

# **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. The professional choice in outdoor protection, our Quad beam detectors synchronise 16 beam paths for maximum stability in severe weather conditions, perfect for long range perimeter protection.

		PB-50F
		50m outdoor / 100m in
		• doub
i - i	i'-'i	
-	-	PB-IN-50H
		50m outdoor / 100m in
<b>{</b>	i = i	• 4 se
	2000	• vivid inter

PB-50F	PB-100F	PB-200F
50m outdoor / 100m indoor	100m outdoor / 200m indoor	200m outdoor / 400m indoor
double mod	synchronised high power b dulation for unsurpassed li • auto-gain control (AGC) 50,000 lux sunlight immuni • IP55 housing	ght immunity
PB-IN-50HF	PB-IN-100HF	PB-IN-200HF
50m outdoor / 100m indoor	100m outdoor / 200m indoor	200m outdoor / 400m indoor
а	s PB-50F/100F/200F plus	3:
• en	le beam channels to preve vironmental monitoring cir ynamic auto-gain lock (AG	rcuit
<ul> <li>vivid internal bo</li> </ul>	ody stickers aid beam aligr	nment procedure
	PB-IN-100AT	

100m outdoor / 200m indoor

as PB-IN-100HF plus:

- anti-crawl beam for high-security applications
- · independent activation of upper or lower beams dual response time system

PXB-50HF	PXB-100HF	PXB-200HF
50m outdoor / 100m indoor	100m outdoor / 200m indoor	200m outdoor / 400m indoor
	synchronised high power b	

increased beam separation minimises nuisance alarms vivid internal colour aids beam alignment procedure · lightning and surge protection up to 15kV IP65 housing

When there is no room for compromise, professional installers and specifiers can rely on the enhanced features of our flagship PXB range. Coupled with the ER-02 wireless alignment tool, the integrated self diagnostic function ensures perfect alignment every time.

#### PXB-100ATC 100m outdoor / 200m indoor

as PXB-100HF plus:

· independent control of upper and lower beams · choose between synchro-quad and anti-crawl operation · dual outputs for crawl attempt and full beam break sync wire allows unlimited stacking without crosstalk

PXB-100SW

100m outdoor / 200m indoor

as PXB-100HF plus:

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

#### **BEAM TOWERS**

Takex Active Infrared Beams can be mounted on poles, walls, or any convenient structure. Where there is no mounting point, or for additional security (to disguise the mounting height and number of beams from observers), Takex TA Series Beam Towers are available as attractive but rugged Wall or Floor-mount units, as Single or Double-Sided variants.

TAS-100	TAS-150	TAS-200	TAS-300
1m	1.5m	2m	3m
• anodized • tamper p	available in 1m, 1.5 aluminium column protected lid to prev	m, 2m or 3m height for high resistance to ent unauthorised int	s o oxidation terference
TAD-100	TAD-150	TAD-200	TAD-300
1m	1.5m	2m	3m
۰de			ew)
TAW-100	TAW-150	TAW-200	TAW-300
1m	1.5m	2m	3m
۰s			w)
	1m • s • anodized • tamper p • TAD-100 1m • de • de • de • de	1m     1.5m       • single sided floor model     • available in 1m, 1.5       • anodized aluminium column i     • anodized aluminium column i       • tamper protected lid to prevere     • vandal resistant potential       • tamper protected lid to prevere     • vandal resistant potential       • TAD-100     TAD-150       1m     1.5m       • double sided floor model     as TAS ser       • double sided floor model     1.5m       1m     1.5m       TAW-100     TAW-150       1m     1.5m	Im     1.5m     2m       • single sided floor mount (180 degree vie • available in 1m, 1.5m, 2m or 3m height • anodized aluminium column for high resistance to • tamper protected lid to prevent unauthorised int • vandal resistant polycarbonate covers       TAD-100     TAD-150     TAD-200       1m     1.5m     2m       as TAS series except: • double sided floor mount (360 degree vie       TAW-100     TAW-150     TAW-200

ТАН	PTS
Heater (12-24VDC)	Thermostat

• one TAH Heater required per Beam unit (ie. 2 per beam set) one PTS Thermosat required per Beam Tower

TAPS	TAFB	TAPSU2A			
Anti-Climb Tamper Switch	First-Fix Bolt Set	12VDC 2A Tower PSU			

· a wide range of accessories are available to suit the most demanding of requirements

KH Series Beams are designed specifically for use in our TA Series Tower Enclosures. Supplied with PTKH 'Quick fix' mounting brackets for fast, trouble-free assembly, the beam units locate in vertical slide-channels in the TA tower column, allowing easy and precise height adjustment.





as PB-IN-50HF/100HF/200HF plus: specifically designed for use in TA series Tower Enclosures double coated electronics for demanding environments · supplied with 'Quick fix' mounting brackets for easy adjustment

> PB-100AT-KH 100m outdoor / 200m indoor

# as PB-100HF-KH plus:

 anti-crawl beam for high-security applications · independent activation of upper or lower beams · dual response time system

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model	PB-	-TK SEF	RIES (	РВ-	TE SEF	RIES	РВ	B-F SER	RIES	PB-IN	N-HF SE	RIES	РХВ	-HF SE	RIES	PB-IN	I-100AT	PXE	B-100ATC
type		twin			twin			quad			quad			quad		anti	i-crawl	qua	d/anti-crawl
range (external)	30m	60m	100m	20m	40m	60m	50m	100m	200m	50m	100m	200m	50m	100m	200m	1	00m		100m
channels		1			4			1			4			4			4	4 (	(sync-wire)
double modulation		•			•			•			•		•		•			•	
resonance filter/PLL		•/•			•/•			•/•			•/•			•/•			•/•		•/•
AGC/AGL		•/-			•/-			•/-			•/•			•/•			•/•		•/•
environmental output		-			-			-			•			•			•		•
IP rating		IP55			IP55			IP55			IP55			IP65			P55		IP65

