



CATALOGUE

Security devices and detection systems
Industrial solutions for data transmission

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Spotted. Caught.



TAKEX
OUTDOOR INFRARED
PASSIVE DETECTORS

Find more details at page 29

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INDUSTRIAL ETHERNET SWITCHES



KBC's Ethernet Switch range include 4, 6, 8, 10, 12, 16 and 24 port options with PoE, PoE+ and PoE++, managed and unmanaged options and all are fully rugged, designed to operate in extreme conditions.

MEANING OF REFERENCES

① ② ③ ④ ⑤ ⑥ ⑦ ⑧
ESUGS8-P2-L-B

①
 ESU: Unmanaged
 ESM: Managed

②
 Speed Mbps:
L: 10/100 (ETH)
G: 1000 (ETH)
M: 100 FX (SFP)
P: 1000 FX (SFP)

③
 PoE power supply:
N: No PoE
S: PoE
H: PoE++

④
 N° of main ports

⑤
 Additional ports speed:
L: 10/100 (ETH)
G: 1000 (ETH)
M: 100 FX (SFP)
P: 1000 FX (SFP)
N: 10 Gigabit FX (SFP)
C: Combo

⑥
 N° of additional ports

⑦
 Supply voltage:
L: up to 160W PoE

⑧
 Mounting type:
B: DIN Rail
W: Wall mounting

ETHERNET UNMANAGED NO PoE SWITCHES

ESUXNx-xx-B



ESULN4-L1-B



ESULN4-M1-B

	ESULN4-L1-B	ESULN4-M1-B	ESULN8-P2-B	ESUMN8-P2-B
ETHERNET PORT	5	4	8	-
ETHERNET PORT SPEED (Mbps)	10/100			-
SFP PORT	-	1	2	8 + 2 Gigabit additional ports
SFP PORT SPEED (Mbps)	-	100	1000	100 + 1000 Mbps
MOUNTING	DIN Rail		DIN Rail/Wall	DIN Rail
POWER SUPPLY	24VDC			

ESUGNx-Px-B

	ESUGN4-P1-B	ESUGN4-P2-B	ESUGN8-P2-B
ETHERNET PORT	4		8
ETHERNET PORT SPEED (Mbps)	10/100/1000		
SFP PORT	1	2	
SFP PORT SPEED (Mbps)	1000		
MOUNTING	DIN Rail		
POWER SUPPLY	24VDC		

ESULxx-xx-x*



ESULH4-L1-W



ESULS4-M1-B



ESULS8-P2-B

	ESULH4-L1-W	ESULS4-M1-B	ESULS4-L1-B	ESULS8-P2-B
ETHERNET PORT	4 PoE + 1 no PoE	4	4 PoE + 1 no PoE	8
ETHERNET PORT SPEED (Mbps)	10/100			
SFP PORT	-	1	-	2
SFP PORT SPEED (Mbps)	-	100	-	1000
PoE TYPE	PoE++	PoE+		PoE/PoE+
MOUNTING	-	DIN Rail		DIN Rail/Wall
POWER SUPPLY	-	48-57VDC		

*Equipments in this switch family require power supply, not supplied (sold separately)

ESUGSx-xx-B*



ESUGS4-P2-B

	ESUGS4-G1-B	ESUGS4-P1-B	ESUGS4-P2-B	ESUGS8-P2-B
ETHERNET PORT	4 PoE + 1 no PoE	4	4	8
ETHERNET PORT SPEED (Mbps)	10/100/1000			
SFP PORT	-	1	2	
SFP PORT SPEED (Mbps)	-	1000		
PoE TYPE	PoE+			
MOUNTING	DIN Rail/Wall/ Desktop	DIN Rail	DIN Rail/Wall/ Desktop	DIN Rail
POWER SUPPLY	48-57VDC	48-57VDC		

*Equipments in this switch family require power supply, not supplied (sold separately)

ESUGSx-xx-L-B*



ESUGS8-P2-L-B

	ESUGS4-G1-L-B	ESUGS6-P1-L-B	ESUGS8-P2-L-B
ETHERNET PORT	4 PoE + 1 no PoE	6	8
ETHERNET PORT SPEED (Mbps)	10/100/1000		
SFP PORT	-	1	2
SFP PORT SPEED (Mbps)	-	1000	1000
PoE TYPE	PoE+	PoE+ (160W max)	PoE++ (160W max)
MOUNTING	DIN Rail/Wall/ Desktop	DIN Rail	
POWER SUPPLY	9-36VDC	24VDC	

*Equipments in this switch family require power supply, not supplied (sold separately)

ESMGNx-xx-x



ESMGN8-C2-B

	ESMGN4-P2-B	ESMGN8-C2-B	ESMGN8-P4-B
ETHERNET PORT	4	8	8
ETHERNET PORT SPEED (Mbps)	10/100/1000		
SFP PORT	2	2*	4
SFP PORT SPEED (Mbps)	1 Gigabit		
MOUNTING	DIN Rail / Desktop		
POWER SUPPLY	Not included (MDR-60-24)		

*Combo ports

MANAGED NON PoE NO ETHERNET SWITCHES

ESMPNx-xx-x



ESMPN8-N2-B

	ESMPN8-N2-B	ESMPN24-C4-RC-B	ESMPN24-C4-RRC-B
1 GIGABIT SFP PORT	8	24	
1 GIGABIT COMBO PORT	0	4	
10 GIGABIT SFP PORT	2	0	0
MOUNTING	DIN Rail/Wall	Rack 1RU	
POWER SUPPLY	Not included (MDR-60-24)	Internal supply	Internal supply/Redundant

MANAGED PoE ETHERNET SWITCHES

ESMGsx-xx-x



ESMGs8-P4-B

ESMGs16-P2-RC



ESMGs24-P4-RCS



	ESMGs4-P2-B	ESMGs8-C2-B	ESMGs8-P4-B
PoE TYPE	PoE+	PoE+	PoE+
ETHERNET PORT	4	8	8
ETHERNET PORT SPEED (Mbps)	10/100/1000		
SFP PORT	2	2*	4
SFP PORT SPEED (Mbps)	1 Gigabit		
MOUNTING	DIN Rail/ Desktop / Wall		
POWER SUPPLY	Not included (MDR-60-24)		

