



**Covert Video
Surveillance Cameras**

100x Zoom Mini Camera



Technical Data:

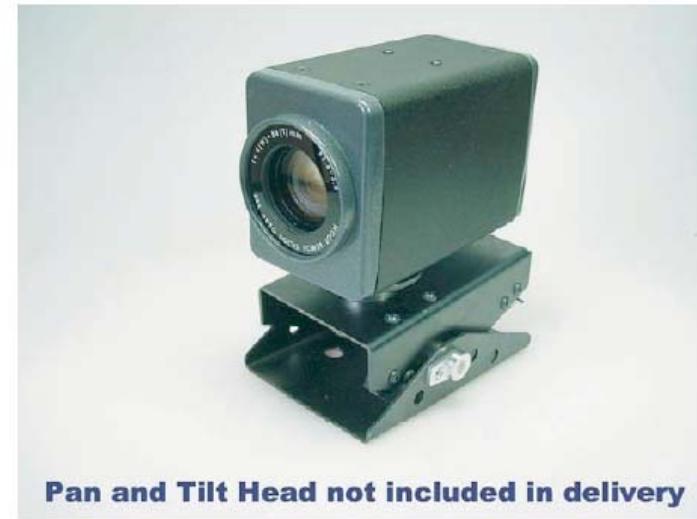
TV system:	PAL
Image sensor:	1/4" CCD image sensor
Minimum illumination day:	2.5 Lux F1.8
Minimum illumination night:	0.07 Lux F1.8
Resolution:	480 TV lines
Motion detector:	48 zones (OSD)
Zoom:	100 x (10 x optical 10 x digital)
Focus:	auto/manual
Position:	64 positions (zoom, focus)
Power supply:	DC 12V ± 1V/3.6W (max.)
Dimensions:	56,2 (l) x 38,5 (w) x 32 (h) mm

Exceptionally small camera module (only 56 mm in length) with integrated zoom lens. 10 x optical and 10 x digital zoom. Remote control possible with RS 232/485 interface. Parameter setting by on screen display. Autofocus, negative image, image reverse, frame integration.

Options:

- Casing made of aluminum
- Refitting for MIB PCB control board (control zoom function)

220x Zoom Camera



Technical Data:

TV system:	PAL
Image sensor:	1/4" CCD image sensor
Minimum illumination day:	1.5 Lux F1.2
Minimum illumination night:	0.02 Lux F1.2
Resolution:	480 TV lines
BLC function:	48 zone BLC
Zoom:	220 x (22 x optical 10 x digital)
Focus:	auto/manual
Position:	64 positions (zoom, focus)
Power supply:	DC 12V ± 1V/3.6W (max.)
Dimensions:	120 (l) x 59 (w) x 80 (h) mm

Exceptionally small camera module (only 120 mm in length) with integrated zoom lens. 22 x optical and 10 x digital zoom. Remote control possible with RS 232/485 interface. Parameter setting by on screen display. Autofocus, negative image, image reverse, frame integration.

Options:

- Casing made of aluminum
- Refitting for MIB PCB control board (control zoom function)

4-Camera Remote Case Concept



4-Camera Remote Case Concept to refit any car into an observation vehicle - an unique system for observation operations of government authorities

A wide range of functional equipment provides solutions for various surveillance applications. No specific installation of equipment is necessary in order to proceed with short time video surveillances. Only a single vehicle has to be parked in a suitable position and its system must be switched on. All other functions can be radio remote controlled with a compact and clearly laid out remote keypad from a secure position. Several cameras observe not only the target itself, but also the surroundings. All video signals can be recorded in highest quality for documentation. For live observation the video is transmitted wirelessly. All components are installed unobtrusively to keep the vehicle's look neutral. The vehicle type fits the user's requirements. Especially suitable are off-road vehicles, trucks, vans, pick ups as well as sports cars.