#### OUTDOOR PIR

One of the biggest concerns with using external PIR's is activations caused by animals (both wild and domestic), for this reason TAKEX has produced the 'Dual-Zone' PIR's, combining a horizontal curtain with a downward curtain, both of which need to be activated simultaneously for an alarm. With up to 180° 12m 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°		
rotating sen     selectable NO/N	dual-zone det • 2-12m c Isor heads (±9 C relay output R detection m • IP54 h	overage 00° horizonta with 2sec-5 odes (MS-12	l adjustment) imin timer function		
TX-114SR	TX-11	4TR	TX-114FR		
up to 12m x 90°	up to 12r	n x 90°	up to 12m x 180°		
dual-zone detection system     • 2-12m coverage					

 2-12m coverage rotating sensor heads (±90° horizontal adjustment) powered by 3V to 9VDC alkaline or lithium battery

· compatible with numerous wireless transmitter units



#### 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 tampers IP54 housing

The OMS-12FE uses our reliable dual-zone detection system to create 180 degrees of volumetric protection with a range of 3 to 12m. Equipped with 4 pyros, the detection field is divided into left and right zones which can be enabled/disabled as required for precise area control. The slim-profile housing features a back-tamper, and the clearly labelled option switches make installation a breeze.



#### **MS-100E** up to 10m Wide Angle / 10m Curtain / 20m Long Range

· supplied with wide angle and long range lenses choose from 4 detection patterns · can be mounted horizontally or vertically sensor head rotates a full 180 degrees

Designed for outdoor and indoor use, the MS-100E offers the choice of wide angle, vertical and horizontal curtain, or long range detection from within a single discreet housing. 180° adjustable optics allow the unit to be installed in almost any position; vertically for standard detection or horizontally as a door sensor.

#### TWIN BEAMS

Even the simplest beams from TAKEX feature our patented 'double modulation' technology giving them an unsurpassed immunity to sunlight and artificial light sources - ideal for protecting windows, doors, fence lines and driveways.

PB-30TK	PB-60TK	PB-100TK			
30m outdoor / 60m indoor	60m outdoor / 120m indoor	100m outdoor / 200m indoor			
double mod	synchronised high power b dulation for unsurpassed li • auto-gain control (AGC) 50,000 lux sunlight immuni • IP55 housing	ght immunity			
PB-20TE	PB-40TE	PB-60TE			
20m outdoor / 40m indoor	40m outdoor / 80m indoor	60m outdoor / 120m indoor			
as	PB-30TK/60TK/100TK pl	us:			

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

#### OUTDOOR REFLECTOR BEAM

The PR-11B Reflector Beam is suitable for both indoor and outdoor use, for applications where a beam-break is desirable but running cable to both ends is impractical. A convenient way to monitor entrances, gateways, and driveways - for general monitoring and lighting control.



#### PR-11B 11m outdoor / 15m indoor

· direct reflection system beam direction can be rotated a full 180 degrees · suitable for both indoor and outdoor use • 50,000 lux sunlight immunity IP55 housing

#### INDOOR REFLECTOR BEAM

The single-ended nature of the PR-5B reflector beam makes it ideal for short distance monitoring across entrances and exits, corridors and staircases



#### direct reflection system

· cable only to one end: for applications where a beam break is desirable but wiring to both ends is impractical

· small "pocket-calculator" sized housing for unobtrusive protection

PR-5B up to 5m indoor

#### **INDOOR PIR**

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



#### SPEAKER / ATTENTION SENSORS

Our speaker / attention sensors can be used to provide welcome messages at building entrances, to protect emergency doors in shopping centres, hospitals and public buildings, to deter would-be intruders in security applications or to trigger warning messages at construction sites and other hazardous areas.



### AV-100E

N/O input contact for activation • requires external trigger for activation (N/O input) 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)

#### **PV-12E**

12m x 75° PIR as AV-100E except:

 integrated PIR triggers activation · alarm output

#### FLAME SENSORS

TAKEX offer a range of Ultra-Violet (UV) flame detection devices for both internal and external applications. With faster detection than conventional smoke alarms, our flame sensors are practical where smoke detection is not an option, such as diesel engine rooms and open environments.

	FS-1000E
	10m / 7cm Flame
-	<ul> <li>high sensitivity ultraviolet flame sensor</li> <li>built-in sounder</li> <li>NO/NC relay output</li> <li>adjustable response time</li> <li>battery or DC input</li> </ul>
	FS-3500E
	10m / 7cm Flame
	as FS-1000E plus: • Pre-recorded flame prohibition and non-smoking messages • Long and short message options • 5 languages; English, Spanish, Japanese, Chinese, Korean • 80dB/1m (max)
	FS-2000E
and the second	10m / 7cm Flame
	high sensitivity ultraviolet flame sensor         - adjustable detection area

 built-in sounder NO/NC relay output adjustable response time

# 10m / 7cm Flame

 high sensitivity ultraviolet flame sensor omni-directional bracket NO/NC relay output · adjustable response time · weather proof housing for indoor or outdoor use

## TAKEX EUROPE LTD.

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