	ESMGs16-P2-RC	ESMGs24-P4-RCS	ESMGs24-P4-RC
PoE TYPE	PoE+	PoE	PoE+
ETHERNET PORT	16	24	
ETHERNET PORT SPEED (Mbps)	10/100/1000		
SFP PORT	2	4	
SFP PORT SPEED (Mbps)	1 Gigabit		
MOUNTING	Rack 1RU		
POWER SUPPLY	Not included (MDR-60-24)		

*Combo ports

KBC

11:01										11:05									
Destino	Aerolinea	Avião	Portão	Partida	Destino	Aerolinea	Avião	Portão	Partida	Destino	Aerolinea	Avião	Portão	Partida	Destino	Aerolinea	Avião	Portão	Partida
Amsterdã	KLM	661	B25	11:00	Amsterdã	KLM	662	B26	11:00	Amsterdã	KLM	663	B27	11:00	Amsterdã	KLM	664	B28	11:00
Bruxelas	Brussels Airlines	333	B29	11:00	Bruxelas	Brussels Airlines	334	B30	11:00	Bruxelas	Brussels Airlines	335	B31	11:00	Bruxelas	Brussels Airlines	336	B32	11:00
Frankfurt	Lufthansa	900	B33	11:00	Frankfurt	Lufthansa	901	B34	11:00	Frankfurt	Lufthansa	902	B35	11:00	Frankfurt	Lufthansa	903	B36	11:00
Genebra	Swire	321	B37	11:00	Genebra	Swire	322	B38	11:00	Genebra	Swire	323	B39	11:00	Genebra	Swire	324	B40	11:00
London	British Airways	380	B41	11:00	London	British Airways	381	B42	11:00	London	British Airways	382	B43	11:00	London	British Airways	383	B44	11:00
Madrid	Iberia	610	B45	11:00	Madrid	Iberia	611	B46	11:00	Madrid	Iberia	612	B47	11:00	Madrid	Iberia	613	B48	11:00
Moscow	Aeroflot	57	B49	11:00	Moscow	Aeroflot	58	B50	11:00	Moscow	Aeroflot	59	B51	11:00	Moscow	Aeroflot	60	B52	11:00
New York	Delta	1	B53	11:00	New York	Delta	2	B54	11:00	New York	Delta	3	B55	11:00	New York	Delta	4	B56	11:00
Paris	Air France	78	B57	11:00	Paris	Air France	79	B58	11:00	Paris	Air France	80	B59	11:00	Paris	Air France	81	B60	11:00
Prague	Czech Airlines	101	B61	11:00	Prague	Czech Airlines	102	B62	11:00	Prague	Czech Airlines	103	B63	11:00	Prague	Czech Airlines	104	B64	11:00
Rome	Alitalia	600	B65	11:00	Rome	Alitalia	601	B66	11:00	Rome	Alitalia	602	B67	11:00	Rome	Alitalia	603	B68	11:00
Stockholm	SAS	700	B69	11:00	Stockholm	SAS	701	B70	11:00	Stockholm	SAS	702	B71	11:00	Stockholm	SAS	703	B72	11:00
Vienna	Austrian Airlines	800	B73	11:00	Vienna	Austrian Airlines	801	B74	11:00	Vienna	Austrian Airlines	802	B75	11:00	Vienna	Austrian Airlines	803	B76	11:00

↖ Portões Gates B25 - B43
↖ Portões Gates C44 - C45
↑ Portões Gates C63 - C69

eCopper™

IP over COAX

The eCopper IP over COAX product series is a simple way to make use of the existing Coax infrastructure with ease, providing full PoE+ capabilities over extended Coax distances.



EECF1-LN1-R-MN-B



EERN1-LN1-X-MX-B



EECF4-DN1-R-XN-B



EECF1-LS4-T-WN-B



EECF16-GN3-R-RX Series

REFERENCES	TYPE	CHANNELS/PORTS	SPEED	POWER MANAGEMENT	POWER SUPPLY
EECF1-LS1-T-IN-B	Transmitter	1 COAX/ 1 ETH*	10/100Mbps	EoC/PoC/PoE+	48-57VDC Sold separately
EECF1-LS1-T-IS-B	Transmitter	1 COAX/ 1 ETH*	10/100Mbps	EoC/PoC/PoE+	48-57VDC Sold separately
EECF1-LS1-T-MN-B	Transmitter	1 COAX/ 1 ETH	10/100Mbps	EoC/PoC/PoE+	48-57VDC Sold separately
EECF1-LN1-R-MN-B	Receiver	1 COAX/ 1 ETH	10/100Mbps	EoC/PoC/PoE+	48-57VDC Sold separately
EECF1-LS4-T-WN-B	Transmitter	1 COAX/ 4 ETH	10/100Mbps	PoE+	48-57VDC Sold separately
EECF4-DN1-R-WN-B	Receiver	4 COAX/ 1 ETH + 1 additional SFP Gigabit port	10/100/1000Mbps	EoC/PoC 700m max EoC/PoE+ 300m max	48-57VDC Sold separately
EECF8-GN3-R-RC-B	Receiver	8 COAX/ 3 ETH	10/100/1000Mbps	EoC/PoC 700m max EoC/PoE+ 300m max	100-240VAC 50/60hz
EECF16-GN3-R-RC-B	Receiver	16 COAX/ 3 ETH	10/100/1000Mbps	EoC/PoC 700m max EoC/PoE+ 300m max	100-240VAC 50/60hz
EERN1-LN1-T-MC-B	Transmitter	1 COAX/ 1 ETH	10/100Mbps	No PoE	12-24VDC
EERN1-LN1-R-MC-B	Receiver	1 COAX/ 1 ETH	10/100Mbps	No PoE	12-24VDC

*Flying lead port

TWISTED PAIR TO FULL PoE IP CONVERTER

IP over UTP

The eCopper IP over UTP product series offers the ideal solution for transmission of IP and Power over 1, 2 and 4 pairs of wires, any Cat cable and even standard alarm wires can be utilised.



