BUNKER
SEGURIDAD

CATALOGUE

Security devices and detection systems

www.bunkerseguridad.es/EN

Contents

GJD
DETECT & SECURE

TAKEX

BUNKER
SEGURIDAD

FB18

C61

AUXILIARY SOLUTIONS

ANALOGUE TO IP CONVERTER

INT-QUADIP

TAKEX
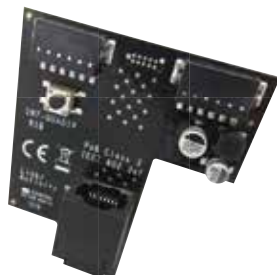
POWER SUPPLY	PoE (IEEE802.3af/at compliant)
CONSUMPTION	3 class PoE (up to 13W)
CONFIGURATION	WEB browser
INPUT	4
ALARM	On IP + digital output N.C. 30V (AC/DC), up to 100 mA
WORKING TEMP.	-35°C a +66°C
COMPATIBLE WITH	Multiple VMS plataforms and IP cams
FUNCTIONS	Convert 3 relay outputs to IP signals
SUITABLE FOR	TAKEX Photoelectric 4 beams: PB-IN-HF/HFA, PB-F/FA, PB-IN-100AT & PB-KH

BATTERY AND WIRELESS TRANSMITTER BOX

BATTERY PACK

BUNKER SEGURIDAD

N° SUPPORTED DEVICES	Up to 2 wireless transmitters
CAPACITY	Up to 4 D type batteries (3,6V) 2 wireless transmitters
INPUT	Alarm: 2 each device / Tamper: 1
SUPPLY OUTPUTS	2 outputs, 3,6V each one
MOUNTING	Beamtower, pole or wall mount
MOUNTING BRACKETS	BP-TB (tower enclosure), BP-WB (wall), BP-PB (pole)
IP	IP65
OPTIONAL	Incorporates space and connector for wireless transmitter

I/O CONTROLLER FOR IP SURVEILLANCE SYSTEMS

IPAnything Module

GJD DETECT & DETER

UNIQUE FEATURES	· Power over Ethernet · Convert input signals to IP alarms · Integrate alarms with VMS or control cameras directly · 12V/24V DC output for powering external units · Network controlled relay outputs
DIGITAL INPUT	4 x digital inputs, high / low / rising edge / falling edge / frequency counting
ANALOG INPUT	1 x 4-20 mA or 0-10V
ALARM OUTPUT	3 x relay. Max 30V, 200mA. N/C and N/O
POWER OUTPUT	1 x 12V DC, max 1A or 24V DC, max 0,5A
NETWORK ALARMS	User configurable HTTP web requests
POWER SUPPLY	Power over Ethernet (48VDC)
CONSUMPTION	Max 12W, PoE class 3
WORKING TEMP.	-30°C to +60°C
INTERFACE	Ethernet IEEE 802.3af, TCP/IP. Web browser user interface
IP	IP66

ELECTRICAL SPECIFICATIONS

DIGITAL INPUT	12VDC, max 1A or 24VDC, max 0,5 A. Short circuit protection.
ANALOG INPUT	0-10V: Accuracy: +/- 25 mV, 12-bit resolution. 4-20 mA: Accuracy: +/- 0,05 mA, 12-bit resolution. Choose input type with DIP-switch.
DIGITAL INPUT	Max 24V. Low signal voltage: 0-1V. High signal voltage: 5-24V. Current typ. 4.4 mA @ 24V. Frequency counting: 0,2 Hz-2,5 kHz. Frequency accuracy <1%.
DIGITAL OUTPUT	Relay, max 30V, 200 mA. N/C and N/O.

MULTISPEECH KIT GJD090K

POWER SUPPLY	9-15VDC
CONSUMPTION	9mA and 38mA (while recording)
AUDIO OUTPUT	2x8W
DIMENSIONS	100x77x40mm
WEIGHT	60g
MEMORY	EEPROM
WORKING TEMP.	-10°C a +50°C

MULTISPEECH 4 KIT
Speaker:
Specially designed for amplifiers with an impedance of 8 Ohm or less

POWER	15w (max), 8 Ohm
FREQUENCY	600-700 hz
SPL	104 dB
DIMENSIONS	135x135x165mm
WEIGHT	380g

AVS electronics
ITALIAN SECURITY MANUFACTURER

BMHP BM series BMM
MICROWAVE BARRIERS

NO TRESPASSING

OUTDOOR DETECTION

ENVIRONMENTAL SANITIZATION SYSTEM

Sany Safe L

AVS electronics

COVERAGE VOLUMES	From 20 m^3 up to 300 m^3
TANK AVAILABILITY	5 L - 10 L - 25 L
SANITIZATION EFFICIENCY	Low intensity: approximately 1 day Medium intensity: approximately 2 days Strong intensity: approximately 1 week
PROGRAMMING BY APP	Environment volume Sanitization intensity Sanitization time scheduling Sanitization cycle management
USER MANAGEMENT BY APP	Manual sanitization start Disable sanitization for a total of n ° of days Reactivation sanitization cycle Tank replacement management Tank level displays Display of sanitization in progress
INSTALLATION	Fixed wall mounting / moveable
POWER SUPPLY	230 Vac (110 Vac optional on request)
WITH EMBEDDED XGSM (2G) MODULE OR XGSM 4G (2G/3G/LTE/4G) MODULE	GPRS always connected to the CLOUD Programming of the configuration parameters with APP - Sany Safe User management with APP - Sany Safe Automatic time synchronization in GPRS
SIM CARD	Included and active for 2 years*
DIMENSIONS	358x264x166mm
WEIGHT	12 kg