4-Camera Remote Case Concept

Equipment

- different cameras (B&W, colour, infrared, intensified CCD or sensor combinations like multisensor cameras)
 - one pan and tilt head and zoom lens
 - video motion detectors for event controlled recordings
 - digital multiplex video recordings of all four cameras as backups in the car and simultaneously wireless video transmission of one or all video signals (split screen)
 - independent routing for recording and live transmission
 - two video transmission antennas, remote controlled pan tilt functions
 - digital scrambling of the video transmission
 - vehicle operation check by local remote board control
 - receiving and controlling devices in an unobtrusive pelican case (RC/receiver unit)
 - portable power supply in a hard case for the RC/receiver unit
 - colour video printer for the RC/receiver unit
 - video overlay text for status information in the video signal
 - maintenance-free liquid lead rechargeable batteries (user recommended operation time) with capacity supervision and deep discharge protection, external 50 A charger
 - all mechanical sensitive components are mounted with rubber absorbers
 - all components are hidden to provide an inconspicuous look

Remote Control Keypad Function Range

- camera selection: each camera individually, split screen and multiplex pan, tilt and zoom control with variable speed (depending on lens and pan and tilt head types) of one camera-head-system
 - auto and manual focus and iris control (depending on lens type)
 - auto and manual shutter control (depending on camera type)
 - activation of the back light compensation and day/night operation (depending on system components)
 - each camera can be switched on or off
 - separate switching of any system device like transmitter, recorder, scrambler, motion detector
 - programming of the video motion detector by user
 - antenna selection for the video transmission and reception
 - simultaneous control of several functions

Camcorder Observation Set I



Set includes:

- 1 Pinhole lens (40 x 19 mm) with adapter for camcorder
- 3 camouflaged shutters, which can easily be attached to the lens, at the same time they serve as fixation and storage for the lens.
- 1 adapter ring Sony analogue (37 x 0,75 mm)
- 1 adapter ring Sony digital (30 x 0,75 mm)
- 1 adapter ring Sony digital (25 x 0,5 mm)
- 1 adapter ring Panasonic (30,5 x 0,5 mm)
- 1 adapter ring JVC (27 x 0,5 mm)



Special Features

Pinhole Camcorder Set with 1 lens and 3 exchangeable shutters.

The lens can be fixed onto any current camcorder with the corresponding adapter rings. The camouflages can be changed corresponding to the specific requirements. Additionally available for the attachable shutters are original screws such as: cross head, leather rivet, case rivet and hexagon socket.

The camcorder set comes in a plastic case with cut out foam, fitted to the respective parts and camcorder typ.

The camcorder can be supplied by the customer or can be purchased directly from us and is not included in the set.

Camcorder Observation Set II



Set includes:

- 1 Pinhole lens (40 x 19 mm) with adapter for camcorder
- 3 camouflaged shutters, which can easily be attached to the lens, at the same time they serve as fixation and storage for the lens.
- 2 fixing brackets to support the camcorder incl. mounting screws
- 1 adapter ring Sony analogue (37 x 0,75 mm)
- 1 adapter ring Sony digital (30 x 0,75 mm)
- 1 adapter ring Sony digital (25 x 0,5 mm)
- 1 adapter ring Panasonic (30,5 x 0,5 mm)
- 1 adapter ring JVC (27 x 0,5 mm)
- 1 quick change adapter version 1, including 3 different Pinhole shutters
- 1 quick change adapter version 2, including 3 different Pinhole shutters
- 1 quick change adapter version 3, including 3 different Pinhole shutters
- 1 external miniature microphone with amplifier and adapter cable for power supply

Special Features

Pinhole Camcorder Set with 1 lens and 3 exchangeable shutters.



The lens can be fixed onto any current camcorder with the corresponding adapter rings. The camouflages can be changed corresponding to the specific requirements. Additionally available are various shutters for the quick change adapter such as: cross head screw, leather rivet, case rivet and hexagon socket.

The camcorder set comes in a high quality Pelicase transport case with cut out foam, fitted to the respective parts and camcorder type.

The camcorder can be supplied by the customer or can be purchased directly from us and is not included in the set.