EERN1-LN1-X-MX-B



EERF1-LN1-R-MN-B



EERF1-LS1-T-MN-B



EERF16-GN3-R-RX-B



EERF4-DN1-R-XN-B



EERF8-GN3-R-RX-B

REFERENCES	TYPE	PORTS/CHANNELS	SPEED	POWER MANAGEMENT	POWER SUPPLY
EERF1-LS1-T-IN-B	Transmitter	1 UTP*/ 1 ETH	10/100Mbps	EoU/PoW/PoE+	48-57VDC
EERF1-LS1-T-MN-B	Transmitter	1 UTP/ 1 ETH	10/100Mbps	EoU/PoW/PoE+	48-57VDC
EERF1-LN1-R-MN-B	Receiver	1 UTP/ 1 ETH	10/100Mbps	EoU/PoW/PoE+	48-57VDC Sold separately
EERF4-DN1-R-WN-B	Receiver	4 UTP/ 1 ETH	10/100/1000Mbps	EoU/PoW	48-57VDC Sold separately
EERF8-GN3-R-RC-B	Receiver	8 UTP / 3 ETH	10/100/1000Mbps	EoU & PoW up to 400m	100-240 VAC 50/60hz
EERF16-GN3-R-RC-B	Receiver	16 UTP / 3 ETH	10/100/1000Mbps	EoU & PoW up to 400m	100-240 VAC 50/60hz
EERN1-LN1-T-MC-B	Transmitter	1 UTP/ 1 ETH	10/100Mbps	Non PoE	12-24VDC
EERN1-LN1-R-MC-B	Receiver	1 UTP/ 1 ETH	10/100Mbps	Non PoE	12-24VDC

*Flying lead port



KBC

MEDIA CONVERTERS

Commercial media converters



MCCL1



MCCG1

Common characteristics to all commercial media converters

- Optical loss budget 15Db
- Working temperature -10°C a 55°C

REFERENCES	MODE	SPEED	No OF FIBERS	RANGE	POWER SUPPLY
MCCL1-M2-xyz	Multimode	10/100 Mbps	2	4km	5VDC/2W
MCCL1-M1A-xyz	Multimode	10/100 Mbps	1 A	4km	5VDC/2W
MCCL1-M1B-xyz	Multimode	10/100 Mbps	1 B	4km	5VDC/2W
MCCL1-S2-xyz	Single mode	10/100 Mbps	2	25km	5VDC/2W
MCCL1-S1A-xyz	Single mode	10/100 Mbps	1 A	25km	5VDC/2W
MCCL1-S1B-xyz	Single mode	10/100 Mbps	1 B	25km	5VDC/2W
MCCG1-M2-xyz	Multimode	1000 Mbps	2	2km	5VDC/2W
MCCG1-M1A-xyz	Multimode	1000 Mbps	1 A	2km	5VDC/2W
MCCG1-M1B-xyz	Multimode	1000 Mbps	1 B	2km	5VDC/2W
MCCG1-S2-xyz	Single mode	1000 Mbps	2	25km	5VDC/2W
MCCG1-S1A-xyz	Single mode	1000 Mbps	1 A	25km	5VDC/2W
MCCG1-S1B-xyz	Single mode	1000 Mbps	1 B	25km	5VDC/2W

Working in pairs:

- MCCL1-M1A-xyz / MCCL1-M1B-xyz · MCCL1-S1A-xyz / MCCL1-S1B-xyz · MCCG1-M1A-xyz / MCCG1-M1B-xyz
- MCCG1-S1A-xyz / MCCG1-S1B-xyz

Industrial media converters to SFP



MCLN1-P1N



MCLN2-P1N

Common characteristics to industrial media converter

- Optical loss budget 12dB
- Working temperature -40°C a 75°C

REFERENCES	SPEED	PORTS	POWER SUPPLY
MCLN1-P1N-xNz-B	10/100 Mbps	1 ETH	12VDC/3W
MCLN2-P1N-xNz-B	10/100 Mbps	2 ETH	12VDC/3W
MCGN1-P1N-xNz-B	10/100/1000 Mbps	1 ETH	12VDC/3W
MCGN2-P1N-xNz-B	10/100/1000 Mbps	2 ETH	12VDC/3W

Industrial media converters Single Mode



MCLN1



MCLN2



MCLS1



MCGN1



MCGN2

REFERENCES	SPEED	No OF FIBERS	RANGE	WAVE LENGHT	LAN PORTS	POWER SUPPLY
MCLN1-S2N-xyz-B	10/100 Mbps	2	20km	1310nm	1	12VDC/3W
MCLN1-S1A-xyz-B	10/100 Mbps	1 A	20km	1310/1550nm	1	12VDC/3W
MCLN1-S1B-xyz-B	10/100 Mbps	1 B	20km	1550/1310nm	1	12VDC/3W
MCLN2-S2N-xyz-B	10/100 Mbps	2	20km	1310nm	2	12VDC/3W
MCLN2-S1A-xyz-B	10/100 Mbps	1 A	20km	1310/1550nm	2	12VDC/3W
MCLN2-S1B-xyz-B	10/100 Mbps	1 B	20km	1550/1310nm	2	12VDC/3W
MCLS1-S2N-xyN-B	10/100 Mbps	2	20km	1310nm	1 PoE port	48VDC/3W
MCLS1-S1A-xyN-B (*)	10/100 Mbps	1 A	20km	1310/1550nm	1 PoE port	48VDC/3W
MCGN1-S2N-xyz-B	10/100/1000 Mbps	2	20km	1310nm	1	12VDC/3W
MCGN1-S1A-xyz-B	10/100/1000 Mbps	1 A	20km	1310/1550nm	1	12VDC/3W
MCGN1-S1B-xyz-B	10/100/1000 Mbps	1 B	20km	1550/1310nm	1	12VDC/3W
MCGN2-S2N-xyz-B	10/100/1000 Mbps	2	20km	1310nm	2	12VDC/3W
MCGN2-S1A-xyz-B	10/100/1000 Mbps	1 A	20km	1310/1550nm	2	12VDC/3W
MCGN2-S1B-xyz-B	10/100/1000 Mbps	1 B	20km	1550/ 1310nm	2	12VDC/3W

*Compatible with module MCLN1-S1B-xyz-B

Working in pairs:

· MCLN1-S1A-xyz-B / MCLN1-S1B-xyz-B · MCLN2-S1A-xyz-B / MCLN2-S1B-xyz-B · MCGN1-S1A-xyz-B / MCGN1-S1B-xyz-B

