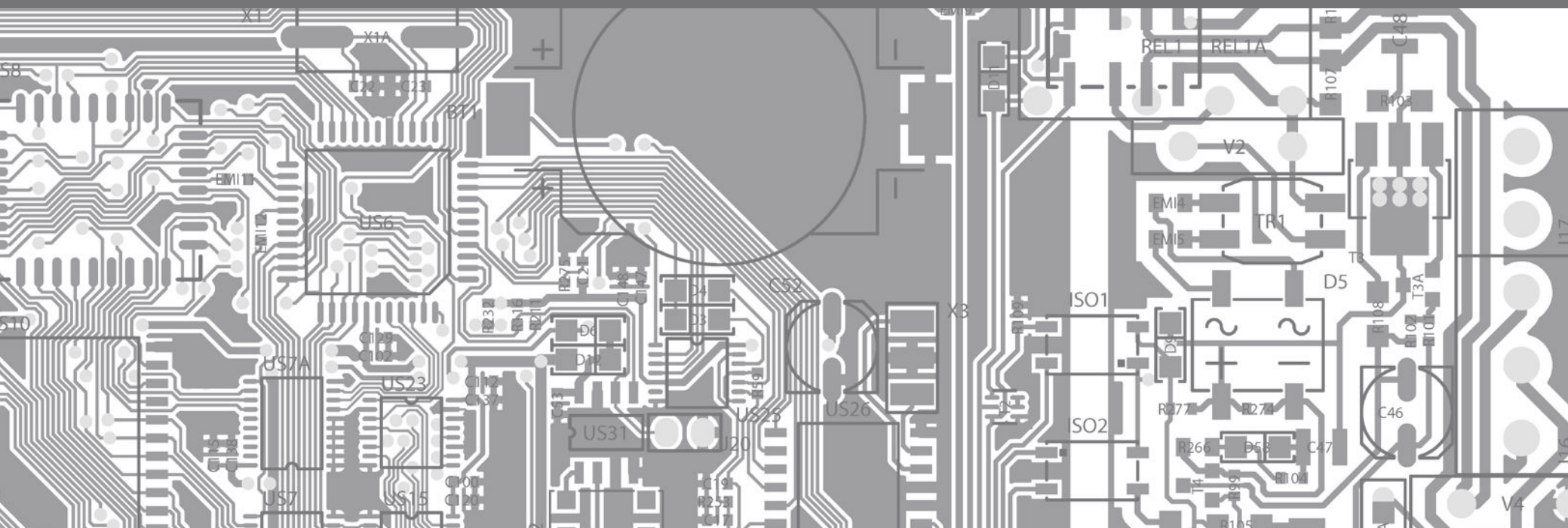




technical specification

INTRUDER ALARM CONTROL PANELS

INTEGRA intruder alarm control panels

	INTEGRA 24	INTEGRA 32	INTEGRA 64	INTEGRA 64 Plus	INTEGRA 128	INTEGRA 128 Plus	INTEGRA 128-WRL
SYSTEM FEATURES							
50131-3 security grade	Grade 2	Grade 2	Grade 2	Grade 3	Grade 2	Grade 3	Grade 2
Max. total number of zones	24	32	64	64	128	128	128
Max. number of addressable zones (CA-64 ADR)	16	24	48	48	112	112	120
Max. number of wireless zones (ACU-100)	16	24	48	48	112	112	120
Simultaneous support for addressable and wireless zones	•	•	•	•	•	•	•
Max. number of programmable outputs	20	32	64	64	128	128	128
Max. number of wireless outputs (ACU-100)	16	24	48	48	112	112	120
ABAX wireless system compatibility	bus communication	bus communication	bus communication	bus communication	bus communication	bus communication	integrated
Partitions	4	16	32	32	32	32	32
Objects	1	4	8	8	8	8	8
Users / master / service	16 / 1 / 1	64 / 4 / 1	192 / 8 / 1	192 / 8 / 1	240 / 8 / 1	240 / 8 / 1	240 / 8 / 1
Expansion modules	32	32	64	64	64	64	32
Event log	439	439	5887	6143	22527	22527	21503
Timers	16	28	64	64	64	64	64
SYSTEM OPERATION							
Keypads	4	4	8	8	8	8	8
Partition keypads	32	32	64	64	64	64	32
Proximity readers: attached to expansion modules / integrated with keypads	64 / 4	64 / 4	128 / 8	128 / 8	128 / 8	128 / 8	64 / 8
MAINBOARD SPECIFICATION							
Nominal mainboard supply voltage (±15%)	18 V AC, 50-60 Hz	18 V AC, 50-60 Hz	20 V AC, 50-60 Hz	20 V AC, 50-60 Hz	20 V AC, 50-60 Hz	20 V AC, 50-60 Hz	18 V AC, 50-60 Hz
Nominal power supply output voltage (±10%)	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC
Power supply load capacity	1,2 A	1,2 A	3 A	2 A + 1.5 A	3 A	2 A + 1.5 A	2 A
High current programmable outputs load	2 A	2 A	3 A	3 A	3 A	3 A	2 A
Low current programmable outputs load	50 mA	50 mA	50 mA	50 mA	50 mA	50 mA	50 mA
Max. battery capacity	7 Ah	18 Ah	24 Ah	24 Ah	24 Ah	24 Ah	24 Ah
Environmental class	II	II	II	II	II	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C
On-board zones	4	8	16	16	16	16	8
On-board outputs	4	8	16	16	16	16	8
Number of buses: keypad / expansion modules	1 / 1	1 / 1	1 / 2	1 / 2	1 / 2	1 / 2	1 / 1
Dimensions (mm)	142 x 106	173 x 106	264 x 134	264 x 134	264 x 134	264 x 134	192 x 106
COMMUNICATION							
PSTN dialer	•	•	•	•	•	•	•
GSM communicator	external	external	external	external	external	external	internal
Messaging telephone numbers	4	8	16	16 + 16	16	16 + 16	16
Voice messages	16	16	16	16	32	32	16
Text messages (Pager/SMS)	16	32	64	64	64	64	64
ETHM-1 TCP/IP module support	•	•	•	•	•	•	•
TCP/IP monitoring	•	•	•	•	•	•	•
TCP/IP upload/download	•	•	•	•	•	•	•
Control via WWW browser	•	•	•	•	•	•	•
TCP/IP supervision with Guard application	•	•	•	•	•	•	•
Remote control with mobile phone	•	•	•	•	•	•	•