Mobile Room Observation Set I



Technical Data

Receiving frequency:

430 MHz

Battery:

9 - 12 V Mignon cells AA 2600 mAh

Power consumption:

< 280 µAh system standby

appro. 100 mAh colour camera plus receiver operating with tightened relay

Special features:

4 different features. Timer feature for transmitting signal of radio PIR. The relay activates the LANC commands. The Sony recorder connected to the receiver immediately starts the video/audio recording. The radio alarms will be added up. Follow-up time of 5 minutes. The feature Continuity On/Continuity OFF can be activated by a hand held radio transmitter.

Radio Receiver Unit with LANC Control



Technical Data

Transmitting power:

50 mW

Transmitting frequency:

430 Mhz

Special features:

PIR range about 6 - 8 m at an opening angle of appro. 80°

Power supply:

3 x 1,5 V button cells

Stand-By time:

at least 21 days

The start delay impedes the alarm for about 30 seconds. This gains time for the mounting of the radio PIR without simultaneously triggering the alarm.

Mobile Room Observation Set I

Technical Data

Mini Digital 8 Video Rec with LCD-Display

- TV standard PAL
- 4" LCD screen with 123.200 pixel
- Integrated cut control
- 20 settings are programmable
- Digital 8 recording/replay mode SP/LP
- Hi8/Video8 replay mode SP/LP
- Time Base Corrector (TBC)
- Digital Noise Reduction (DNR)
- InfoLITHIUM
- LANC
- Audio-Syst. PCM Digital Stereo (12 Bit/16 Bit)
- Weight GV-D800: 930 g
- Colour black

Mobile Room Observation Set I



Technical Data:

Image sensor:	1/4"
Image angle (objective) H/D:	92°/118° Pinhole
Range Control:	1/50 to 1/100000 secs.
Minimum illumination:	1 LUX F: 1.2
Automatic brightness control:	3 level
Objective:	0.8 - 1.2 mm
Resolution pixel:	512 x 492 NTSC, 512 x 582 PAL / 470 TV lines
Power supply:	8 - 12 V
Power consumption:	65 mA
Dimensions:	29 x 25 x 10 mm
Lens system:	Pinhole standard

Camouflaged High-Resolution CCD Camera

Special features:

This kit is equipped with a new generation of high resolution cameras based on the latest CCD chip technologie. Also equipped with automatic backlight-control (BLC), important for recordings under extreme back light conditions. The professional digital image processing of the colour camera in use is of such high quality, that it meets maximum standards.

Mobile Room Observation Set I

Special Features of the observation system:

The low power consumption of the complete recording system including camera and microphone guarantees an above-average usage continuity paired with minimal installation effort. The included mounting aids guarantee quick on site installation. Different lenses including original camouflages are included in the delivery, e.g. rivets, cross head screws or hexagonal screws. The advantages of this set are easy handling and mounting.

The **standard kit** will be delivered including the following equipment:

- Receiver unit with omni directional antenna, LANC control and power supply distributor
 - High Resolution CCD Camera Serie II Colour
 - Audio amplifier and highly sensitive microphone with cable loom
 - 2 Micro Radio PIR 50 mW with batteries
 - 3 camouflaged lenses with different camouflages and mountings
 - Remote control hand held transmitter 100 mW for feature Continuity ON/Continuity OFF system
 - Battery pack 9 V for portable use
 - one set of Mignon batteries
 - Instruction manual
 - Contents come in robust high-quality plastic case with cut out foam

Optionally the kit can be equipped with the following (please indicate when ordering):

- Radio Vox detector 50 mW transmitting power (connects by overstepping a certain noise level)
 - Radio vibration detector 50 mW transmitting power (connects by vibration or object movement)

- 2 different recording alternatives (please indicate when ordering):

 - Sony GV-D 800 Miniature Digital8 Recorder with LCD Display
 - Sony GV-D 200 Miniature Digital8 Video Recorder

- corresponding high quality TFT monitor 6.8" for Sony GV-D 200 with integrated audio amplifier and connecting cable video/audio IN including headset

Up to 6 different detectors can be combined.