*Available for all EU countries

ENVIRONMENTAL SANITIZATION SYSTEM

Sany Safe XL

AVS electronics

COVERAGE VOLUMES	From 100 m^3 up to 600 m^3
TANK AVAILABILITY	5 L - 10 L - 25 L
SANITIZATION EFFICIENCY	Low intensity: approximately 1 day Medium intensity: approximately 2 days Strong intensity: approximately 1 week
PROGRAMMING BY APP	Environment volume Sanitization intensity Sanitization time scheduling Sanitization cycle management
USER MANAGEMENT BY APP	Manual sanitization start Disable sanitization for a total of n ° of days Reactivation sanitization cycle Tank replacement management Tank level displays Display of sanitization in progress
INSTALLATION	Fixed wall mounting / moveable
POWER SUPPLY	230 Vac (110 Vac optional on request)
WITH EMBEDDED XGSM (2G) MODULE OR XGSM 4G (2G/3G/LTE/4G) MODULE	GPRS always connected to the CLOUD Programming of the configuration parameters with APP - Sany Safe User management with APP - Sany Safe Automatic time synchronization in GPRS
SIM CARD	Included and active for 2 years*
DIMENSIONS	480x353x166mm
WEIGHT	18,5 kg

*Available for all EU countries

FLAME SENSORS

INDOOR FLAME SENSOR
FS-2000E

TAKEX

DISTANCE DETECTION	10m (7cm flame height), angle aperture 120°
POWER SUPPLY	10,5V to 30VDC
CONSUMPTION	Standby: 25mA / Alarm (with sound): 75mA / Without sound 40mA
SENSITIVITY ADJUSTMENT	4 stroke timer (0,2/1/6/30sec)
ALARM	Dry contact relay Form C (NO/NC) Contact action: off-delay (approx. 2 sec.) Contact capacity: 30V (AC/DC) 0,3A, (protective resistance 3,3Ω) Off delay (2sec aprox.)
TAMPER	Dry contact relay Form B (NC) Capacity: 30V (AC/DC) 0,1A
BUZZER	Alarm: intermittent every 0,2sec during 10sec Volume: 80dB (silent configuration available)
WORKING TEMP.	-10°C to +60°C

DETECTION:
Ultraviolet rays (180~260nm)

INDOOR FLAME SENSOR
FS-3500E

TAKEX

DISTANCE DETECTION	10m (7cm flame height), angle aperture 120°
POWER SUPPLY	Alcaline battery AA (LR6) 2 units / 3VDC (included) 10/30VDC (with polarity)
CONSUMPTION	Standby: 40mA Alarm: 300mA
ALARM	Dry contact relay (NO/NC selectable) Detection time: 2 sec aprox. Output DC30V 0,1A
TAMPER	Contact relay (NC)
MESSAGES	Programmed messages in 5 languages Buzzer included
WORKING TEMP.	-10°C to +60°C

DETECTION:
Ultraviolet beam (180~260nm)

INDOOR FLAME SENSOR
FS-1000E

TAKEX

DISTANCE DETECTION	10m (7cm flame height), angle: 120° (conically)
POWER SUPPLY	Type-3 alkaline battery (LR6) x2 (3V) Included lithium battery (CR17450E-R-2-CM2) x1 (3V) Optional external power supply: 9V to 30VDC with polarity
CONSUMPTION	Standby: 50 μA (with battery)/ 5mA (DC) Alarm: 50mA (with sound)
BUZZER	Alarm: intermittent every 0,2sec during 10sec Low battery: rigs 0,1sec each 5sec
ALARM	Volume 80dB (silent configuration available)
WORKING TEMP.	-10°C to +60°C

DETECTION:
Ultraviolet rays (180~260nm)

INDOOR/OUTDOOR FLAME SENSOR
FS-5000E

TAKEX

DISTANCE DETECTION	10m (7cm flame height) Hor.: 100° Vert.: 75°
POWER SUPPLY	10V to 30VDC
CONSUMPTION	35 mA
ALARM	Dry contact relay output form C (NO/NC) Capacity: 30V (CA/CC) 0,5A Adjustable operation time Day/night mode configuration
WORKING TEMP.	-20°C to +50°C

DETECTION:
Ultraviolet rays (180~260nm)

FLAME SENSORS

DUAL TECHNOLOGY PIR & FLAME SENSOR

FP-2500E

TAKEX

DISTANCE DETECTION	10m, angle aperture 120° PIR: Wide angle, 10m. 29 pairs
POWER SUPPLY	10V-30VDC
CONSUMPTION	up to 20mA
ALARM OUTPUT	Individual / AND / OR
TAMPER OUTPUT	Dry contact NC
WORKING TEMP.	-15°C a +55°C

DETECTION:
PIR + Ultraviolet flame sensor (185-260nm)

Infrared and white light LED illuminators

More details at page 29

Clarius®
LED Illuminators

Spotted. Caught.

TAKEX

OUTDOOR INFRARED PASSIVE DETECTORS

DETECTORS

INDOOR CEILING PIR
PA-68xx-E

TAKEX

	PA-6805E	PA-6810E	PA-6812E	PA-6820E
COVERAGE	180° Ø4m	360° up to Ø15,2m	Wide angle up to 12m	Vertical courtain up to 20m
SENSITIVE AREA	9 pairs	33 pairs	17 pairs	8 pairs
ADJUSTMENT	vertical 30°	-		vertical 30°
	Horizontal: 25°			
COUNTERS	1 / 2 / 3 / 4 adjustable			-
POWER SUPPLY	10,5 - 28VDC (non polarity)			
CONSUMPTION	25mA (+2mA at L/C use)			
WORKING TEMP.	-15°C a +55°C non condensing			

OUTDOOR PIR
MS-100E

TAKEX

RANGE OPTIONS	Vertical installation · Wide angle: 10m (5 pairs) · Curtain: 10m (5 pairs) · Long range: 20m (1 pair) Horizontal installation · Vertical curtain: 3m (5 pairs)
POWER SUPPLY	10,5V a 30VDC (non polarity)
CONSUMPTION	30mA
WORKING TEMP.	-20°C a +50°C
TAMPER OUTPUT	Dry contact (NC)
ALARM OUTPUT	Dry contact (NO/NC)
OPTIONAL	Ceiling/wall mount brackets (BCW-401) Wall mount fittings (BW-14)