INTEGRA keypads

	INT-KSG	INT-KLCD-GR/BL	INT-KLCDR-GR/BL	INT-KLCDL-GR/BL	INT-KLCDS-GR/BL	INT-KLCDK-GR
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC
Standby current consumption	165 mA	17 mA	60 mA	61 mA	33 mA	30 mA
Max. current consumption	175 mA	101 mA	156 mA	147 mA	151 mA	110 mA
Dimensions (mm)	143 x 156 x 22	140 x 126 x 26	140 x 126 x 26	145 x 115 x 26	114 x 94 x 23,5	160 x 132 x 29
Environmental class	II	II	II	II	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C

INTEGRA and VERSA operation

	INT-S-GR/BL	INT-SK-GR	INT-SCR-BL	INT-IT	INT-CR	INT-RX	INT-RX-S
INTEGRA / VERSA compatibility	• / -	• / -	• / -	• / •	• / •	• / •	• / •
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC
Max. current consumption	66 mA	65 mA	125 mA	80 mA	75 mA	30 mA	29 mA
Max. switched voltage	24 V	24 V	24 V				
Max. switched current	2 A	2 A	2 A				
Frequency						433 MHz	433 MHz
Dimensions (mm)	80 x 127 x 24	144 x 80 x 27	47 x 158 x 24	21 x 44 x 50	35 x 127 x 21	72 x 118 x 24	24 x 110 x 27
Environmental class	II	II	III	II	II	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-25°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C

Zones/outputs expansion modules for INTEGRA and VERSA control panels

	CA-64 E	CA-64 EPS	CA-64 ADR	ACU-100	ACU-250	CA-64 PP	CA-64 O	CA-64 OPS	INT-IORS	INT-ORS
INTEGRA / VERSA compatibility	• / •	• / •	• / -	• / •	• / •	• / -	• / •	• / •	• / -	• / •
Supply voltage (±15%)	12 V DC	18 V AC	18 V AC	12 V DC	12 V DC	18 V AC	12 V DC	18 V AC	12 V DC	12 V DC
Power supply type		A	A			A		A		
Power supply load capacity		1,2 A	2,2 A			2,2 A		2,2 A		
Max. battery capacity		7 Ah	7 Ah			7 Ah		7 Ah		
Dimensions (mm)	80 x 57	140 x 68	140 x 68	104 x 73	24 x 110 x 27	142 x 101	140 x 68	142 x 101	121 x 93 x 58	121 x 93 x 58
Max. number of zones	8	8	48	48		8			8	
Support for vibration and roller shutter sensors	•	•								
Programmable EOL value	•	•								
Max. number of outputs				24		8	8	8	8	8
Max. current consumption (active relay state)						116 mA			280 mA	230 mA
Average current consumption (±10%)	18 mA	39 mA	46 mA	100 mA	33 mA	45 mA	17 mA	39 mA		
Environmental class	II	II	II	II	II	II	II	II	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C

Mimic board

	CA-64 PTSA
Supply voltage (±15%)	18 V AC, 50-60 Hz
Power supply type	A
Power supply load capacity	1,3 A
Max. battery capacity	7 Ah
Dimensions (mm)	173 x 102
Environmental class	II
Operating temperature range	-10°C...+55°C

TCP/IP communication module

	ETHM-1
Supply voltage (±15%)	12 V DC
Average current consumption (±10%)	112 mA
Dimensions (mm)	68 x 140
Environmental class	II
Operating temperature range	-10°C...+55°C

Voice module

	INT-VG
Max. current consumption	35 mA
Supply voltage	12 V DC
Standby mode current consumption	27 mA
Environmental class	II
Operating temperature range	-10...+55 °C
Board dimensions	57 x 80 mm
Weight	32 g

Voice message module

	INT-VMG
Supply voltage	12 V DC
Board dimensions	68 x 140 mm
Operating temperature range	-10...+55 °C
Standby mode current consumption	75 mA
Max. current consumption	500 mA
Weight	80 g
Maximum humidity	93 ±3%
Environmental class according to EN50130-5	II
Maximum power of speaker output	6 W
Recommended impedance of loudspeaker connected to SPEAKER terminals	8 Ω

KNX bus integration module

	INT-KNX
Environmental class	II
Supply voltage	12 V DC
Board dimensions	57 x 80 mm
Operating temperature range	-10...+55 °C
Standby mode current consumption	35 mA
Max. current consumption	35 mA
Weight	140 g
Maximum humidity	93 ±3%

Fiber-optic interface

	INT-FI
Environmental class	II
Average current consumption (standby mode) (±10%)	120 mA
Board dimensions	80 x 57 mm
Operating temperature range	-10...+55 °C
Nominal supply voltage (±15%)	12 V DC
Max. current consumption	160 mA
Weight	125 g

RS-232 interface for systems integration

	INT-RS
Environmental class	II
Supply voltage	12 V DC
Average current consumption (standby mode) (±10%)	35 mA
Board dimensions	57 x 80 mm
Operating temperature range	-10...+55 °C
Max. current consumption	35 mA
Weight	39 g

Access control modules for INTEGRA systems

	INT-SZ-GR/INT-SZ-BL	INT-SZK-GR
Supply voltage (±15%)	12 V DC	12 V DC
Average current consumption (±10%)	24 mA	19 mA
Max. switched voltage	24 V	24 V
Max. switched current	2 A	2 A
Dimensions (mm)	80 x 127 x 24	144 x 80 x 27
Environmental class	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C

Multifunction expander for card / chip readers

	INT-R
Environmental class	II
Board dimensions	140 x 68 mm
Operating temperature range	-10...+55 °C
Supply voltage	12 V DC ±15%
Standby mode current consumption	110 mA
Max. current consumption	150 mA
Weight	80 g
Relay contacts rated load (resistive)	5 A / 30 V DC
Maximum humidity	93 ±3%

Proximity card readers

	CZ-EMM	CZ-EMM2	CZ-EMM3	CZ-EMM4
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC	12 V DC
Average current consumption (±10%)	50 mA	31 mA	80 mA	80 mA
Dimensions (mm)	80 x 120 x 16	35 x 127 x 21	47 x 158 x 24	47 x 158 x 24
Environmental class	II	II	III	III
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-25°C...+55°C	-25°C...+55°C