Universal Camouflage for Pinhole Cameras



Special Features:

- Quick and fast hidden installation of a Pinhole Camera
- Schützt die Linse vor seitlichen Lichtreflexionen
- Erhebliche Zeitersparnis bei der Installation
- Das Basisloch für die Linse kann mit einem handelsüblichen 6-10mm Bohrer vorgebohrt werden
- Material des Tarngehäuses muss nicht mehr angesenkt oder konisch ausgefräst werden
- Durch die Plexiglasschicht ist die Linse vor Umwelteinflüssen, wie Staub, Wasser geschützt
- Die Kamera kann schnell ausgewechselt werden
- Die Folie ist in mehreren Schichten aufgebaut bzw. bedruckt, nicht nur durchbohrt.

Electronic Plug Socket With High-Resolution Camera and Frame Buffer (MMC)



Technical Data

- High-resolution surveillance colour camera (VGA 640 x 480 pixel) for discreet surveillance, integrated in standard distribution box (splash water resistant) with digital frame buffer function
- At alarm set off by IR sensors (PIR), the image recording is effected in JPEG format on MMC memory stick, option: up to 6 wireless stepped up detectors
- event operated recording for **up to 65.528 pictures** depending on the used memory stick and the resolution
- integrated pinhole lens
- internal synchronisation
- electronic shutter
- incl. 128 MB memory stick (MMC standard) (VGA/resolution - 3274 pictures)
- incl. PC software package and MMC card reader/USB adapter
- integrated rechargeable battery Li-ionic 3000 mAh for **up to 6 weeks operating time**
- continuous operation possible with mains adapter
- IR remote control

Special Feature

Stand-alone compact surveillance system: no cable, no radio communication, up to 65.528 picture disc space.

The high memory frequency is made possible by sophisticated image compression technology, whereas image quality, the rate of image recordings, recording time by event, pause between each single picture, etc. can be determined at the implementation by the included software. Should the memory storage be full a re-start is effected as well as a transcription of the older recordings. The system is operated by the IR remote control included in the delivery.

Wireless Mobile Observation I



Technical Data

Frequency:	1100 MHz - 1300 MHz
Modulation:	FM max. 28 MHz by 1Vss / 200kHz
Transmitting power:	10/100mW
Power supply:	2 x 1,5V Micro integrated
Power consumption:	6 hrs. transmitting time / 100mW 12 hrs. transmitting time / 10 mW
Weight:	130 gr.
Antenna:	omni directional antenna
Range:	50 - 100 m indoors / up to 500 m clear view outdoors

Technical Data

Video Audio Transmitter

	Colour	B/W
Image sensor:	1/3" CMOS	
Image angle (objective) H/D:	90°/118°	
Range control:	1/50 - 1/16000	1/50 - 1/16000
Minimum light:	< 2,5 LUX @ f1.4	< 0,2 LUX @ f1.2
Weight:	12 gr.	10 gr.
Objective:	0,8 - 1,2 mm	
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 350 TV lines	508 x 492 NTSC, 628 x 582 PAL / 480 TV lines
Power supply:	7 - 12 V (5 V DC option)	
Power consumption:	35 mA	
S/N ratio:	> 48 dB	
Video output:	1 V, 75 Ohm	
Dimensions:	24 x 22 x 10mm	
Lens system:	Pinhole Standard	
Options:	5 V conversion Different camouflaged lenses are available at additional charge.	

Wireless Mobile Observation I

Technical Data

Frequency:

Video/Audio Receiver

8 fixed channels between 1140 - 1350 Mhz,
in 30 Mhz steps with DIP switch adjustable,
e.g. DIP 1 = ON (1140 MHz)

Power supply:

12 V

Video OUT BNC:

1 Vp-p/75Ohm

Audio OUT:

Chinch (6,5 MHz)

Dimensions:

62 x 155 x 24 mm

Antenna connection:

F with remote power supply 12 V

Option:

12 V output antenna. Multi channel version (100 ch) with
digital LCD signal possible. Control channel receiver to
Automatically start a connected analogue/digital video
Recorder.