OUTDOOR PIR
MS-12TE/FE

TAKEX

	MS12-TE	MS12-FE
RANGE	90° 12m	180° 12m 2 x MS-12TE
CONSUMPTION	35mA	40mA
DETECTION MODE	---	AND/OR
POWER SUPPLY	12V a 30V (non polarity)	
WORKING TEMP.	-20°C a +50°C	
TAMPER OUTPUT	Dry contact (NC)	
ALARM OUTPUT	Dry contact (NO/NC)	

OUTDOOR PIR
OMS-12FE

TAKEX

DETECTION ZONE	180°, 12m Horizontal area: 14 zones Downward area: 14 zones
ALIMENTATION	9 a 28VDC (non polarity)
CONSUMPTION	20mA
TAMPER	Dry contact relay (NC)
ALARM OUTPUT	Dry contact relay (NO/NC)
WORKING TEMP.	-20°C a +50°C
OPTIONAL	Pole attachment: BP-32

OUTDOOR WIRELESS PIR

TX-114SR / TX-114TR / TX-114FR

TAKEX

RANGE	12m - 90°
POWER SUPPLY	3V to 9VDC battery
CONSUMPTION	25µA
TAMPER OUTPUT	Dry contact (NO/NC)
WORKING TEMP.	-20°C to 50°C
OPTIONAL	Wall mount accessories (BW-24) Pole attachment BP-32 (PA-22)

TX-114SR

PULSATIONS	1 or 3 times selectable
ALARM FREQ.	Selectable 10/120/300/900sec

TX-114FR

RANGE	12m - 180°
CONSUMPTION	30µA
DETECTION MODE	AND / OR selectable

LASER DETECTION

GJD provides high quality laser sensors, which offer precise and accurate presence detection
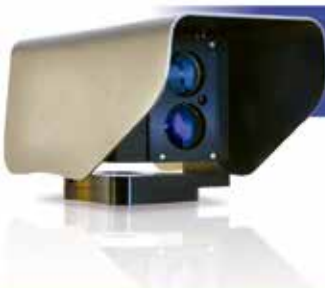
D-TECT GJD-500-505-509

Range up to 25x25m

LASER WATCH - GJD515

Range up to 500m

GJD
DETECT & DETER

Residential perimeter beam towers

Industrial perimeter beam towers

Outdoor perimeter security systems

More details at page 20-21

BUNKER
SEGURIDAD

FOG DETERRENT
SYSTEMS

Foggy30W

AVS electronics

COVERAGE VOLUMES	10'' activation: 100 m³ 20" activation: 200 m³ 60" activation: 300m³ 60" of pulsed activation: until 1900 m³
TANK CAPACITY	1 liter
NOZZLES AVALAIBLE	1 at 90º curtain with one jet (series) / 3 with different angles and deliveries (optional)
POWER SUPPLY	220VAC
CONSUMPTION	Heating: 600 Watt Maintenance: 60/120 Watt
DIMENSIONS	358 x 264 x 166 mm
WEIGHT	15kg
OUTPUT	12VDC Indication outputs: Delivery on – Tampering, liquid level, technical trouble, mains absence, battery level, damaged battery, pump malfunctioning, PCB temperature, heater temperature
BUS	Serial RS485 dedicated to AVS Electronics Systems
IMQ APPROVAL	EN 50131-8
COLOR	White

Supplied with full tank and single-jet 90° nozzle

Foggy50W

AVS electronics

COVERAGE VOLUMES	20" activation: 200 m³ 40" activation: 400 m³ 60" activation: 600m³ 60" of pulsed activation: until 1900 m³
TANK CAPACITY	1,5 liter
NOZZLES AVALAIBLE	1 at 90 curtain with one jet (series) / 3 with different angles and deliveries (optional)
POWER SUPPLY	220VAC
CONSUMPTION	Heating: 1000 Watt Maintenance: 60 Watt
DIMENSIONS	480 x 353 x 166 mm
WEIGHT	22kg
OUTPUT	12VDC Indication outputs: Delivery on – Tampering, liquid level, technical trouble, mains absence, battery level, damaged battery, pump malfunctioning, PCB temperature, heater temperature
BUS	Serial RS485 dedicated to AVS Electronics Systems
SYSTEM DIAGNOSIS	Via USB connection on the control PCB with GSM remote connection by optional PCB XGSM
IMQ APPROVAL	EN 50131-8
COLOR	White

Supplied with full tank and single-jet 90° nozzle

Outdoor perimeter
security beam tower

easyPack

Format of pre-wired tower with the different necessary elements already fixed and wired on the tower itself, providing a complete solution that makes the installation easier by decreasing the time required to perform it, and by simplifying the work in the field: this way it will only be necessary to align the infrared beams.
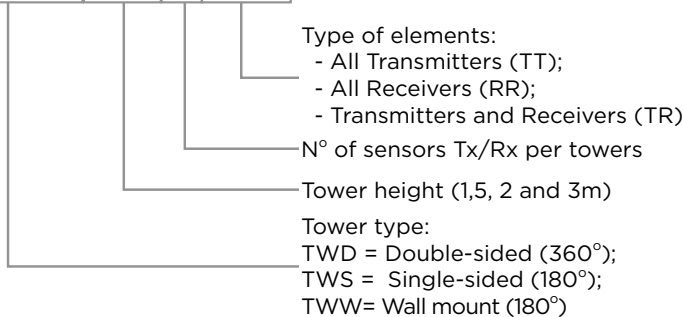
A very flexible, customizable solution that adapts to the requirements of each installation, due to the shape of the tower itself (180º/360º; floor or wall mounting, different heights) and to the detectors assembled in every single tower (quantity, brand and location within the tower).