VERSA intruder alarm control panels

	VERSA 5	VERSA 10	VERSA 15
SYSTEM FEATURES			
50131-3 security grade	Grade 2	Grade 2	Grade 2
Max. number of zones programmable	30	30	30
Tamper input	•	•	•
Max. number of wireless devices	30	30	30
Max. number of programmable outputs	12	12	12
ABAX wireless system compatibility	•	•	•
Standard user / installer	30 / 1	30 / 1	30 / 1
Partitions	2	2	2
Event log	2047	2047	2047
Timers	4	4	4
SYSTEM OPERATION			
Keypads	6	6	6
Proximity card readers	6	6	6
MAINBOARD SPECIFICATION			
Supply voltage (±10%)	18 V AC, 50-60 Hz	18 V AC, 50-60 Hz	18 V AC, 50-60 Hz
Power supply type	A	A	A
Nominal output voltage (±10%)	13,7 V DC	13,7 V DC	13,7 V DC
Power supply current rating	1 A	2 A	2 A
High current outputs current rating (±10%)	1,1 A	1,1 A	1,1 A
Low current outputs current rating	50 mA	50 mA	50 mA
Max. battery capacity	7 Ah	17 Ah	17 Ah
Environmental class	II	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C
On-board zones	5	10	15
On-board programmable outputs	4	4	4
Supply outputs	2	2	2
Communication buses	1	1	1
Dimensions (mm)	120 x 68	150 x 68	180 x 68
COMMUNICATION			
Telephone dialer	•	•	•
Telephone line monitoring	SIA, Contact ID, inne	SIA, Contact ID, inne	SIA, Contact ID, inne
Messaging telephone numbers	8	8	8
Voice messages	16	16	16
Text messages: pager (SMS)	64	64	64
Support for GSM/GPRS communicators	•	•	•
GPRS reporting support with additional module	•	•	•
Support for TCP/IP communicators	•	•	•
TCP/IP reporting with additional module	•	•	•
E-mail messaging with additional module	•	•	•

VERSA keypads

	VERSA-LCDM-WH	VERSA-LED-BL	VERSA-LED-GR	VERSA-LCD-BL	VERSA-LCD-GR
Environmental class	II	II	II	II	II
Supply voltage	12 V DC	-	-	-	-
Enclosure dimensions	139 x 124 x 22 mm	114,5 x 95 x 22,5 mm	114,5 x 95 x 22,5 mm	114,5 x 95 x 22,5 mm	114,5 x 95 x 22,5 mm
Operating temperature range	-10...+55°C	-10...+55 °C	-10...+55 °C	-10...+55 °C	-10...+55 °C
Standby mode current consumption	50 mA	40 mA	33 mA	40 mA	36 mA
Max. current consumption	60 mA	120 mA	110 mA	130 mA	110 mA
Weight	236 g	97 g	97 g	123 g	123 g
Maximum humidity	93±3%	-	-	-	-
Nominal supply voltage (±15%)	-	12 V DC	12 V DC	12 V DC	12 V DC

Wireless system control

	VERSA-MCU
Number of supported remote control keyfobs	30
Supply voltage	12 V DC
Enclosure dimensions	24 x 110 x 27 mm
Operating temperature range	-10 °C...+55 °C
Standby mode current consumption	24 mA
Max. current consumption	29 mA
Weight	30 g
Maximum humidity	93±3%
Environmental class according to EN50130-5	II
Number of supported wireless detectors	30
Supported keyfobs	MPT-300, P-2, P-4, T-1, T-2, T-4
Supported wireless detectors	MFD-300, MMD-300, MPD-300, MSD-300
Keyfob and wireless detector operating frequency band	433,05 ÷ 434,79 MHz

MICRA Alarm module with GSM/GPRS communicator

	MICRA
Number of inputs	4 + 1
Inputs mode	digital (on/off) or analog (voltage)
Number of outputs	2 + 1
Number of supported remotes	8 (models: MPT-300, P-2, P-4, T-1, T-2, T-4 types)
Number of supported wireless detectors	8 (models: MFD-300, MMD-300, MPD-300, MSD-300)
Number of supported wireless keypads	1 (model: MKP-300)
GSM telephone	quad-band, GPRS class 10
Microphone connector	3.5 mm Jack
AUX output rating	500 mA
FT output rating	50 mA
Maximum relay load	1 A / 30 V DC (resistive)
Recommended transformer	TR40VA (18 V AC, 40 VA)
Battery current consumption	120 mA (standby) / 420 mA (max.)
230 V mains current consumption	50 mA (standby) / 150 mA (max.)*
Max. battery charging current	250 mA ±20%
Low battery voltage threshold	11 V
Battery cut-off threshold	10,5 V
Total power supply rating	2 A
Environmental class	II
Operating temperature range	-10°C...+55°C
Dimensions (with enclosure) (mm)	266 x 286 x 100
Weight (excl. transformer and battery)	1072 g

* measured with recommended TR40VA transformer

Wireless keypad

	MKP-300
Environmental class	II
Battery working time	Estimated 3 years
Operating temperature range	-10...+55 °C
Standby mode current consumption	80 µA
Max. current consumption	20 mA
Weight	164 g
Maximum humidity	93 ±3%
Operating frequency band	433,05 ÷ 434,79 MHz
Radio communication range (in open area)	to 200 m
Battery	CR123A 3V
Dimensions	144 x 80 x 27 mm

Remote control keyfob

	MPT-300
Enclosure dimensions	38 x 78 x 16 mm
Operating temperature range	-10...+55 °C
Weight	30 g
Maximum humidity	93 ±3%
Operating frequency band	433,05 ÷ 434,79 MHz
Radio communication range (in open area)	to 100 m
Battery	2 x CR2016 3V
Environmental class according to EN50130-5	II

Wireless motion detector

	MPD-300
Environmental class	II
Detected target velocity	0,3...3 m/s
Enclosure dimensions	63 x 96 x 49 mm
Operating temperature range	-10...+55 °C
Recommended mounting height	2,4 m
Standby mode current consumption	90 µA
Max. current consumption	20 mA
Weight	108 g
Maximum humidity	93 ±3%
Operating frequency band	433,05 ÷ 434,79 MHz
Radio communication range (in open area)	to 200 m
Battery	CR123A 3V
Battery life expectancy (energy save mode)	Estimated 3 years

Wireless smoke and heat detector

	MSD-300
Battery working time	Estimated 3 years
Enclosure dimensions	ø108 x 61 mm
Operating temperature range	0...+55 °C
Standby mode current consumption	50 µA
Max. current consumption	20 mA
Weight	170 g
Operating frequency band	433,05 ÷ 434,79 MHz
Radio communication range (in open area)	to 200 m
Battery	CR123A 3V
Class according to EN 54-5 (heat sensor)	A1R
Minimum static response temperature	54 °C
Maximum static response temperature	65 °C

Wireless door/window opening detector

	MMD-300
Additional input sensitivity	312 ms
Environmental class	II
Enclosure dimensions	24 x 110 x 27 mm
Operating temperature range	-10...+55 °C
Standby mode current consumption	80 µA
Max. current consumption	27 mA
Weight	64 g
Maximum humidity	93 ±3%
Operating frequency band	433,05 ÷ 434,79 MHz
Radio communication range (in open area)	to 200 m
Battery	CR123A 3V
Battery life expectancy (energy save mode)	Estimated 3 years