Special Features:

Very small, easy to use transmitting unit with integrated power supply, 2 x AAA micro battery 3 V, internally clocked to 5 V. The controls are technically sophisticated as well as simple to use. By using just one pushbutton and simultaneously a feedback signal of the vibrations motor the unit has been especially designed for hidden operation and is adapted for it. The Micro CMOS Colour Cameras Series I contained in the kit can also be supplied with power through the transmitting unit. The low power consumption of the cameras guarantees an above average longer transmitting time.

Optionally:

To gain higher image quality and photo sensivity the Micro CMOS Colour Camera Series I can be exchanged with a high resolution Miniature CCD Colour Camera Series II, which is externally supplied with power by a 9 V block battery pack. Also on request different items are available, such as belts, ties or jackets with the above mentioned cameras integrated.

The **standard kit** comes with the following contents:

- transmitting unit with battery compartment and omni directional antenna
- Micro CMOS Button Camera Series I B/W Version D
- Micro CMOS Button Camera Series I Colour Version C
- 8 channel video/audio receiver with H antenna (3 dB gain)
- 220/240 V mains adapter
- car cable 12 V
- one pack of micro batteries
- instruction manual
- contents come in a robust high quality plastic case, packed in cut out foam

Optionally the kit can be equipped with the following:

- 35 dB receiving amplifier with external power supply or power supply through receiver
- magnet antenna with thin RG 178 cable and omni directional antenna
- external 12 V battery pack with audio amplifier to connect to our video/audio receiver including ear phones and connecting cable/mains adapter 220/240 V
- one Yagi high performance antenna with 7 dB gain

Wireless Mobile Observation II



Technical Data

Frequency:	1100 MHz - 1300 MHz
Modulation:	FM max. 28 MHz by 1Vss / 200kHz
Transmitting power:	40 / 400mW
Power supply:	extern 10,5 bis 13,8 V
Power consumption:	80 mAh / 40 mW 160 mAh / 400 mW
Weight:	28 gr.
Antenna:	omni directional antenna
Range:	50 - 100 m indoors / up to 2500 m clear view outdoors

Technical Data

	Colour	B/W
Image sensor:	1/3" CCD	
Image angle (objective) H/D:	90°/118°	
Range control:	1/50 - 1/120000	1/60 - 1/120000
Minimum light:	< 0,6 LUX @ f1.2	< 0,06 LUX @ f1.2
Weight:	30 gr.	
Objective:	0,8 - 1,2 mm	
Resolution pixel:	542 x 492 NTSC, 542 x 582 PAL / 570 TV lines	811 x 508 NTSC, 795 x 596 PAL / 600 TV lines
Power supply:	12 V	
Power consumption:	90 mA	
S/N ratio:	> 60 dB	
Video output:	1 V, 75 Ohm	
Dimensions:	37 x 37 x 12mm	
Lens system:	Pinhole Standard	
Options:	Different camouflaged lenses are available at additional charge.	

Wireless Mobile Observation II

Technical Data

Frequency:

Video/Audio Receiver

8 fixed channels between 1140 - 1350 Mhz,
in 30 Mhz steps with DIP switch adjustable,
e.g. DIP 1 = ON (1140 MHz)

Power supply:

12 V

Video OUT BNC:

1 Vp-p/75Ohm

Audio OUT:

Chinch (6,5 MHz)

Dimensions:

62 x 155 x 24 mm

Antenna connection:

F with remote power supply 12 V

Option:

12 V output antenna. Multi channel version (100 ch) with
digital LCD signal possible. Control channel receiver to
Automatically start a connected analogue/digital video
Recorder.