Industrial media converters Multimode



MCGN1



MCGN2

REFERENCES	SPEED	No OF FIBERS	WAVE LENGHT	RANGE	LAN PORTS	POWER SUPPLY
MCLN1-M2N-xyz-B	10/100 Mbps	2	1310nm	2km	1	12VDC/3W
MCLN1-M1A-xyz-B	10/100 Mbps	1 A	1310/1550nm	2km	1	12VDC/3W
MCLN1-M1B-xyz-B	10/100 Mbps	1 B	1550/1310nm	2km	1	12VDC/3W
MCLN2-M2N-xyz-B	10/100 Mbps	2	1310nm	2km	2	12VDC/3W
MCLN2-M1A-xyz-B	10/100 Mbps	1 A	1310/1550nm	2km	2	12VDC/3W
MCLN2-M1B-xyz-B	10/100 Mbps	1 B	1550/1310nm	2km	2	12VDC/3W
MCLS1-M2N-xyN-B	10/100 Mbps	2	1310nm	2km	1 PoE port	48VDC/3W
MCLS1-M1A-xyN-B (*)	10/100 Mbps	1 A	1310/1550nm	2km	1 PoE port	48VDC/3W
MCGN1-M2N-xyz-B	10/100/1000 Mbps	2	1310nm	0.5km	1	12VDC/3W
MCGN1-M1A-xyz-B	10/100/1000 Mbps	1 A	1310/1550nm	0.5km	1	12VDC/3W
MCGN1-M1B-xyz-B	10/100/1000 Mbps	1 B	1550/1310nm	0.5km	1	12VDC/3W
MCGN2-M2N-xyz-B	10/100/1000 Mbps	2	1310nm	0.5km	2	12VDC/3W
MCGN2-M1A-xyz-B	10/100/1000 Mbps	1 A	1310/1550nm	0.5km	2	12VDC/3W
MCGN2-M1B-xyz-B	10/100/1000 Mbps	1 B	1550/ 1310nm	0.5km	2	12VDC/3W

*Compatible with module MCLN1-M1B-xyz-B

Working in pairs:

· MCLN1-M1A-xyz-B / MCLN1-M1B-xyz-B · MCLN2-M1A-xyz-B / MCLN2-M1B-xyz-B · MCGN1-M1A-xyz-B / MCGN1-M1B-xyz-B
· MCGN2-M1A-xyz-B / MCGN2-M1B-xyz-B

- **Manufacturer of perimeter intrusion detection systems**
- **More than 15 years of experience**
 - **Worldwide distribution**
 - **Reliable quality**



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An aerial photograph of a city at sunset. On the left, a large, modern building with a grid-like facade of windows and horizontal white bands dominates the foreground. The rest of the image shows a cityscape with various buildings, trees, and streets. A semi-transparent orange banner covers the bottom right portion of the image, containing the text 'WIRELESS PRODUCTS'. The sky is filled with soft, orange-hued clouds.

IKBC

WIRELESS
PRODUCTS

WIRELESS SOLUTIONS

Wireless solutions including Point to Point and Multipoint line of sight, up to 650Mbps throughput as well as a fully explosion proof solution



WES3-AX



WES3HTG-AX



WES3HTG-EXP

REFERENCES	CONFIGURATION	ANTENNA GAIN	PoE / MIDSPAN	THROUGHPUT	ENCLOSURE
WES3-AX-AC	Point to Point, Point to Multipoint host or client	5dBi	No	Standard (up to 99 Mbps)	Industrial
WES3-AX-BC		9dBi	No	Standard (up to 99 Mbps)	Industrial
WES3-AX-CC		17dBi	No	Standard (up to 99 Mbps)	Industrial
WES3-AX-AG		5dBi	PoE	Standard (up to 99 Mbps)	Industrial
WES3-AX-BG		9dBi	PoE	Standard (up to 99 Mbps)	Industrial
WES3-AX-CG		17dBi	PoE	Standard (up to 99 Mbps)	Industrial
WES3HTG-AX-AC		5dBi	PoE / Midspan	Standard (up to 650 Mbps)	Industrial
WES3HTG-AX-BC		9dBi	PoE / Midspan	High (up to 650 Mbps)	Industrial
WES3HTG-AX-CC		17dBi	PoE / Midspan	High (up to 650 Mbps)	Industrial
WES3HTG-EXP-CC		17dBi	PoE / Midspan	High (up to 650 Mbps)	ATEX