Wireless flood detektor

	MFD-300
Battery working time	Estimated 3 years
Enclosure dimensions	24 x 110 x 27 mm
Operating temperature range	-10...+55 °C
Standby mode current consumption	80 µA
Max. current consumption	27 mA
Weight	90 g
Maximum humidity	93 ±3%
Operating frequency band	433,05 ÷ 434,79 MHz
Radio communication range (in open area)	to 200 m
Battery	CR123A 3V
Environmental class according to EN50130-5	II
Probe wire length	3 m

CA-10, CA-6, CA-5 intruder alarm control panels

	CA-10	CA-6	CA-5
SYSTEM FEATURES			
Max. total number of zones	16	8	5
Max. number of outputs	6	5	3
Bus communication with ABAX wireless controller	•		
Partitions	4	2	1
Users / master users / service	28 / 4 / 1	12 / 1 / 1	5 / 1 / 1
Expansion modules	•		
Zone expansion in keypads	•	•	
Event log	255	255	255
Event printing	•		
Timers	4	4	
SYSTEM OPERATION			
LCD keypads	•		•
LED keypads	•	•	•
Radio remote controllers RX/RE support	•	•	•
MAINBOARD SPECIFICATION			
Supply voltage (±15%)	18 V AC, 50-60 Hz	18 V AC, 50-60 Hz	18 V AC, 50-60 Hz
Power supply type	A	A	A
Nominal power supply output voltage (±10%)	12 V DC	12 V DC	12 V DC
Power supply load capacity	1,7 A	1,2 A	1,2 A
High current programmable outputs load (±10%)	2,2 A	2,2 A	1,1 A
Low current programmable outputs load	50 mA	50 mA	50 mA
Max. battery capacity	17 Ah	7 Ah	7 Ah
Environmental class	II	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C
On-board zones	8	6	5
RS-232 port	•	•	•
PSTN telephone dialer	•	•	•
Built-in modem	•	•	•
Dimensions (mm)	173 x 102	142 x 102	147 x 70
COMMUNICATION			
Monitoring	•	•	•
Telephone messaging	•	•	•
Messaging telephone numbers	8	4	
Voice messages	1	1	
Text messages (Pager/SMS)	4	2	
Upload/download functionality	•	•	•

Zone expansion module

	CA-10 E
Supply voltage (±15%)	12 V DC
Average current consumption (±10%)	11 mA
Environmental class	II
Operating temperature range	-10°C...+55°C

Keypads CA-10, CA-6, CA-5

	CA-10 KLCD	CA-10 KLCD-L	CA-10 KLCD-S	CA-10 KLED	CA-10 KLED-S	CA-6 KLED-S	CA-6 KLED	CA-5 KLCD-L	CA-5 KLCD-S	CA-5 KLED-S
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC
Average current consumption (±10%)	95 mA	61 mA	33 mA	15 mA	15 mA	15 mA	15 mA	64 mA	33 mA	15 mA
Dimensions (mm)	160 x 132 x 29	145 x 115 x 26	114 x 94 x 23	144 x 80 x 27	80 x 95 x 20	80 x 95 x 20	144 x 80 x 27	145 x 115 x 26	114 x 94 x 23	80 x 95 x 20
Environmental class	II	II	II	II	II	II	II	II	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C

ABAX TWO WAY WIRELESS SYSTEM

Wireless system controller

	ACU-100	ACU-250
Supply voltage (±15%)	12 V DC	12 V DC
Dimensions (mm)	104 x 73	24 x 110 x 27
Max. number of zones	48	
Max. number of outputs	24	
Average current consumption (±10%)	100 mA	33 mA
Environmental class	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C

Controller inputs and outputs expansion module

	ACX-100
Supply voltage (±15%)	12 V DC
Average current consumption (±10%)	26 mA
Outputs load capacity	50 mA
Dimensions (mm)	72 x 118 x 24
Environmental class	II
Operating temperature range	-10°C...+55°C

Zones and outputs expansion wireless modules

	ACX-200	ACX-201
Supply voltage (±15%)	12 V DC	18 V AC 50-60 Hz
Power supply load capacity		1,2 A
Average current consumption depending on relay status (±10%)	40 mA + 120 mA	40 mA + 120 mA
Operating range in the open space	up to 500 m	up to 500 m
Relay outputs load capacity	1 A/24 V	1 A/24 V
Dimensions (mm)	126 x 158 x 32	250 x 250 x 80
Environmental class	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C

Wireless movement detectors

	APMD-150	APD-100
Supply type	lithium battery CR123A 3 V	lithium battery CR123A 3 V
Estimated battery lifetime	3 years	3 years
Operating range in the open space	up to 500 m	up to 500 m
Dimensions (mm)	63 x 136 x 49	63 x 96 x 49
Motion detection target speed	do 3 m/s	do 3 m/s
Recommended installation height	2,4 m	2,4 m
Environmental class	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C

Wireless detectors for perimeter protection

	AMD-100	AMD-101	AMD-102	ARD-100	AVD-100	AGD-100
Supply type	lithium battery CR123A 3 V	lithium battery CR123A 3 V	lithium battery CR123A 3 V	lithium battery CR123A 3 V	lithium battery CR123A 3 V	lithium battery CR123A 3 V
Estimated battery lifetime	3 years	3 years	3 years	3 years	3 years	3 years
Operating range in the open space	up to 500 m	up to 500 m	up to 500 m	up to 500 m	up to 500 m	up to 500 m
Dimensions (mm)	24 x 110 x 27	24 x 110 x 27	24 x 110 x 27	24 x 110 x 27	24 x 110 x 27	24 x 110 x 27
Additional input sensitivity	312 ms	312 ms	312 ms			
Environmental class	II	II	II	II	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C

Wireless flood detector

	AFD-100
Supply type	lithium battery CR123A 3 V
Estimated battery lifetime	3 years
Operating range in the open space	up to 500 m
Dimensions (mm)	24 x 110 x 27
Environmental class	II
Operating temperature range	-10°C...+55°C

Wireless smoke and heat detector

	ASD-110
Supply type	lithium battery CR123A 3 V
Estimated battery lifetime	3 years
Operating range in the open space	up to 500 m
Dimensions (mm)	106 x 106 x 49
Minimal operating temperature	-10°C

Site survey tool for ABAX system

	ARF-100
Supply type	alkaline battery 9 V 6LR61
Dimensions (mm)	70 x 196 x 32
Environmental class	II
Operating temperature range	-10°C...+55°C

Bidirectional remote control keyfob

	APT-100
Operating frequency band	868,0 MHz + 868,6 MHz
Operating range in the open space	up to 500 m
Supply type	lithium battery CR2032 3 V
Environmental class according to EN50130-5	II
Operating temperature range	-10°C...+55°C
Dimensions (mm)	78 x 38 x 16