Each easyPack product includes: an aluminium central body, a polycarbonate profile, a top cover, an aluminium base, an anti-sabotage tamper, both heaters and detectors (Tx/Rx), and a motherboard with its thermostat that is able to manage the entire system; everything installed together with the beams chosen specifically by the customer and secured by their corresponding fixing brackets.

This specific product does not include the beams, since they are customized to each particular case and sample chosen by the client.

MEANING OF REFERENCES

TWD206TR

Type of elements:
- All Transmitters (TT);
- All Receivers (RR);
- Transmitters and Receivers (TR)

Nº of sensors Tx/Rx per towers

Tower height (1,5, 2 and 3m)

Tower type:
TWD = Double-sided (360º);
TWS = Single-sided (180º);
TWW= Wall mount (180º)

EXAMPLES

Mounting	Type	Tx	Rx	Reference
Standalone	360º	4	0	TWD204TT
		0	4	TWD204RR
		2	2	TWD204TR
	180º	2	0	TWS202TT
		0	2	TWS202RR
Wall mount	180º	2	0	TWW202TT
		0	2	TWW202RR

TECNOLOGY BY

BUNKER SEGURIDAD

TAKEX

ACCESSORIES

DC12V/DC24V

TWE

TWC

TWAA

TWCAB

INT-QUAD-IP

SF1/SF2

CR3SB

TWEB 3/4

TWSM

BATTERY PACK

PHOTOELECTRIC BEAM TOWER

PT

360° double-sided protection perimeter tower for infrared Photoelectric beams
· Compatible with 99% of AIR beams in the market.
· Height: 0,5m – 1m - 1,5m – 2m - 3m, other sizes upon request.
· Anti-sabotage tamper switch included to avoid any manipulation.
· Vandal resistant polycarbonate profiles that protects from sunlight and hide the sensors.
· The 3m version includes side bracket.
· Mounting kit.

ACCESSORIES	PTLUX PTCCTV MB3SB PTFB PTH24V PTS PTS50 FAN12/24 PTPS PTFA DC12/24V PT4R BEAG TAKH PTSSL PTWB Battery Pack BP-TB

PHOTOELECTRIC BEAM TOWER

MB

180° single sided protection perimeter tower for infrared Photoelectric beams
· Compatible with 99% of AIR beams in the market.
· Height: 0,5m – 1m - 1,5m – 2m - 3m, other sizes upon request.
· Anti-sabotage tamper switch included to avoid any manipulation.
· Vandal resistant polycarbonate profiles that protects from sunlight and hide the sensors.
· Side brackets included with each tower. MB3SB, 70cm height side brackets included on
  every 3m towers
· Mounting kit.

ACCESSORIES	MB3SB MBFB PTH24V PTS PTS50 MBPS MB3R FAN12/24 PTFA DC12/24V PTCLIP BEAG TAKH PTSSL Battery Pack BP-TB

PHOTOELECTRIC BEAM TOWER

MBW

180° wall mount protection tower for infrared Photoelectric beams
· Compatible with 99% of AIR beams in the market.
· Height: 0,5m – 1m - 1,5m – 2m - 3m, other sizes upon request.
· 2 anti-sabotage tamper switches included to avoid any manipulation.
· Vandal resistant polycarbonate profiles that protects from sunlight and hide the sensors.
· Mounting kit.

ACCESSORIES	PTH24V PTS PTS50 MBPS FAN12/24 PTFA DC12/24V PTCLIP BEAG TAKH PTSSL Battery Pack BP-TB

LAMP BEAM TOWER. GARDEN GUARD SERIES

MALTA

BUNKER SEGURIDAD

LED BULB	E27 12/24V, LED bulbs only. Bulbs are not included
CAPACITY	4 sensors of 2 beams each (consult models) For Takex twin beams.
HEIGHT	1,85m (155cm pole height + 35cm PC globe diameter)
ACCESSORIES	PTS PTS 50 MAH24V MAFB MA FAN 12/24

· Fixing kit and sabotage tamper included.

Available MALTA/2 - 2 units per box (ideal to reduce the carriage impact cost)

LAMP BEAM TOWER. GARDEN GUARD SERIES

CAV

BUNKER SEGURIDAD

LED BULB	E27 12/24V, LED bulbs only. Bulbs are not included
CAPACITY	4 sensors of 2 beams each For Takex twin beams.
HEIGHT	1m (75cm pole height + 25cm top cap)
ACCESSORIES	PTS PTS 50 MAH24V MAFB MA FAN 12/24

· Fixing kit and sabotage tamper included.

Available CAV/2 - 2 units per box(ideal to reduce the carriage impact cost)

LAMP BEAM TOWER WALL MOUNT. GARDEN GUARD SERIES

CAV-W

BUNKER SEGURIDAD

LED BULB	E27 12/24V, LED bulbs only. Bulbs are not included
CAPACITY	1 sensor of 2 beams, 1 Tx or 1 Rx
HEIGHT	58,45cm (33,45cm pole height + 25cm top cap)
ACCESSORIES	PTS PTS 50 MAH24V MA FAN 12/24

· Fixing kit and sabotage tamper included.