TAKEX
PB-HF-KH

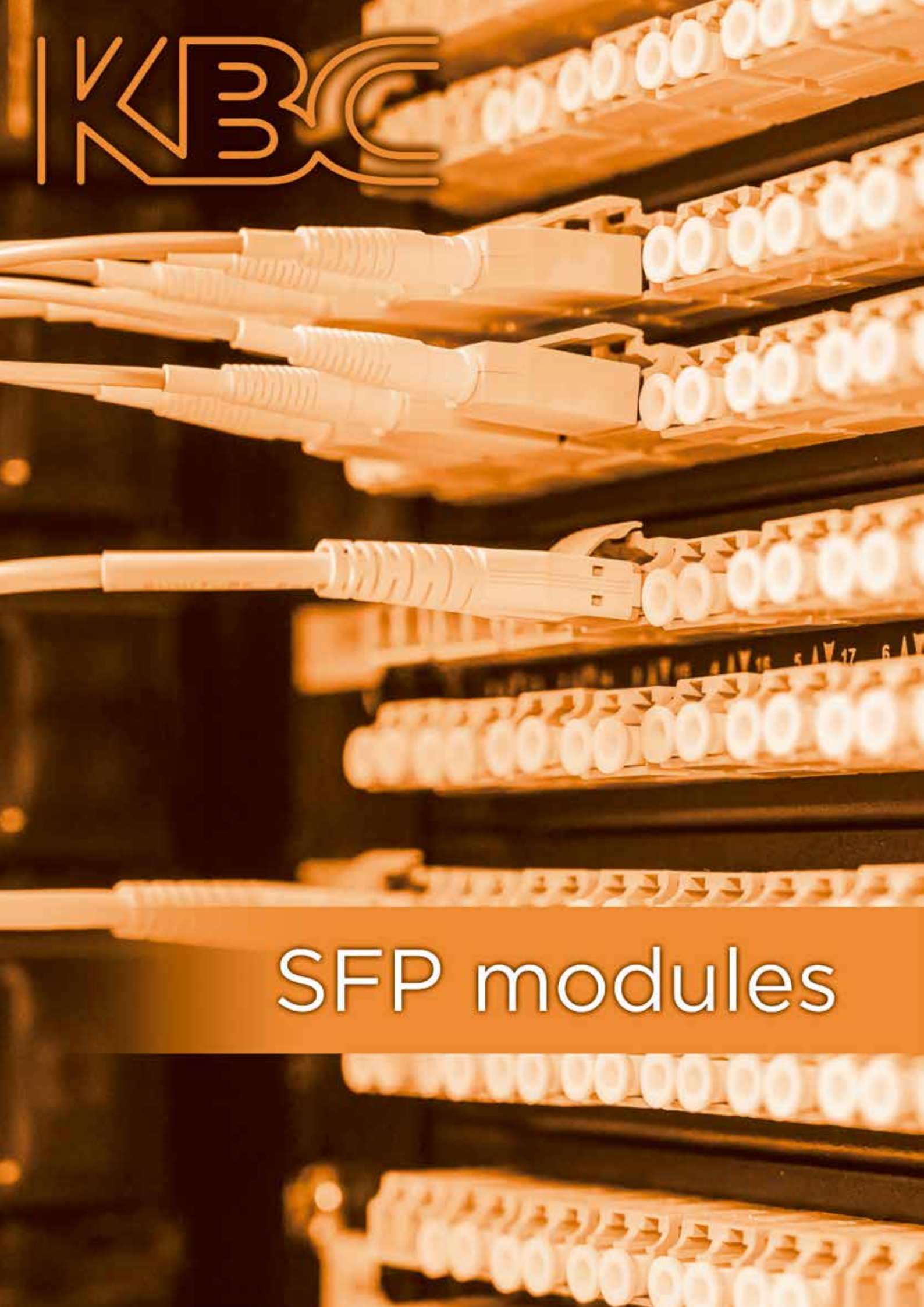
Industrial performance



BUNKER
SEGURIDAD

Pre-wired infrared
tower beam easyPack

More details at page 35



KBC

SFP modules

SFP MODULES

The KBC SFP module range provides true flexibility to the KBC range of media converters and Ethernet Switches. Modules are available for twisted pair and for multimode and singlemode optical fiber. Optical modules include Digital Diagnostics Monitoring (DDM). KBC SFPs are compatible with KBC entire range of switches and media converters.



Common specifications:

STANDARDS

100BASE-T, 1000BASE-T, 1000BASE-SX,
1000BASE-LX, 1000BASE-XD,
1000BASE-ZX, 100BASE-FX, 10GBase-FX

ENVIRONMENTAL

Operating Temperature: -40°C ~ 74°C
Storage Temperature: -40°C ~ 74°C
Operating Humidity: 0 to 95%
non-condensing

CONNECTORS

Ethernet RJ45
Optical LC, SC

REFERENCES	DATA RATE (Mbps)	TRANSMISSION TYPE	MEDIUM N°	TX λ (nm)	RX λ (nm)	CONNECTOR	APPROXIMATE TRANSMISSION DISTANCE
SFPV-MT	100	Copper	NA	NA	NA	RJ45	0-100m
SFPV-GT	1000	Copper	NA	NA	NA	RJ45	0-100m
SFP-NM2-D	10G	Multimode	2	850	850	LC	0-300m
SFP-MM2-D	100	Multimode	2	1310	1310	LC	0-2km
SFP-MS2-AD	100	Singlemode	2	1310	1310	LC	0-20km
SFP-MS2-BD	100	Singlemode	2	1310	1310	LC	0-40km
SFP-MS1A-AD	100	Singlemode	1	1310	1550	LC	0-20km
SFP-MS1B-AD	100	Singlemode	1	1550	1310	LC	0-20km
SFP-GM2-D	1000	Multimode	2	850	850	LC	0-500m
SFP-GS2-AD	1000	Singlemode	2	1310	1310	LC	0-20km
SFP-GS1A-AD	1000	Singlemode	1	1310	1550	LC	0-20km
SFP-GS1B-AD	1000	Singlemode	1	1550	1310	LC	0-20km
SFP-NS2-ND	1000	Singlemode	2	1310	1310	LC	0-10km
SFP-NS2-AD	10000	Singlemode	2	1310	1310	LC	0-20km
SFP-NS1A-ND	10000	Singlemode	1	1270	1330	LC	0-10km
SFP-NS1B-ND	10000	Singlemode	1	1330	1270	LC	0-10km
SFP-NS1A-AD	10000	Singlemode	1	1270	1330	LC	0-20km
SFP-NS1B-AD	10000	Singlemode	1	1330	1270	LC	0-20km



FP-2500E



FS-2000E



FS-3500E



FS-5000E

Flame sensors

more details at page 25

TAKEX

KBC



ThruLink™

ThruLink™



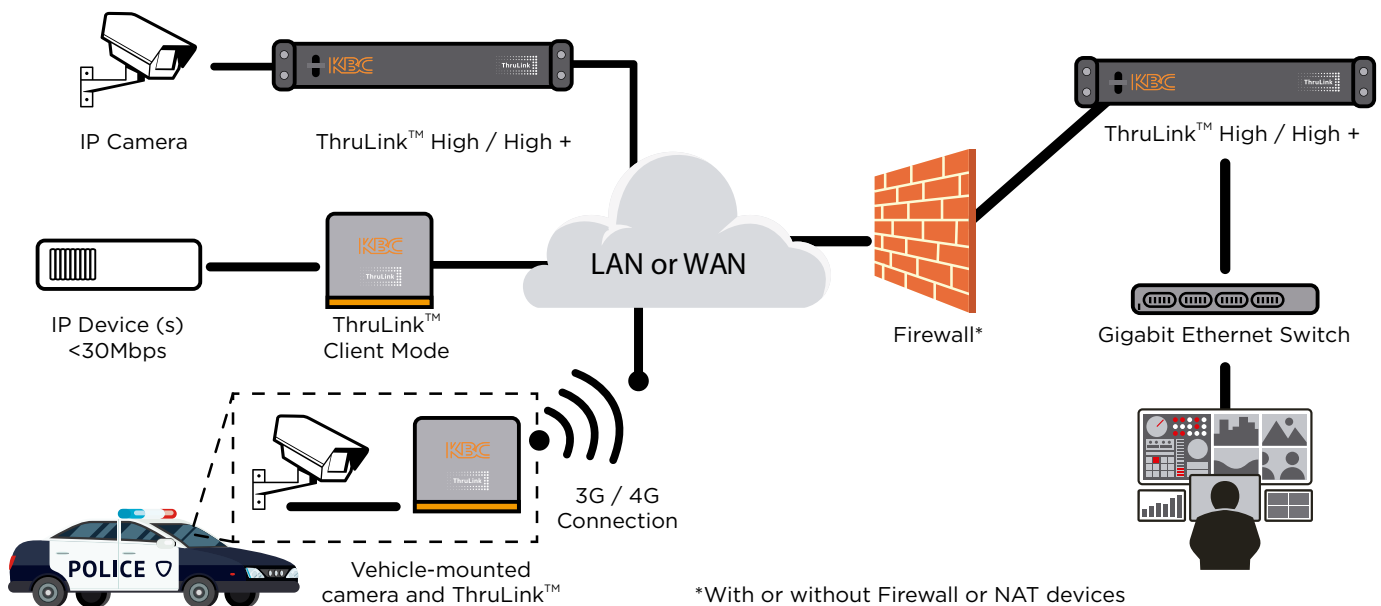
ThruLink™ High Capacity / High Capacity Plus