Wirelessly triggered outdoor siren

	ASP-105
Supply voltage	12 V DC ±15%
Type of internal battery	6 V 1,2 Ah
Operating range in the open space	up to 500 m
Average current consumption (standby mode)	150 mA ±10%
Average current consumption (signaling mode)	600 mA ±10%
Dimensions (mm)	148 x 254 x 64
Environmental class	III
Operating temperature range	-35°C...+55°C

Wireless indoor siren

	ASP-205
Supply type	lithium battery CR123A 3 V
Estimated battery lifetime	3 years
Operating range in the open space	up to 500 m
Dimensions (mm)	87 x 134 x 37
Environmental class	II
Operating temperature range	-10°C...+55°C

Wireless control

	ASW-100 E	ASW-100 F
Supply voltage (±15%)	230 V AC	230 V AC
Maximum load	16 A AC	16 A AC
Operating range in the open space	up to 500 m	up to 500 m
Dimensions (mm)	65 x 100 x 77	65 x 100 x 77
Plug type	hybrid (type E and type F)	hybrid (type E and type F)
Socket type	E	F
Environmental class	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C

DETECTORS

Digital movement detectors

	COBALT	COBALT Plus	COBALT Pro	SILVER	AQUA Plus	AQUA Plus 2E	AQUA Pet	AQUA Pet 2E	AQUA Pro	AQUA Luna	AQUA S	AQUA Ring	AQUA Ring S	AMBER	AMBER 2E	GRAPHITE	GRAPHITE Pet	IVORY
Pyrosensor type	dual element	dual element	quad element	dual element	dual element	dual element	dual element	dual element	quad element	dual element	dual element	dual element	dual element	dual element	dual element	dual element	dual element	dual element
Microwave unit	10,525 GHz	10,525 GHz	10,525 GHz	10,525 GHz														
Antimask feature		•	•	•														
Lens	extra wide	extra wide	extra wide	precise LODIFF	extra wide	extra wide	precise LODIFF	precise LODIFF	extra wide	extra wide	extra wide	360°	360°	WA	WA	precise LODIFF	precise LODIFF	mirror
EOL resistors						2 x 1,1 kΩ		2 x 1,1 kΩ							2 x 1,1 kΩ			
Digital temperature compensation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PIR sensitivity adjustment	jumpers	jumpers	jumpers	trimmer	jumpers	jumpers	jumpers	jumpers	jumpers	jumpers	jumpers	jumpers	jumpers	jumpers	jumpers	trimmer	trimmer	trimmer
Microwave range adjustment	trimmer	trimmer	trimmer	trimmer														
Installation height compensation					•	•			•	•	•		•			•		
Prealarm feature					•	•	•	•	•	•	•	•	•					
Auto-diagnostics	basic	basic	basic	advanced	basic	basic	basic	basic	basic	basic	basic	basic	basic			advanced	advanced	advanced
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	24 V AC/DC	12 V DC	24 V AC/DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC
Average current consumption (±10%)	24 mA	24 mA	24 mA	16 mA	9,5 mA	9,5 mA	9,5 mA	9,5 mA	9,5 mA	9,5 mA	27 mA for 24 V AC 14 mA for 24 V DC	9,5 mA	27 mA for 24 V AC 14 mA for 24 V DC	3 mA	3 mA	11 mA	11 mA	12 mA
Backlight current consumption										25 mA								
Dimensions (mm)	63 x 136 x 49	63 x 136 x 49	63 x 136 x 49	62 x 136 x 49	63 x 96 x 49	63 x 96 x 49	63 x 96 x 49	63 x 96 x 49	63 x 96 x 49	63 x 96 x 49	63 x 96 x 49	ø 97 x 29	ø 97 x 29	48,5 x 66 x 36	48,5 x 66 x 36	62 x 96 x 48	62 x 96 x 48	57 x 123 x 42
Adjustable mounting bracket	•	•	•	•	•	•			•	•	•			optional	optional	•		•
Environmental class	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II	II
Operating temperature range	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C

Gas detectors

	DG-1 CO	DG-1 LPG	DG-1 ME	DG-1 TCM
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC	12 V DC
Average current consumption (±10%)	12 mA	35 mA	35 mA	80 mA
Dimensions (mm)	ø 97 x 36	ø 97 x 36	ø 97 x 36	ø 97 x 36
Environmental class	II	II	II	II
Operating temperature range	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C	-30°C...+55°C

Active infrared barrier

	ACTIVA-2	ACTIVA-3	ACTIVA-4	ACTIVA-5	ACTIVA-6	ACTIVA-7	ACTIVA-8
Number of beams	2	3	4	5	6	7	8
Length (cm)	52	78	105	130	158	184	210
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC
Standby current consumption	55 mA	58 mA	60 mA	63 mA	65 mA	70 mA	75 mA
Max. current consumption	60 mA	63 mA	65 mA	68 mA	70 mA	75 mA	80 mA
Emitted wavelength	950 nm	950 nm	950 nm	950 nm	950 nm	950 nm	950 nm
Adjustable range (m)	10 / 20	10 / 20	10 / 20	10 / 20	10 / 20	10 / 20	10 / 20
Operating temperature range	-25°C...+55°C	-25°C...+55°C	-25°C...+55°C	-25°C...+55°C	-25°C...+55°C	-25°C...+55°C	-25°C...+55°C

Magnetic detectors

	K-1	K-1 2E	K-2	K-2 2E	K-3	K-3 2E	S-1	S-2	S-3	S-4
Max. reed switched voltage	20 V	20 V	20 V	20 V	20 V	20 V	20 V	20 V	20 V	20 V
Max. switched current	0,02 A	0,02 A	0,02 A	0,02 A	0,02 A	0,02 A	0,02 A	0,02 A	0,02 A	0,02 A
Weight	10 g	10 g	10 g	10 g	24 g	24 g	29 g	28 g	43 g	24 g
Transient resistance	0,15 Ω	-	0,15 Ω	-	0,15 Ω	-	0,15 Ω	0,15 Ω	0,15 Ω	0,15 Ω
Life expectancy (20 V, 20 mA)	360 000	360 000	360 000	360 000	360 000	360 000	360 000	360 000	360 000	360 000
Contact material	Ru (Ruten)	Ru (Ruten)	Ru (Ruten)	Ru (Ruten)	Ru (Ruten)	Ru (Ruten)	Ru (Ruten)	Ru (Ruten)	Ru (Ruten)	Ru (Ruten)
Make distance	18 mm	18 mm	28 mm	28 mm	15 mm	15 mm	18 mm	28 mm	15 mm	18 mm
Break distance	28 mm	28 mm	40 mm	40 mm	24 mm	24 mm	28 mm	40 mm	24 mm	28 mm
Resistance	-	2 x 1100 Ω	-	2 x 1100 Ω	-	2 x 1100 Ω	-	-	-	-