2 units per box

PHOTOELECTRIC
BEAMS

TAKEX

OUTDOOR INFRARED REFLECTOR BEAM
PR-11B

TAKEX

RANGE	Outdoor 1-11m Indoor 1-15m
POWER SUPPLY	10,5 - 30VDC (non polarity)
CONSUMPTION	55mA
ALARM OUTPUT	30V(AC/DC), 0,5A
TAMPER OUTPUT	30V(AC/DC), 0,5A
TIME RESPONSE	0,05 s a 0,7 sec (regulable)
WORKING TEMP.	-25°C to +60°C
IP	IP55
FUNCTIONS	Monitor output

DETECTION: Infrared beam interruption

INDOOR INFRARED REFLECTOR BEAM
PR-5B

TAKEX

RANGE	5m
POWER SUPPLY	10,5 - 30VDC (non polarity)
CONSUMPTION	37mA
ALARM OUTPUT	30V(AC/DC), 0,5A
RESPONSE TIME	50 msec
WORKING TEMP.	-20°C to +50°C
MOUNTING	Indoor

OUTDOOR INFRARED REFLECTOR BEAM
PR-30BE

TAKEX

RANGE	0,5 up to 30m (Outdoor) 0,5 up to 40m (Indoor)
POWER SUPPLY	10,5 - 30VDC (non polarity)
CONSUMPTION	200mA or less
ALARM OUTPUT	Dry contact relay NO/NC
CONTACT CAPABILITY	30V (AC/DC) 0,25A or less
RELAY OPERATION	Interruption time
TAMPER OUTPUT	Dry contact relay (NC)
TIME RESPONSE	0,05/0,1/0,25/0,5 sec
WORKING TEMP.	-25°C to +60°C
IP	IP54

DETECTION: Infrared beam interruption (ToF tecnology)

SINGLE BEAM INFRARED BARRIER WITHOUT FREQUENCIES
PB-10NS

TAKEX

DESCRIPTION	Photoelectric beam sensor
RANGE	10m
POWER SUPPLY	10 - 30Vdc (non polarity)
CONSUMPTION	45mA
ALARM	Dry contact 30V(AC/DC) 0,3A N/O, N/C selectable Dry contact action: interruption time + delay time (aprox. 1 sec)
WORKING TEMP.	-25°C to +55°C

DETECTION: Infrared beam interruption

2 BEAMS INFRARED PHOTOBEAM SINGLE FREQUENCY

PB-30/60/100TK

TAKEX

	PB-30TK	PB-60TK	PB-100TK
RANGE	30m	60m	100m
CONSUMPTION	53mA	80mA	
POWER SUPPLY	10 - 30VDC (non polarity)		
RESPONSE TIME	50 up to 700ms (adjustable)		
ALARM/TAMPER	30V (AC/DC) 0,5A		
MODULATION	Double		
WORKING TEMP.	-25°C to +60°C		
IP	IP55		
FUNCTIONS	Circuit AGC, frost-proof enclosure		
OPTIONAL	TAKH (tower beam bracket) BP60A (pole support)		

DETECTION: Simultaneous breaking of 2 beams

2 BEAMS 4 FRECUENCIES INFRARED PHOTOBEAM

PB-20/40/60TE

TAKEX

	PB-20TE	PB-40TE	PB-60TE
RANGE	20m	40m	60m
CONSUMPTION	55mA	75mA	80mA
POWER SUPPLY	12 - 30VDC		
RESPONSE TIME	50 up to 700ms (adjustable)		
ALARM/TAMPER	30V (AC/DC) 0,5A		
WORKING TEMP.	-25°C to +60°C		
MODULATION	Double		
IP	IP55		
FUNCTIONS	Circuit AGC, frost-proof enclosure		
OPTIONAL	TAKH (tower beam bracket) BP60A (pole support)		

DETECTION: Simultaneous breaking of 2 beams

4 BEAMS INFRARED PHOTOBEAM SINGLE FREQUENCY

PB-50/100/200F

TAKEX

	PB-50F	PB-100F	PB-200F
OUTDOOR RANGE	50m	100m	200m
CONSUMPTION	75mA		
POWER SUPPLY	12 - 30VDC (non polarity)		
RESPONSE TIME	50 up to 700ms (regulable)		
ALARM/TAMPER	30V (AC/DC) 1A		
MODULATION	Double		
WORKING TEMP.	-25°C to +55°C		
IP	IP55		
FUNCTIONS	Circuit AGC, frost-proof enclosure		
OPTIONAL	Fixing bracket TAKH (tower beam mounting)		

DETECTION: Simultaneous breaking of 4 beams

4 BEAMS AND 4 FREQUENCIES INFRARED PHOTOBEAM

PB-IN 50/100/200HF

TAKEX

	PB-IN50HF	PB-IN100HF	PB-IN200HF
OUTDOOR RANGE	50m	100m	200m
CONSUMPTION	60mA	70mA	85mA
POWER SUPPLY	12 - 30VDC (non polarity)		
RESPONSE TIME	50 up to 700ms (adjustable)		
ALARM/TAMPER ENVIRONMENTAL	30V (AC/DC) 1A		
MODULATION	Double		
WORKING TEMP.	-35°C to +66°C		
IP	IP55		
FUNCTIONS	Circuito AGC, frost-proof enclosure		
OPTIONAL	Fixing bracket TAKH (tower beam mounting)		

DETECTION: Simultaneous breaking of 4 beams

4 BEAMS AND 4 FREQUENCIES INFRARED PHOTOBEAM

PB-IN-100AT

TAKEX

DETECTION: Simultaneous breaking of 4 beams or 2 lower beams

RANGE	100m
POWER SUPPLY	12 - 30VDC (non polarity)
CONSUMPTION	85mA
ALARM/TAMPER ENVIRONMENTAL	30V (AC/DC) 100mA
RESPONSE TIME	Resp. DUAL: 35 up to 500ms (AND) 100, 200, 300, 500ms
MODULATION	Double
WORKING TEMP.	-35°C to +66°C
IP	IP55
FUNCTIONS	Indicator, programmed AGC, **Crawling protection**, Beam power switch

