internal body stickers aid beam alignment procedure
- PB-50/100/200HFA-KH for TA series Beam Towers also available



PB-IN-100AT
up to 100m KH

as PB-IN-100HFA, plus:

- anti-crawl beam for high-security applications
- independent activation of upper or lower beams
- dual response time system
- PB-100AT-KH for TA series Beam Towers also available



PXB-50F	PXB-100F	PXB-200F
up to 50m	up to 100m	up to 200m

as PB-50FA/100FA/200FA, plus:

- increased beam separation minimizes nuisance alarms
- vivid internal color aids beam alignment procedure
- lightning and surge protection up to 15kV
- dynamic auto-gain lock (AGL)
- ±90° horizontal ±20° vertical adjustable sensor heads
- IP65 housing

PXB-50HF	PXB-100HF	PXB-200HF
up to 50m KH	up to 100m KH	up to 200m KH

as PXB-50F/100F/200F, plus:

- 4 selectable beam channels to prevent crosstalk
- environmental monitoring circuit
- PXB-50/100/200HF-KH for TA series Beam Towers also available



PXB-100ATC
up to 100m KH

as PXB-100HF, plus:

- independent control of upper and lower beams
- choose between synchro-quad and anti-crawl operation
- sync wire allows unlimited stacking without crosstalk
- PXB-100ATC-KH for TA series Beam Towers also available



PXB-100SW
up to 100m

as PXB-100HF, plus:

- low-current consumption for battery or solar operation
- optional BA-6SLA solar panel/battery pack available



## BATTERY BEAM

Designed for compatibility with leading wireless systems, our Battery Beams are ideal for rapid deployment in creating temporary or permanent secure perimeter intruder systems.



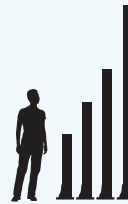
TXF-125E
up to 100m KH

- 4 x synchronised high power beams
- 4 selectable operation ranges 25/50/75/100m
- 4 selectable beam channels to prevent crosstalk
- up to 5 year battery life using 2 x LS33600 (3.6V 17Ah) batteries per unit
- use up to 4 batteries per unit for extended battery life (up to 10 years)
- vivid internal colour aids beam alignment procedure
- ±90° horizontal ±20° vertical adjustable sensor heads
- environmental monitoring circuit
- IP65 housing
- TXF-125E-KH for TA series Beam Towers also available



## BEAM TOWERS

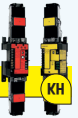
For additional security, or to disguise the number and position of beams from observers, our TA Series Beam Towers comprise of attractive but rugged floor or wall mounted units, with single and double-sided variants.



TAS	TAD	TAW
single sided	double sided	wall mounted

TA series Beam Towers for use with KH Beams

- available in 1m, 1.5m, 2m, and 3m heights (TA\*100/150/200/300)
- anodized aluminium column
- tamper protected lid to prevent unauthorised interference
- vandal resistant polycarbonate covers



KH Beams are designed for use in TA series Beam Towers

## PRE-ASSEMBLED

Standing 2m tall and with a choice of single or double-sided options covering zones up to 200m, our TQ/TC series Beam Towers are pre-designed and wired - including beams, heaters, thermostats, and tamper switches - to be quickly and easily specified and installed.

Example shown (below, and left): TCS-RX3

T	Q	S	TX	3
	C	D	RX	
			TRX	

Key

- T • 2m Tower enclosure
- Q • 2 x Quad Beams (200m)
- C • 1 x Quad and 1 x Anti-Crawl Beam (100m) + Anti-Climb tamper top
- S • Single-sided (180°)
- D • Double-sided (360°)
- TX • Transmitter units only
- RX • Receiver units only
- TRX • Transmitter units one side / Receiver units the other
- 3 • optional: 1 x Additional Quad Beam (3 x Beams total)



		transmitter	receiver	transmitter + receiver
up to 200m	double-sided	<b>TQD-TX</b> Quad Beams	<b>TQD-RX</b> Quad Beams	<b>TQD-TRX</b> Quad Beams
	single-sided	<b>TQS-TX</b> Quad Beams	<b>TQS-RX</b> Quad Beams	
up to 100m	double-sided	<b>TCD-TX</b> Quad + Anti-Crawl	<b>TCD-RX</b> Quad + Anti-Crawl	<b>TCD-TRX</b> Quad + Anti-Crawl
	single-sided	<b>TCS-TX</b> Quad + Anti-Crawl	<b>TCS-RX</b> Quad + Anti-Crawl	



- available in 2m height
- 200m Quad or 100m Quad + Anti-Crawl options
- pre-assembled and wired, ready to install
- includes motherboard, heaters, fan, and tamper switch
- optional: fitted power supply unit (TOWERPSU)



## INTERFACE MODULE

With the IP interface module our photoelectric beams are as easy as IP cameras to install and integrate with Video Management Systems; start recording when somebody enters the area, move a PTZ to the location of an intrusion, or activate lighting. For use with PB-IN-HFA, PB-FA, PB-IN-100AT, & PB-KH series.



INT-QUADIP
IP interface module

- PoE Class 3 / IEEE 802.3af
- VMS compatible
- direct control of supported cameras
- plug & play web browser interface



## REFLECTIVE BEAMS

For applications where a beam-break is desirable but running cable to both ends is impractical. Ideal for short-distance monitoring of entrances and exits, corridors, staircases, gateways, and driveways.