Magnetic detectors

	B-1	B-1M	B-1T	B-2	B-2S	B-2T	B-3	B-3A	B-4L	B-4M	B-4S
Max. reed switched voltage	100 V	100 V	100 V	100 V	100 V	100 V	100 V	100 V	100 V	100 V	100 V
Max. switched current	0,5 A	0,5 A	0,5 A	0,5 A	-	0,5 A	0,4 A	0,4 A	0,4 A	0,4 A	0,4 A
Make distance	24 mm	30 mm	25 mm	19 mm	25 mm	19 mm	38 mm	38 mm	75 mm	75 mm	75 mm
Break distance	29 mm	33 mm	30 mm	20 mm	27 mm	20 mm	42 mm	42 mm	80 mm	80 mm	80 mm
Dimensions	28 x 12,5 mm	51 x 9 mm	65 x 13,5 x 11 mm	ø11 x 14,5 mm	ø6,5 x 27 mm	ø11 x 19 mm	50 x 17 x 9,8 mm	50 x 17 x 9,8 mm	104,5 x 44,5 mm	107 x 50 mm	88,9 x 44,5 mm

Vibration detector with magnetic contact

	VD-1
Supply voltage (±15%)	12 V DC
Standby current consumption	3,5 mA
Max. current consumption	5,4 mA
Dimensions (mm)	24 x 110 x 27
Environmental class	II
Operating temperature range	-30°C...+55°C

Digital glassbreak detector

	MAGENTA
Supply voltage	12 V DC
Enclosure dimensions	24 x 110 x 27 mm
Operating temperature range	-30...+55 °C
Standby mode current consumption	5 mA
Max. current consumption	10 mA
Weight	40 g
Relay contacts rated load (resistive)	40 mA / 16 V DC
Environmental class according to EN50130-5	II
Alarm signaling time	2 s
Detection range	to 6 m

Acoustic glassbreak detector

	INDIGO
Supply voltage (±15%)	12 V DC
Average current consumption (±10%)	12,5 mA
Dimensions (mm)	48 x 78 x 23
Environmental class	II
Operating temperature range	-30°C...+55°C

Programmable temperature detector

	TD-1
Environmental class	III
Supply voltage	12 V DC
Enclosure dimensions	48 x 78 x 18 mm
Operating temperature range	-35...+60 °C
Standby mode current consumption	15 ±20% mA
Max. current consumption	50 mA
Weight	108 g
Relay contacts rated load (resistive)	1 A / 30 V DC

Universal smoke and heat detector for alarm systems

	TSD-1
Supply voltage	12 V DC
Enclosure dimensions	ø108 x 61 mm
Operating temperature range	-10...+55 °C
Standby mode current consumption	250 µA
Max. current consumption	24 mA
Weight	164 g
Relay contacts rated load (resistive)	40 mA / 16 V DC
Maximum humidity	93 ±3%
Class according to EN 54-5 (heat sensor)	A1R
Minimum static response temperature	54 °C
Maximum static response temperature	65 °C
Environmental class according to EN50130-5	II

Latching panic button

	PNK-1
Max. switched voltage	160 V
Max. switched current	250 mA
Max. switched power	5 VA
Dimensions (mm)	40 x 60 x 25

Water flood detector

	FD-1
Supply voltage (±15%)	12 V DC
Average current consumption (±10%)	3 mA
Dimensions (mm)	24 x 110 x 27
Environmental class	II
Operating temperature range	-10°C...+55°C

SIRENS

Outdoor sirens

	SP-4001	SP-4002	SP-4003	SP-4006	SD-3001	SP-500	SPLZ-1011	SPL-2010	SPL-2030	SPL-5010	SPL-5020
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC
Average current consumption (acoustic signaling)	250 mA	220 mA	200 mA	200 mA	1,7 A	250 mA	220 mA	250 mA	250 mA	250 mA	200 mA
Average current consumption (optical signaling)	35 mA	60 mA	250 mA	250 mA	35 mA	35 mA	120 mA	35 mA	35 mA	35 mA	350 mA
Optical signaling	LED	LED	LED	LED	LED	LED	LED	LED	LED	LED	light bulb
Acoustical signaling	piezo	piezo	piezo	piezo	dynamic	piezo	piezo	piezo	piezo	piezo	piezo
Alarm tone selection	•	•	•	•	•	•	•	•	•	•	
Sealed lead acid battery		•		•	optional		•				optional
Battery type		6 V 1,3 Ah		6 V 1,3 Ah	12 V 1,3 Ah		6 V 1,3 Ah				12 V 0,8 Ah
Enclosure	polycarbonate	polycarbonate	polycarbonate	polycarbonate	polycarbonate	polycarbonate	polycarbonate	polycarbonate	polycarbonate	polycarbonate	polycarbonate
Dimensions (mm)	148 x 254 x 64	148 x 254 x 64	148 x 254 x 64	148 x 254 x 64	300 x 195 x 97	300 x 195 x 97	298 x 197 x 90	298 x 197 x 90	298 x 197 x 90	298 x 197 x 72	298 x 197 x 72
Inner metal shield	•	•	•	•	•	optional	•	•	optional	optional	optional
Tamper opening switch	•	•	•	•	•	•	•	•	•	•	•
Tamper removal from mounting	•	•	•	•	•	•	•	•	•	•	•
Anti foam tamper (SPL-SAB)							•	•	optional	optional	optional
Optical anti foam tamper (SPL-TO)							optional	optional	optional	optional	optional
Environmental class	III	III	III	III	III	III	III	III	III	III	III
Operating temperature range	-35°C...+55°C	-35°C...+55°C	-35°C...+55°C	-35°C...+55°C	-35°C...+55°C	-35°C...+55°C	-35°C...+55°C	-35°C...+55°C	-35°C...+55°C	-35°C...+55°C	-35°C...+55°C

Indoor sirens

	SPW-250	SPW-220	SPW-210	SPW-100	SOW-300 R/O	SOW-300 BL
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC
Average current consumption (acoustic signaling)	90 mA	100 mA	100 mA	240 mA		
Average current consumption (optical signaling)		180 mA			24/14 mA*	44/24 mA*
Optical signaling		LED			LED	LED
Acoustical signaling	piezo	piezo	piezo	piezo		
Alarm tone selection		•	•	•		
Dimensions (mm)	87 x 134 x 37	87 x 134 x 37	87 x 134 x 37	130 x 130 x 40	97 x 97 x 37	97 x 97 x 37
Tamper opening switch	•	•	•	•	•	•
Tamper removal from mounting	•	•	•			
Environmental class	II	II	II	II	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C

* Depends on optic signaling mode.