4 BEAMS AND 4 FREQUENCIES INFRARED PHOTOBEAM

PXB-100ATC

TAKEX

DETECTION: Simultaneous breaking of 4 beams or 2 lower beams

RANGE	100m
POWER SUPPLY	12 - 30VDC (non polarity)
CONSUMPTION	Transmitter: 27mA / Receiver: 48mA
ALARM/TAMPER ENVIRONMENTAL	30V (AC/DC) 100mA
RESPONSE TIME	Resp. DUAL: 35 up to 500ms (AND) 100, 200, 300, 500ms
MODULATION	Double
WORKING TIME	-35°C to +66°C
IP	IP65
FUNCTIONS	Indicator, programmed AGC, **synchro-quad or anti-crawl switch**, Beam power switch, 4 selectable beam channels to prevent crosstalk

## 4 BEAMS AND 4 FREQUENCIES INFRARED PHOTOBEAM FOR BEAM TOWER

PB 100AT-KH

TAKEX

DETECTION: Simultaneous breaking of 4 beams or 2 lower beams

RANGE	100m
POWER SUPPLY	10,5 - 30VDC (non polarity)
CONSUMPTION	85mA
ALARM / ENVIRONMENTAL	1A or less
MODULATION	Double
WORKING TEMP.	-35°C to +66°C
FUNCTIONS	Programmed AGC, Verification, **Crawling protection,** Perfect for marine environments
OPTIONAL	TAKH (beam tower mounting)

4 BEAMS AND 4 FREQUENCIES INFRARED PHOTOBEAM FOR BEAM TOWER

PB-50/100/200HF-KH

TAKEX
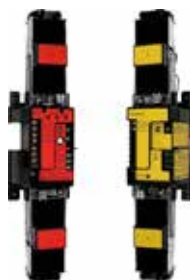
DETECTION: Simultaneous breaking of 4 beams

	PB-50HF-KH	PB-100HF-KH	PB-200HF-KH
RANGE	50m	100m	200m
POWER SUPPLY	12 - 30VDC (non polarity)		
CONSUMPTION	50mA	60mA	70mA
ALARM ENVIRONMENTAL	30V (AC/DC) 1A		
RESPONSE TIME	50 up to 700ms (adjustable)		
MODULATION	Double		
WORKING TEMP.	-35°C to +66°C		
FUNCTIONS	Perfect for marine environments		
OPTIONAL	TAKH (beam tower mounting)		

4 BEAMS AND 4 FREQUENCIES INFRARED PHOTOBEAM FOR BEAM TOWER

PXB 50/100/200HF-KH

TAKEX

	PXB 50HF-KH	PXB 100HF-KH	PXB 200HF-KH
RANGE	50m	100m	200m
CONSUMPTION	30mA	32mA	34mA
POWER SUPPLY	12 - 30VDC		
ALARM / TAMPER ENVIRONMENTAL	30V AC/DC, 200 mA		
RESPONSE TIME	up to 700ms (adjustable)		
MODULATION	Double		
WORKING TEMP.	-35°C to +66°C		
FUNCTIONS	Modulated beam frequency selection, Tone indicator, Beam power selection, Programmed AGC, Auto-gain lock function, Wireless checker		
OPTIONAL	TAKH (tower beam mounting)		

DETECTION: 4 beams simultaneous interruption

MS-12FE
Outdoor PIR DUAL detector
180° angle opening
Suitable for pets

TAKEX
Find more details at page 27

LOW CONSUMPTIOM INFRARED BARRIER WITH 4 FREQUENCIES

PXB-100SW

TAKEX

RANGE	100m
POWER SUPPLY	5 - 30VDC
CONSUMPTION	min 2,3 mA up to 5,2 mA (depending on voltage)
MODULATION	Double
WORKING TEMP.	-35°C to +66°C
IP	IP65
OPTIONAL	TAKH, Battery Pack (tower beam mounted)

DETECTION: Near infrared pulsed beam interruption system
(TX-RX 4 beam simultaneous interruption)

WIRELESS INFRARED BARRIER WITH 4 FREQUENCIES

TXF-125E

TAKEX

RANGE	25, 50, 75, 100m (adjustable)
POWER SUPPLY	3,6V, 17Ah lithium battery SAFT: LS33600
CONSUMPTION	750 µA
LIFE BATTERY	5 years (aprox.)
MODULATION	Simple
WORKING TEMP.	-10°C to +50°C
IP	IP65