### PR-5B

up to 5m indoor

- direct reflection system
- cable only to one end
- for indoor use



### PR-11B

up to 11m outdoor

#### as PR-5B, plus:

- beam direction can be rotated a full 180 degrees
- for indoor (up to 15m) and outdoor (up to 11m) use
- IP55 housing



The PR-30BE uses Time of Flight technology to measure both light reception level and timing, meaning no more lost alarms from highly reflective objects such as white vehicles. It provides the performance of a traditional point-to-point beam sensor with the single-ended convenience of a PIR detector.



### PR-30BE

up to 30m outdoor

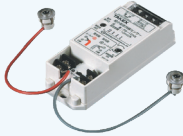
#### as PR-11B, plus:

- Time of Flight technology to determine detecting distance
- measures light reception & timing for improved accuracy
- for indoor (up to 40m) and outdoor (up to 30m) use
- environmental monitoring circuit



## MINIATURE BEAM

For covert/prestige applications including ATM machines, motor driven shutters, windows, and corridors.



### PB-10NS

up to 10m indoor

- miniaturised control box for easy installation
- sensor cord can be cut to length as required
- supplied with flush mounting plates for sensor heads



## ATTENTION SENSORS

Use to provide welcome messages, protect emergency doors, deter intruders, or to trigger warning messages.



### AV-100E

N/O input to trigger

- record a message (up to 12 secs.) using built-in microphone
- omni-directional bracket
- memory back-up for 20 days without power
- horn speaker type 100dB/1m (max)

### PV-12E

integrated 12m PIR

## FLAME SENSORS

With faster detection than conventional smoke alarms, our Ultra-Violet (UV) flame sensors are practical where smoke detection is not an option, such as diesel engine rooms and open environments.



### FS-1000E

built-in sounder

### FS-2000E

built-in sounder

### FS-3500E

pre-recorded message

- high sensitivity ultraviolet flame sensor
- up to 10m detection of 7cm flame
- adjustable detection area (FS-2000E only)
- battery or DC operation (FS-1000E & FS-3500E only)
- NO/NC relay output



### FS-5000E

indoor/outdoor

- high sensitivity ultraviolet flame sensor
- up to 10m detection of 7cm flame
- omni-directional bracket for detection area adjustment
- NO/NC relay output
- adjustable response time



### FP-2500E

integrated 10m PIR

- combination UV flame sensor + PIR with pet immunity
- up to 10m detection of 7cm flame
- AND/OR detection modes
- dual output with forced alarm during sustained flame



## DUAL-ZONE PIR

Our Dual-Zone PIR's combine a horizontal and downward curtain requiring simultaneous activation for alarm. With up to 12m x 180° range these sensors are perfect for use in both domestic and industrial applications.



### MS-12TE

up to 12m x 90°

### MS-12FE

up to 12m x 180°

- dual-zone detection system
- 2-12m coverage
- rotating sensor heads (±90° horizontal adjustment)
- selectable NO/NC relay output with 2 sec. to 5min. timer function
- AND/OR detection modes (MS-12FE only)
- IP54 housing



### TX-114SR

up to 12m x 90°

### TX-114TR

up to 12m x 90°

### TX-114FR

up to 12m x 180°

#### as MS-12TE/FE, plus:

- powered by 3V to 9VDC alkaline or lithium battery
- compatible with numerous wireless transmitter units
- back box with back-tamper (TX-114TR/FR only)



### OMS-12FE

up to 12m x 180°

- dual-zone detection system
- 3-12m coverage
- fixed sensor heads
- supplied masking sheets allow precise area control
- front and back tamperers
- IP54 housing



MX-12FAM includes a sophisticated anti-masking system designed to expose any attempt to defeat the sensor by obstruction.

### MX-12FAM

up to 12m x 180°

- dual-zone detection system
- 2-12m coverage
- dual alarm signal outputs
- anti-masking technology with near-lens awareness
- front and back tamperers
- stowable area masks



## HIGH-MOUNT PIR

The high-performance PIR-T sensor family offers the ultimate in detection versatility. Precision triple mirror optics and intelligent signal processing ensure accurate detection from a mounting height of 2m to 6m.



### PIR-T15WE

up to 15m x 80°

### PIR-T15AM

up to 15m x 80°

### PIR-T40NAM

up to 40m x 3.2m

- 4 selectable operation modes:
- 2m to 6m installation height (by operation mode)
- high-performance triple mirror optical system
- precise detection area adjustment using on-mirror LED's
- anti-masking function (PIR-T15AM/T40NAM only)
- lightning surge protection
- IP55 housing



## MULTI-PATTERN PIR

The MS-100E offers the choice of wide-angle, vertical and horizontal curtain, or long range detection within a single discreet housing. Install vertically for standard detection or horizontally as a door sensor.



### MS-100E

up to 20m

- 10m Wide Angle / 10m Curtain / 20m Long Range
- 2 lenses for up to 4 different detection patterns
- 180° rotating sensor head for vertical or horizontal mount
- for indoor and outdoor use



## INDOOR PIR

The PA-6800 series ceiling mount PIR sensors combine a discreet compact appearance with outstanding performance at a low price. The sensor can be snapped in and out of its base unit for easy installation.



### PA-6805E

4m spot

### PA-6810E

15m x 360°

### PA-6812E

12m wide-angle

### PA-6820E

20m vertical curtain

- ceiling mount design
- 2m to 4.9m installation height
- detachable base unit with snap-in-out sensor design
- pulse count and sensitivity adjustable
- geared mirror array for precise area definition (PA-6812E/6820E)



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