COMMUNICATION AND MESSAGING

GSM/GPRS modules

	GPRS-T1	GPRS-T2	GSM-4	GSM-5	GSM LT-1	GSM LT-2
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC
Average current consumption (±10%)					230 mA	230 mA
Average current consumption (standby mode) (±10%)	50 mA	50 mA	100 mA	100 mA	100 mA	50 mA
Max. current consumption (±10%)	220 mA	180 mA	250 mA	330 mA		
Outputs load			50 mA	50 mA		
Dimensions (mm)	80 x 57	80 x 57	162 x 104	162 x 104		
Environmental class	II	II	II	II	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C

Voice synthesizer

	SM-2
Supply voltage (±15%)	12 V DC
Average current consumption (±10%)	18 mA
Dimensions (mm)	65 x 43 x 20
Environmental class	II
Operating temperature range	-10°C...+55°C

PSTN telephone communicator

	DT-1
Supply voltage (±15%)	12 V DC
Average current consumption (±10%)	30 mA
Dimensions (mm)	145 x 90 x 38
Environmental class	II
Operating temperature range	-10°C...+55°C

Terminal adapter for ISDN networks

	ISDN-MOD
Supply voltage (±15%)	12 V DC
Average current consumption (±10%)	500 mA
Environmental class	II
Operating temperature range	-10°C...+55°C

Universal TCP/IP communication module

	ETHM-2	
Supply voltage	12 V DC ±15%	16 V AC ±10%
Average current consumption (standby mode)	150 mA	180 mA
Max. current consumption (±10%)	450 mA	1500 mA
Dimensions (mm)	68 x 120	68 x 120
Operating temperature range	0°C...+45°C	0°C...+45°C

Video alarm verification unit

	VIVER
Supply voltage (±15%)	12 V DC
Average current consumption (standby mode) (±10%)	160 mA
Max. current consumption (±10%)	200 mA
Dimensions (mm)	69 x 139
Environmental class	I
Operating temperature range	+5°C...+40°C

External 56k modem

	MDM56
Supply voltage (±15%)	12 V DC
Average current consumption (±10%)	110 mA
Dimensions (mm)	125 x 114,5 x 31
Environmental class	II
Operating temperature range	-10°C...+55°C

RADIO REMOTE CONTROLLERS

Sets

	RXH-1K	RXH-2K	RXH-4K	RE-1K	RX-1K	RE-2K	RX-2K	RE-4K	RX-4K
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC
Max. current consumption (±10%)	40 mA	70 mA	100 mA	40 mA	30 mA	60 mA	50 mA	65 mA	65 mA
Operating frequency band	433,05 ÷ 434,79 MHz	433,05 ÷ 434,79 MHz	433,05 ÷ 434,79 MHz	433,05 ÷ 434,79 MHz	433,05 ÷ 434,79 MHz	433,05 ÷ 434,79 MHz	433,05 ÷ 434,79 MHz	433,05 ÷ 434,79 MHz	433,05 ÷ 434,79 MHz
Independent control channels	1	2	4	1	1	2	2	4	4
Number of supported keyfobs	40	340	340	16	40	16	340	340	340
RS-232							•	•	•
Dimensions (mm)	72 x 118 x 24	72 x 118 x 24	72 x 118 x 24	72 x 118 x 24	72 x 118 x 24	72 x 118 x 24	72 x 118 x 24	72 x 118 x 24	72 x 118 x 24
Environmental class	II	II	II	II	II	II	II	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C

Keyfobs

	P-2	P-4	T-1	T-2	T-4
Independent control channels	2	4	1	2	4
Dimensions (mm)	37 x 55 x 15	37 x 55 x 15	35 x 70 x 15	35 x 70 x 15	35 x 70 x 15
Battery type	23A 12 V	23A 12 V	23A 12 V	23A 12 V	23A 12 V

POWER SUPPLIES

	APS-1012	APS-524	APS-30	APS-15
Supply voltage (transformer)			230 V AC	230 V AC
PCB nominal supply voltage	230 V AC 50 Hz	230 V AC 50 Hz	20 V AC	20 V AC
Nominal output voltage (±15%)	12 V DC	24 V DC	12 V DC	12 V DC
Power supply load capacity	10 A	5 A	3 A	1,5 A
OC outputs load	50 mA	50 mA	50 mA	50 mA
Recommended battery type	12 V 17 Ah	2 x 12 V 17 Ah	12 V 17 Ah	12 V 7 Ah
Dimensions (mm)	403 x 323 x 100	403 x 323 x 100	296 x 330 x 90	170 x 270 x 81
Environmental class	I	I	I	I
Operating temperature range	+5°C...+40°C	+5°C...+40°C	+5°C...+40°C	+5°C...+40°C

ACCO ACCESS CONTROL SYSTEM

Door controllers

	ACCO-KPWG	ACCO-KP	ACCO-KPWG-PS	ACCO-KP-PS
Number of users	1024	1024	1024	1024
Event log	24 576	24 576	24 576	24 576
Supply voltage	12 V DC ±15%	12 V DC ±15%	18 V AC ±10%	18 V AC ±10%
Switching mode power supply			•	•
Power supply load capacity			1,2 A	1,2 A
Battery load testing and charging mechanism			•	•
Number of inputs	5	5	5	5
Number of OC outputs	2	2	2	2
Number of relay outputs	1	1	1	1
Maximum relay switching current	8 A	8 A	8 A	8 A
RS-232	•	•	•	•
RS-485	•	•	•	•
RJ socket dedicated for LCD keypad connection during programming	•	•	•	•
Dimensions (mm)	104 x 73	104 x 73	151 x 70	151 x 70
Environmental class	II	II	II	II
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C	-10°C...+55°C

ACCO terminals

	ACCO-KLCDR-BG	ACCO-KLCDR-BW	ACCO-SCR-BG
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC
Max. current consumption	160 mA	160 mA	110 mA
Dimensions (mm)	140 x 126 x 26	140 x 126 x 26	47 x 158 x 24
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-20°C...+55°C
Outdoor operation			•
Doorbell button			•
PIN code access authorization	•	•	•
Proximity card access authorization	•	•	•

RS-485 to USB interface

	ACCO-USB
Supply voltage	5 V (received from USB port)
Dimensions (mm)	125 x 114,5 x 31
Operating temperature range	+5°C...+40°C