Clarius®
LED Illuminators

LED ILLUMINATORS

INFRARED LED ILLUMINATOR
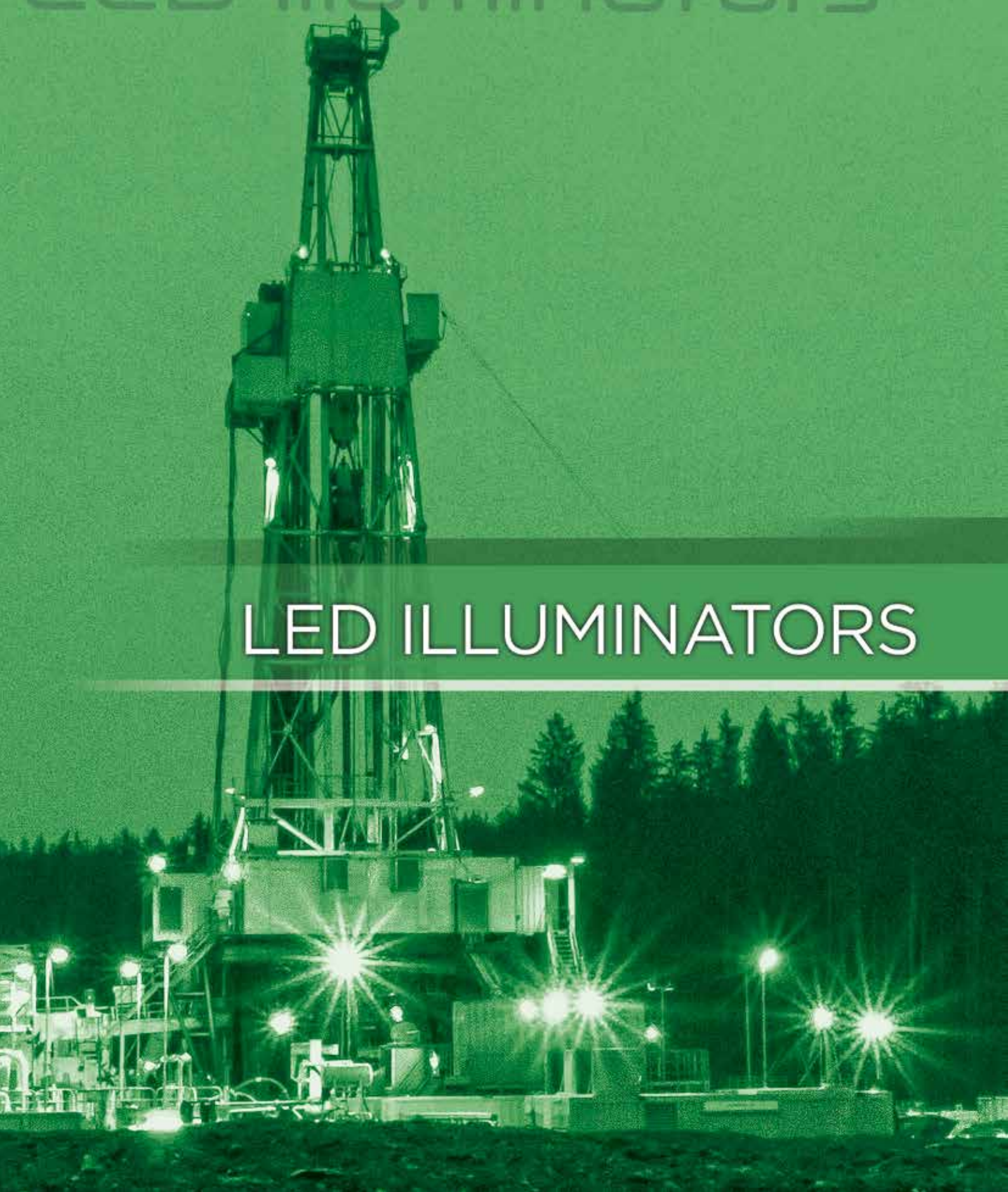
Clarius PLUS

Available sizes **S M L XL**

CONSTRUCTION	Robust high quality black anodised aluminium extrusion
PHOTOCELL	Adjustable 20-70 lux
ILLUMINATION	Adjustable 10%-100%
WORKING TEMP.	-50°C / 50°C
MOUNTING	Wall mount bracket
POWER SUPPLY	12-32VDC or 24VAC +/-10% (except PoE)
IP	IP66
ELECTRONICS	Dual Core LED's™ OSRAM

Front Window: Polycarbonate high transmission Protective IR Filter with CleanLITE® technology

REF.	SCOPE	CONSUMPTION	POWER SUPPLY	WAVELENGHT	ANGLE
IS-8	21m up to 132m	15W	ALT 30-24	850nm	10° Circular
IM-8	30m up to 187m	26W			20° Elliptical
IL-8	36m up to 228m	39W	ALT 60-24		30° Elliptical
IX-8	42m up to 262m	52W			60° Elliptical
IS-8-P	16m up to 101m	12W	any injector PoE IEEE 802.3af		80° Elliptical
IM-8-P	30m up to 187m	25W	any injector PoE IEEE 802.3at (PoE+)		95° Elliptical
IS-9	12m up to 81m	15W	ALT-30-24	940nm	
IM-9	20m up to 115m	26W			
IL-9	24m up to 140m	39W	ALT-60-24		
IX-9	28m up to 161m	52W			
IS-9-P	9m up to 62m	12W	any injector PoE IEEE 802.3af		
IM-9-P	20m up to 115m	25W	any injector PoE IEEE 802.3at		

INFRARED LED ILLUMINATOR

Clarius PLUS DUAL

Available sizes **L XL**

CONSTRUCTION	Robust high quality black anodised aluminium extrusion
PHOTOCELL	Adjustable 20-70 lux
ILUMINATION	Adjustable 10%-100%
WORKING TEMP.	-50°C / 50°C
MOUNTING	Wall mountbracket
POWER SUPPLY	L version: 12-32VDC/24V AC+/-10% Input current: 3,2A at 24V XL version: 12-32VDC/24V AC+/-10% Input current: 4,4A at 24V
IP	IP66
ELECTRONICS	Dual Core LED's™ OSRAM

Front Window: Polycarbonate high transmission Protective IR Filter with CleanLITE® technology

REFERENCE	SCOPE	CONSUMPTION	POWER SUPPLY	WAVE LENGHT	ANGLE
IL2-8-DUAL	51m up to 319m	L version 78W	Not included, recomended: ALT-100-24	850nm	10° Circular
IL2-9-DUAL	34m up to 196m	XL version 104W		940nm	20°/30°/60°/80°/95° Elliptical

INFRARED LED ILLUMINATOR

Clarius LT

Available sizes **S M**

CONSTRUCTION	Robust high quality black anodised aluminium extrusion
PHOTOCELL	Predefined 50 lux
WORKING TEMP.	-50°C / 50°C
MOUNTING	Wall mountbracket
POWER SUPPLY	12-32VDC +/-10%
IP	IP67
ELECTRONICS	Dual Core LED's™ OSRAM

Front Window: Polycarbonate high transmission Protective IR Filter with CleanLITE® technology

REF.	SCOPE	CONSUMPTION	POWER SUPPLY	ANGLE
IS-830-LT	20m	12W	ALT-30-24	30°
IM-830-LT	45m	20W		
IS-890-LT	15m	12W		90°
IM-890-LT	25m	20W		

INFRARED LED ILLUMINATOR

Clarius IP

Clarius® LED Illuminators

Front Window: Polycarbonate high transmission Protective IR Filter with CleanLITE® technology