ThruLink™ Standard Capacity / Standard Capacity Plus

REFERENCES	TYPE	TRANSMISSION CAPACITY	ENCRYPTION COMPATIBILITY	PORTS	MODEM
THLK-SC-OO-AN-WC	Compact	15 Mbps	AES:128/192/256bits Blowfish: 128/196/256bits Camellia: 128/196/256bits SHA1, SHA256 RSA: 128/196/256bits FIPS: 140-2	1 LAN/1 WAN	No
THLK-SP-OO-AN-WC	Compact	30 Mbps		1 LAN/1 WAN	No
THLK-SC-BO-AN-WC	Compact	15 Mbps		1 LAN/1 WAN	4G LTE
THLK-SP-BO-AN-WC	Compact	30 Mbps		1 LAN/1 WAN	4G LTE
THLK-SC-OO-AG-WC	Compact	15 Mbps		1 LAN/1 WAN/ 1 USB	No
THLK-SP-OO-AG-WC	Compact	30 Mbps		1 LAN/1 WAN/1 USB	No
THLK-SC-BO-AG-WC	Compact	15 Mbps		1 LAN/1 WAN/ 1 USB	4G LTE
THLK-SP-BO-AG-WC	Compact	30 Mbps		1 LAN/1 WAN/1 USB	4G LTE
THLK-H3-RC	Rack	100 Mbps		1 LAN/1 WAN	No
THLK-H4-RC	Rack	200 Mbps		1 LAN/1 WAN	No

EXAMPLES OF SYSTEM CONFIGURATION





TAKEEX

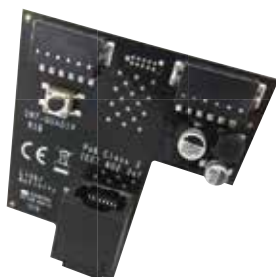


FB18

**AUXILIARY
SOLUTIONS**

081

INT-QUADIP



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 PACK



Nº 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



IPAnything Module



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.

VOICE ENUNCIATOR

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



BMHP **BM** **series** **BMM**

MICROWAVE BARRIERS



OUTDOOR DETECTION

- **Manufacturer of perimeter intrusion detection systems**
- **More than 15 years of experience**
 - **Worldwide distribution**
 - **Reliable quality**



www.bunkerseguridad.es/EN



TAKEX

FLAME SENSORS

TAKEX

INDOOR FLAME SENSOR

FS-2000E

DETECTION:
Ultraviolet rays (180-260nm)

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

TAKEX

INDOOR FLAME SENSOR

FS-3500E

DETECTION:
Ultraviolet beam (180-260nm)

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

TAKEX

INDOOR FLAME SENSOR

FS-1000E

DETECTION:
Ultraviolet rays (180-260nm)

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

TAKEX

INDOOR/OUTDOOR FLAME SENSOR

FS-5000E

DETECTION:
Ultraviolet rays (180-260nm)

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

DUAL TECHNOLOGY PIR & FLAME SENSOR

FP-2500E



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 45

Clarius®
LED Illuminators



Residential perimeter beam towers



Industrial perimeter beam towers

Outdoor perimeter security systems

More details at page 36-37





DETECTORS

INDOOR CEILING PIR

PA-68xx-E



	PA-6805E	PA-6810E	PA-6812E	PA-6820E
COVERAGE	180°	360°	Wide angle	Vertical curtain
	Ø4m	up to Ø15,2m	up to 12m	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			

TAKEX

OUTDOOR PIR

MS-100E



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)

TAKEX

OUTDOOR PIR

MS-12TE/FE



	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)	

TAKEX

OUTDOOR PIR

OMS-12FE



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



TX-114SR

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

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-114FR

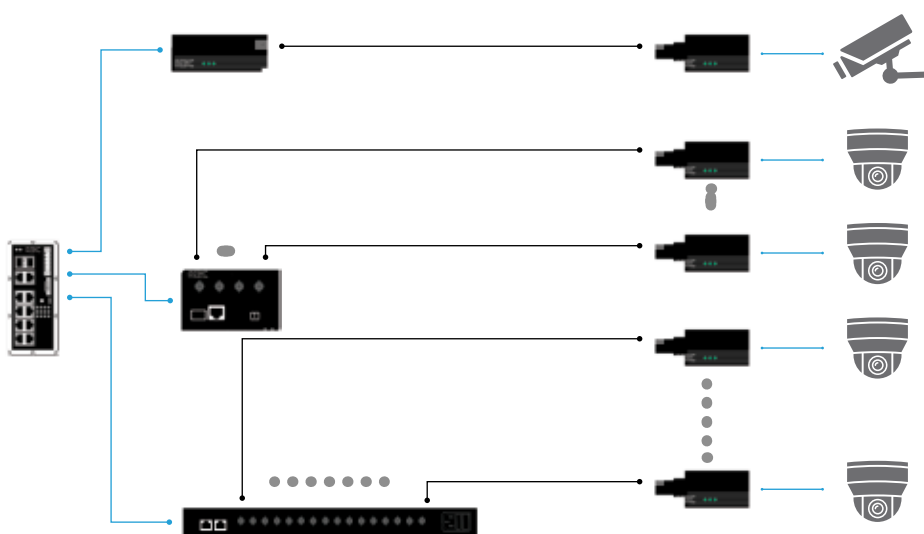
RANGE	12m - 180°
CONSUMPTION	30µA
DETECTION MODE	AND / OR selectable

eCopper™



Specifically designed for the most demanding environments, with features that make them ideal for use in today's complex industrial and IP video surveillance applications