Proximity card readers

	CZ-EMM	CZ-EMM2	CZ-EMM3	CZ-EMM4	ACCO-USB-CZ
Supply voltage (±15%)	12 V DC	12 V DC	12 V DC	12 V DC	12 V DC (received from ACCO-USB converter)
Average current consumption	50 mA	31 mA	80 mA	80 mA	
Dimensions (mm)	80 x 120 x 16	35 x 127 x 21	47 x 158 x 24	47 x 158 x 24	120 x 80 x 29
Outdoor operation			•	•	
Doorbell button			•	•	
Proximity card access authorization	•	•	•	•	
Environmental class	II	II	III	III	
Operating temperature range	-10°C...+55°C	-10°C...+55°C	-25°C...+55°C	-25°C...+55°C	-10°C...+55°C

Integrated monitoring receiver with micro server

	STAM-IRS
Operating temperature range	0...+35 °C
Supply voltage	230 V AC
Current consumption from 230 V mains (with 1 card connected)	0,25 A
Current consumption from battery in emergency power mode (with 1 card connected)	2,5 A
Recommended battery capacity	40 Ah
PCI slots for cards	14
COM ports	4
USB 2.0 ports	2
Operating system	Microsoft Windows XP Professional
Main disk drive	32 GB
Spare disk drive	60 GB
Display	TFT LCD supporting the resolution of 800 x 600
Maximum humidity	90 %
Enclosure dimensions	55 x 48 x 17,7 cm
Weight (without cards)	15 kg

Visualization board for STAM monitoring station

	STAM-1 PTSA
Supply voltage (±15%)	20 V AC, 50-60 Hz
Power supply type	A
Power supply load capacity	1,3 A
Max. battery capacity	7 Ah
Dimensions (mm)	173 x 102
Environmental class	II
Operating temperature range	-10°C...+55°C

TCP/IP reporting converter to telephone formats

	SMET-256
Recommended power supply	12 V DC / 750 mA
Dimensions (mm)	125 x 114,5 x 31
Environmental class	II
Operating temperature range	-10°C...+55°C

Battery deep discharge protection

	ZB-1
Cut-off voltage	10,5 V ±0,5%
Max. current	7 A
Environmental class	II
Operating temperature range	-10°C...+55°C

Relay module

	MP-1
Supply voltage (±15%)	12 V DC
Max. switched voltage R1 and R2	48 V
Max. switched voltage R3 and R4	400 V AC / 250 V DC
Max. switched current R1 and R2	4 A
Max. switched current R3 and R4	8 A
Dimensions (mm)	140 x 68
Environmental class	II
Operating temperature range	-10°C...+55°C

Code lock

	SZW-02
Supply voltage (±15%)	DC 9 V to 16 V
Average current consumption (±10%)	19 mA
Max. switched voltage	24 V
Max. switching current	2 A
Dimensions (mm)	144 x 80 x 27
Environmental class	II
Operating temperature range	-10°C...+55°C

DTMF remote operation module

	MST-1
Average current consumption (±10%)	16 mA
Dimensions (mm)	61 x 50
Environmental class	II
Operating temperature range	-10°C...+55°C

Distribution box modules

	MZ-1 S	MZ-1 L	MZ-1 CT	MZ-2 S	MZ-2 L	MZ-2 CT	MZ-3 S	MZ-3 L	MZ-3 CT
Number of terminals	6	6	5 pairs	18	18	11 pairs	38	38	39 pairs
Terminal dimensions (mm)	1,5 x 2,5	2,5 x 2,5		1,5 x 2,5	2,5 x 2,5		1,5 x 2,5	2,5 x 2,5	
Jumpers for parallel connections				•	•		•	•	
Max. jumper circuit current				500 mA	500 mA		500 mA	500 mA	
Max. terminal voltage	24 V DC/AC	24 V DC/AC	24 V DC/AC	24 V DC/AC	24 V DC/AC	24 V DC/AC	24 V DC/AC	24 V DC/AC	24 V DC/AC
Tamper switch	•	•	•	•	•	•	•	•	•
Dimensions (mm)	89 x 28 x 30	89 x 28 x 30	89 x 28 x 30	89 x 66 x 30	89 x 66 x 30	89 x 66 x 30	132 x 89 x 30	132 x 89 x 30	132 x 89 x 30

Automatic overload protection with notification output

	ZB-2
Supply voltage (±15%)	12 V DC
OUT output cut-off current (±10%)	1,7 A
Current consumption without OUT output load	1,5 mA
Current-carrying capacity of OVL output	50 mA
Environmental class	II
Operating temperature range	-10°C...+55°C

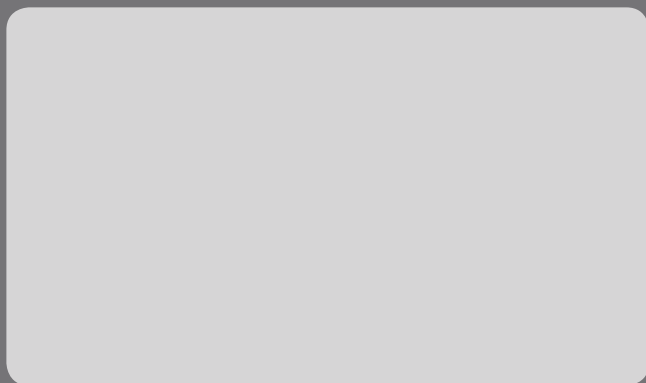
Voice message module

	INT-VMG
Supply voltage	12 V DC
Board dimensions	68 x 140 mm
Operating temperature range	-10...+55 °C
Standby mode current consumption	75 mA
Max. current consumption	500 mA
Weight	80 g
Maximum humidity	93 ±3%
Environmental class according to EN50130-5	II
Maximum power of speaker output	6 W
Recommended impedance of loudspeaker connected to SPEAKER terminals	8 Ω

Standalone door control module

	PK-01
Supply voltage	12 V DC
Enclosure dimensions	47 x 158 x 24 mm
Operating temperature range	-25...+55 °C
Standby mode current consumption	105 mA
Max. current consumption	125 mA
Weight	297 g
Relay contacts rated load (resistive)	2 A / 24 V DC
Maximum humidity	93 ±3%
Environmental class according to EN50130-5	III
Max. load for doorbell output	30 mA
Max. load for alarm output	30 mA
Reader frequency	125 kHz

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ul. Franciszka Schuberta 79, 80-172 Gdansk, Poland, tel. +48 58 320-94-00, fax +48 58 320-94-01, e-mail: trade@satel.pl

Registered at the Sad Rejonowy Gdansk-Polnoc VII Wydział Gospodarczy, National Court Register KRS 0000178400, REGON 192 976 380, EU VAT 584 015 40 38
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The manufacturer reserves the right to change the specification and technical data of devices described in this catalog. (IND_1212)