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.

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

B-IN-200HFA

- · 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-200H
up to 50m	up to 100m	up to 200m
environmental monitor vivid internal body sti	annels to prevent crossta	t procedure

PR-IN-100AT up to 100m

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	up to 100m	up to 200m
KII	KI	KII

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



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

- · 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^x100/150/200/300)
- 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 BEAM TOWERS

Standing 2m tall and with a choice of single or double-sided options covering zones up to 200m, our TO/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	optional —
Key			TRX	

- 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
	double-sided	TQD-TX	TQD-RX	TQD-TRX
up to	uouble-sided	Quad Beams	Quad Beams	Quad Beams
200m	single-sided	TQS-TX	TQS-RX	
		Quad Beams	Quad Beams	
	double-sided	TCD-TX	TCD-RX	TCD-TRX
up to		Quad + Anti-Crawl	Quad + Anti-Crawl	Quad + Anti-Crawl
100m	single-sided	TCS-TX	TCS-RX	
	Sillyle-Sideu	Quad + Anti-Crawl	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

- PoF Class 3 / IFFF 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 shortdistance 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:

- · uses Time of Flight technology to determine detecting distance
- measures light reception level and timing for unprecedented 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

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	FS-3500E
built-in sounder	pre-recorded message

- · high sensitivity ultraviolet flame sensor
- · up to 10m detection of 7cm flame
- · NO/NC relay output
- · adjustable response time
- · battery or DC operation



FS-2000E

built-in sounder

- · high sensitivity ultraviolet flame sensor
- · up to 10m detection of 7cm flame
- adjustable detection area
- NO/NC relay output
- · adjustable response time



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



integrated 10m PIR

- · combination ultraviolet 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

ATTENTION SENSORS

nessages, protect emergency doors, deter intruders, or to trigger warning messages



AV-100E	PV-12E
N/O input to trigger	integrated 12m PIR

- · record a message (up to 8 secs.) using built-in microphone
- · omni-directional bracket
- · memory back-up for 20 days without power
- · horn speaker type 100dB/1m (max)

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	MS-12FE
up to 12m x 90°	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	TX-114TR	TX-114FR
up to 12m x 90°	up to 12m x 90°	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 $^{\circ}$

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

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	PIR-T15AM	PIR-T40NAM
up to 15m x 80°	up to 15m x 80°	up to 40m x 3.2m

- · 4 selectable operation modes:
- 2m to 6m installation height (depending on 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

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
- supplied with 2 lenses for up to 4 different detection patterns
- 180 degree rotating sensor head allows 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	PA-6810E	PA-6812E	PA-6820E
4m spot	15m x 360°	12m wide-angle	20m vertical curtain



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

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PHOTOELECTRIC BEAMS

PASSIVE INFRARED SENSORS

ATTENTION SENSORS

FLAME SENSORS