Find more details at page 9



LASER DETECTION

GJD provides high quality laser sensors, which offer precise and accurate presence detection

D-TECT GJD-500-505-509



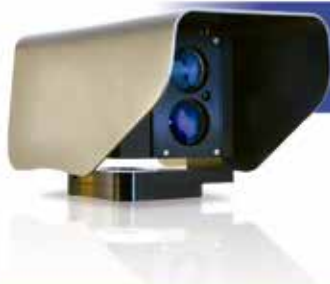
Range up to 25x25m



LASER WATCH - GJD515



Range up to 500m



More details at page 49





KBC

Wireless Transmission Solution

Explosion-proof Enclosure
(ATEX)

WES3HTG-EXP
Series

Find more details at page 15





TAGHeuer

FOG DETERRENT
SYSTEMS

 **AUS electronics**

Foggy30W



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 AVAILABLE	1 at 90° 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



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 AVAILABLE	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 (180°/360°; 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)
 N° of sensors Tx/Rx per towers
 Tower height (1,5, 2 and 3m)
 Tower type:
 TWD = Double-sided (360°);
 TWS = Single-sided (180°);
 TWW = Wall mount (180°)

EXAMPLES

Mounting	Type	Tx	Rx	Reference
Standalone	360°	4	0	TWD204TT
		0	4	TWD204RR
		2	2	TWD204TR
	180°	2	0	TWS202TT
		0	2	TWS202RR
		2	2	TWS202TR
Wall mount	180°	2	0	TWW202TT
		0	2	TWW202RR

TECNOLOGY BY



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

MALTA



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)

CAV



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)

CAV-W



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



OUTDOOR INFRARED REFLECTOR BEAM

PR-11B



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



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



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 technology)

SINGLE BEAM INFRARED BARRIER WITHOUT FREQUENCIES

PB-10NS



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



DETECTION: Simultaneous breaking of 2 beams

	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)		

2 BEAMS 4 FRECUENCIES INFRARED PHOTOBEAM

PB-20/40/60TE



DETECTION: Simultaneous breaking of 2 beams

	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)		

4 BEAMS INFRARED PHOTOBEAM SINGLE FREQUENCY

PB-50/100/200F



DETECTION: Simultaneous breaking of 4 beams

	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)		

4 BEAMS AND 4 FREQUENCIES INFRARED PHOTOBEAM

PB-IN 50/100/200HF



DETECTION: Simultaneous breaking of 4 beams

	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	30V (AC/DC) 1A		
ENVIRONMENTAL			
MODULATION	Double		
WORKING TEMP.	-35°C to +66°C		
IP	IP55		
FUNCTIONS	Circuito AGC, frost-proof enclosure		
OPTIONAL	Fixing bracket TAKH (tower beam mounting)		

4 BEAMS AND 4 FREQUENCIES INFRARED PHOTOBEAM

PB-IN-100AT



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



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

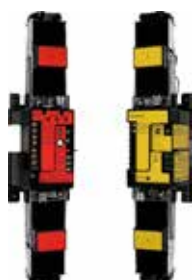


DETECTION: Simultaneous breaking of 4 beams or 2 lower beams

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



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

TAKEX

PXB 50/100/200HF-KH



DETECTION: 4 beams simultaneous interruption

	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)		

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

TAKEX

Find more details at page 29

LOW CONSUMPTION INFRARED BARRIER WITH 4 FREQUENCIES

TAKEX

PXB-100SW



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

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)