Available sizes **M**

CONSTRUCTION	Robust high quality black anodised aluminium extrusion
PHOTOCELL	Predefined 50 lux
WORKING TEMP.	-50°C / 50°C
MOUNTING	Wall-mounting bracket
POWER SUPPLY	PoE+ (IEEE802.3at)
IP	IP66
ELECTRONICS	Dual Core LED's™ OSRAM
CONSUMPTION	25W

REFERENCES	SCOPE	WAVELENGHT	POWER SUPPLY	ANGLE
IM-8- IP	30m up to 187m	850nm	Any injector PoE IEEE 802.3at	10° Circular 20°/30°/60° Elliptical
IM-9-IP	20m up to 115m	940nm		

WHITE LIGHT LED ILLUMINATOR

Clarius PLUS

Clarius® LED Illuminators

Front Window: Polycarbonate high transmission Protective IR Filter with CleanLITE® technology

Available sizes **S M L XL**

CONSTRUCTION	Robust high quality black anodised aluminium extrusion
PHOTOCELL	Adjustable 20-70 lux
ILLUMINATION	Adjustable 10%-100%
WORKING TEMP.	-50°C / 50°C
MOUNTING	Wall-mountin bracket
POWER SUPPLY	12-32VDC or 24VAC +/-10% (except PoE)
IP	IP66
ELECTRONICS	Dual Core LED's™ OSRAM
COLOR TEMP.	5700k (6000k and 6800k on request)

REFERENCES	SCOPE	LUMENS	CONSUMPTION	POWER SUPPLY	ANGLE
VS-CW	20m up to 81m	1200lm	15W	ALT 30-24	10° Circular
VM-CW	29m up to 114m	2400lm	26W		20° Elliptical
VL-CW	35m up to 139m	3600lm	39W	ALT 60-24	30° Elliptical
VX-CW	42m up to 262m	4450lm	52W		60° Elliptical
VS-CW-P	17m up to 68m	1100lm	12W	any injector PoE IEEE 802.3at	80° Elliptical
VM-CW-P	29m up to 114m	2400lm	25W		95° Elliptical

WHITE LIGHT LED ILLUMINATOR

Clarius PLUS DUAL

Clarius® LED Illuminators

Front Window: Polycarbonate high transmission Protective IR Filter with CleanLITE® technology

Available sizes **L XL**

CONSTRUCTION	Robust high quality black anodised aluminium extrusion
PHOTOCELL	Adjustable 20-70 lux
ILLUMINATION	Adjustable 10%-100%
WORKING TEMP.	-50°C / 50°C
MOUNTING	Wall mountbracket
POWER SUPPLY	L version: 12-32VDC/24V AC+/-10% Input current: 3,2A at 24V XL version: 12-32VDC/24V AC+/-10% Input current: 4,4A at 24V
IP	IP66
ELECTRONICS	Dual Core LED's™ OSRAM
COLOR TEMP.	5700k (6000 and 6500k on request)

REFERENCES	SCOPE	LUMENS	CONSUMPTION	POWER SUPPLY	ANGLE
VL2-CW	49m up to 195m	7200lm	L version 78W	Not included, recomended: ALT-100-24	10° Circular 20°/30°/60°/
VX2-CW	56m up to 223m	9600lm	XL version 104W		80°/95° Elliptical

WHITE LIGHT LED ILLUMINATOR

Clarius IP

Clarius®
LED Illuminators

Front Window: Polycarbonate high transmission
Protective IR Filter with CleanLITE® technology

Available sizes	**M**
CONSTRUCTION	Robust high quality black anodised aluminium extrusion
PHOTOCELL	Predefined 50 lux
WORKING TEMP.	-50°C / +60°C
MOUNTING	Wall-mounting bracket
POWER SUPPLY	100-240VAC IEEE802at Compliant, TCP/IP (PoE)
IP	IP66
ELECTRONICS	Dual Core LED's™ OSRAM
COMSUPTION	26W
COLOR TEMP.	5700 K (6000 and 6500 k on request)

REFERENCES	SCOPE	LUMENS	POWER SUPPLY	ANGLE
VM-CW-IP	29m up to 114m	2400 lm	Any injector PoE IEEE 802.3at	10° Circular 20°/30°/60°/80°/95° Elliptical

AVS electronics

Foggy

Foggy 50W
Fog deterrent system

Find more details at page 17

LASER DETECTORS

GJD
DETECT & SECURE

D-TECT

	GJD500 D-TECT	GJD505 D-TECT	GJD509 D-TECT
RANGE	25x25m	5x5m	10x10m
POWER SUPPLY	10V to 35VDC		
CONSUMPTION	1,8A		
CABLE LENGHT	10m		
OBJECTIVE SIZE (min)	2,1cm at 3m/3,5cm at 5m/7cm at 10m/17,5cm at 25m (in proportion to the distance of the object)		
LASER CHARACTERISTICS	Wavelength 650 nm; max. output CW power 3 mW (CLASS 3R) IR LASER: wavelength 905 nm; max. output pulse power 75 W (CLASS 1)		
IP	IP65		
RESPONSE TIME	20-80ms		
ROTATION ANGLES ON BRACKETS	Rotation: -5° up to +5° (lockable) Inclination: -5° up to +5°		

LASER WATCH GJD515

RANGE	500m
POWER SUPPLY	PoE 48VDC or 12VDC
UPDATE RATE	250Hz
LASER WAVELENGHT	905nm
BEAM DIVERGENCE	2,0x0,2m RAD
ALIGNMENT LASER	Yes
LASER CLASS	Class 2, eye-safe
CONSUMPTION	4W PoE class 2 / 12VDC 0,1 A
IP	IP66
INTERFACE	Ethernet IEEE 802. 3af, TCP/IP, interface with WEB browser

Flame sensors

indoor & outdoor ultra-violet
flame detection

TAKEX

Find more details at page 9