WIRELESS INFRARED BARRIER WITH 4 FREQUENCIES

TAKEX

TXF-125E



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

KBC

data delivered



Wireless products

Line of sight, Point to point/Multipoint, up to 5km with 650Mbps Wireless

More details at page 15



ThruLink™

Secure, Encrypted transmission over any network, including 4G/LTE

More details at page 19



eCopper™

IP over Coax and UTP solutions including 2 and 4 wire with PoE/PoE+

More details at page 9



Industrial Switches

from 4 unmanaged ports up to 24 full SFP managed rugged ports
Ethernet switches

More details at page 5

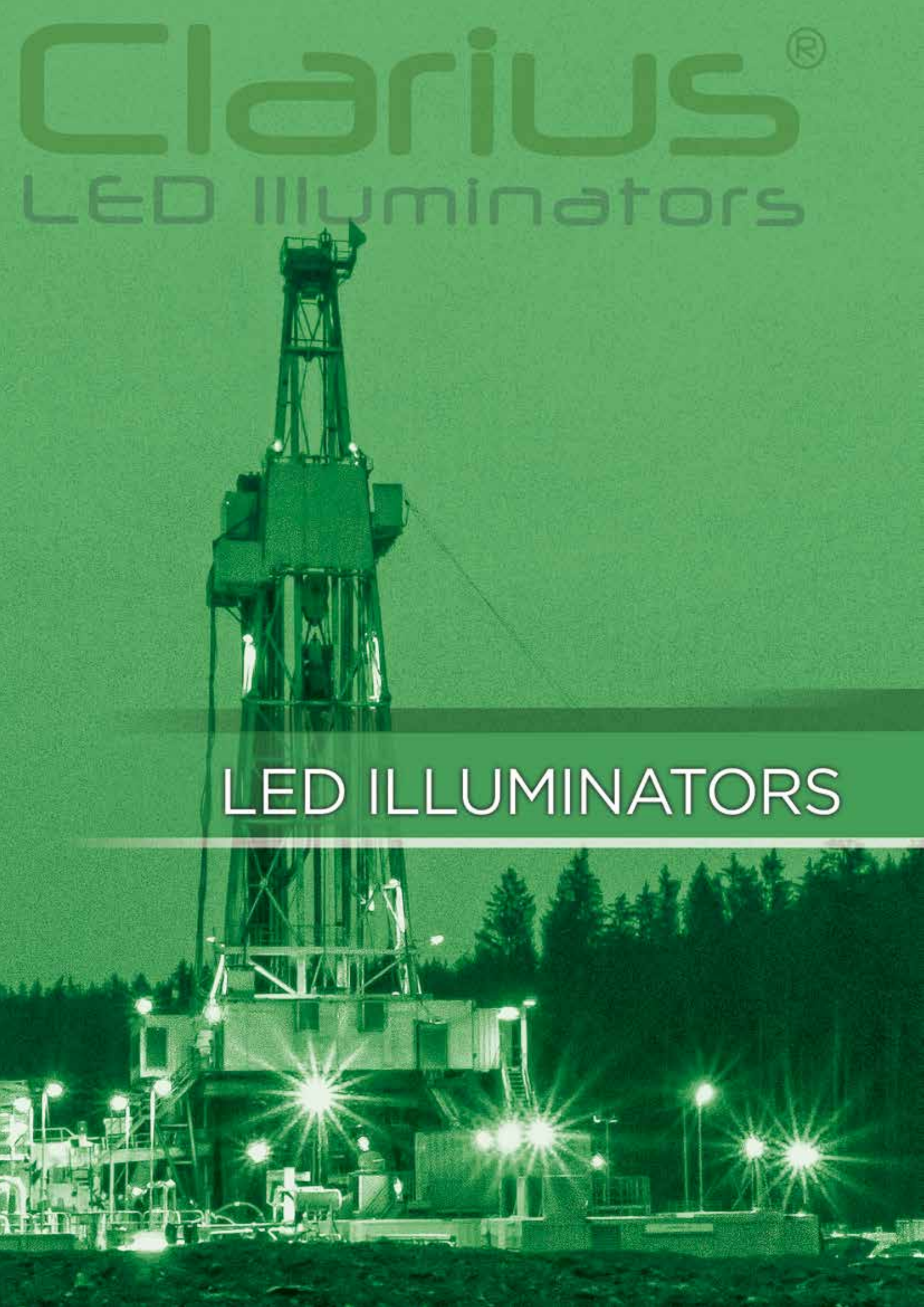


Media converters

IP over Single or Multimode Fibre with transmission distances up to 80km

More details at page 11

Data transmission solutions and industrial telecommunication systems



Clarius®

LED Illuminators

LED ILLUMINATORS

Clarius PLUS



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 mount bracket
POWER SUPPLY	12-32VDC or 24VAC +/-10% (except PoE)
IP	IP66
ELECTRONICS	Dual Core LED's™ OSRAM

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

Clarius PLUS DUAL

Available sizes **L XL**



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

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	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

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

Clarius LT

Available sizes **S M**



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

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

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®
LED Illuminators

Clarius IP



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

WAVELENGTH

POWER SUPPLY

ANGLE

IM-8- IP

30m up to 187m

850nm

Any injector PoE

10° Circular

IM-9-IP

20m up to 115m

940nm

IEEE 802.3at

20°/30°/60°
Elliptical

WHITE LIGHT LED ILLUMINATOR

Clarius®
LED Illuminators

Clarius PLUS

Available sizes

S M L XL



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

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

80° Elliptical

VM-CW-P

29m up to 114m

2400lm

25W

802.3at

95° Elliptical

WHITE LIGHT LED ILLUMINATOR

Clarius®
LED Illuminators

Clarius PLUS DUAL

Available sizes L XL



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

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,

10° Circular

VX2-CW

56m up to 223m

9600lm

XL version 104W

recomended: ALT-100-24

20°/30°/60°/
80°/95° Elliptical

Clarius IP



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

CONSUMPTION

26W

COLOR TEMP.

5700 K (6000 and 6500 k on request)

REFERENCES

VM-CW-IP

SCOPE

29m up to 114m

LUMENS

2400 lm

POWER SUPPLY

Any injector PoE
IEEE 802.3at

ANGLE

10° Circular
20°/30°/60°/80°/95°
Elliptical



Foggy 50W
Fog deterrent
system





LASER DETECTORS

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 WAVELENGTH	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

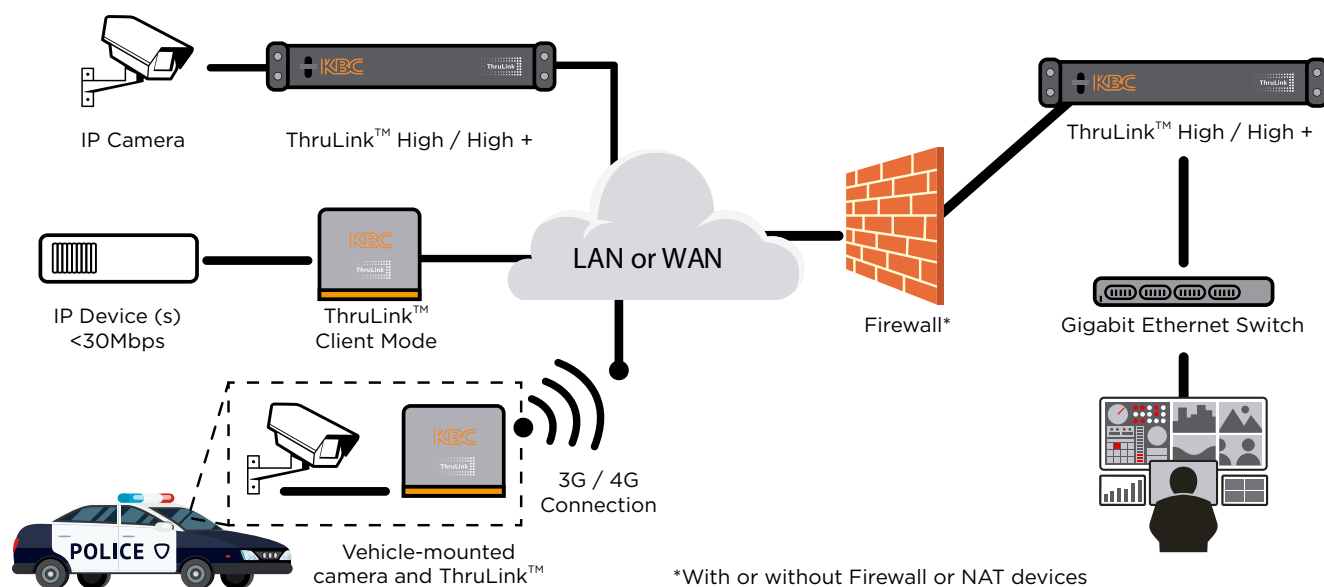
ThruLink™



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A hardware fully encrypted VPN solution, license free, 100% agnostic and optimised for use with Video systems.

Find more details at page 19





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