Special Features:

Very small, easy to use transmitting unit with integrated power supply for the camouflaged high resolution camera which is connected to the transmitter. The low power supply of the complete transmitting system with camera and microphone, guarantees an above average longer transmitting time paired with a maximum of transmitting capacity. The included mounting aids guarantee a fast on-site mounting. Included in the delivery are different lens 'types including the original camouflage such as rivets, cross head screws or hexagon screws.

The **standard kit** comes with the following contents:

- transmitting unit with omni directional antenna
- high resolution CCD Camera Series III Colour or
- high resolution CCD Camera Series III B/W
- 4 camouflaged lenses with different camouflages
- 8 channel video/audio receiver with H antenna (3 dB gain)
- 220/240 V mains adapter
- car cable 12 V
- one pack of micro batteries
- instruction manual
- contents come in a robust high quality plastic case, packed in cut out foam

Optionally the kit can be equipped with the following:

- 35 dB receiving amplifier with external power supply or power supply through receiver
- magnet antenna with thin RG 178 cable and omni directional antenna
- external 12 V battery pack with audio amplifier to connect to our video/audio receiver including ear phones and connecting cable/mains adapter 220/240 V
- one Yagi high performance antenna with 7 dB gain

Ultra Micro CMOS Camera Series I B/W Version A



Technical Data:

Image Sensor:	1/4" CMOS
Lens angle (objective) H/D:	90°/118°
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 1 LUX @ f1.4
Weight:	5 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	352 x 288 PAL, 320 x 240 NTSC / 280 TV lines
Power supply:	7 - 12 V (5 V DC option)
Power consumption:	10 mA
S/N ratio:	> 45 dB
Video exit:	1 V, 75 Ohm
Dimensions:	8 (L) x 8 (B) x 7 (H) mm
Lens system:	Pinhole standard
Optional:	5 V refitting Different camouflaged lenses are available at additional charge.

Special features:

This camera is because of its high resolution, the small dimensions and the low power consumption our recommendation for container construction. Adapter for BNC and power supply is included in delivery.

Camera Serie I CMOS Colour with Video/Audiotransmitter



Technical Data

Image sensor:	CMOS
Lens angle (objective) H/D:	P43
Auto electronic exposure:	1/60 - 1/150000
Minimum illumination:	< 3 LUX @ f1.2
Weight:	25 g.
Entrance pupil diameter objective:	0.8 mm
Resolution horizontal:	380 TV lines
Power supply:	9 V DC
Power consumption:	120 mA
Dimensions with lens:	22 (L) x 16 (W) x 16 (H) mm
Lens system:	Pinhole Standard
Audio carrier:	6.5 MHz
Microphone:	Integrated in the case
Transmitting power:	approx. 100 mW
Connectors:	Preconverted with cable and 9 V battery clip.

2 different channels available.

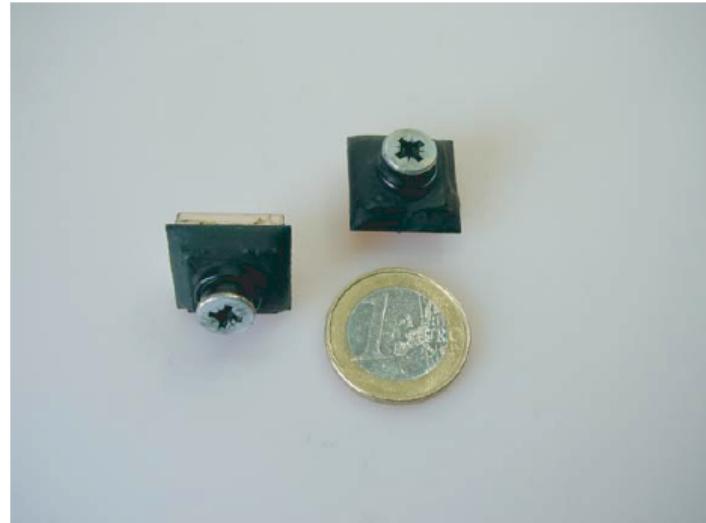
This is a very special CMOS Video Camera with an integrated 1/3" Chip.

The camera offers premium class pictures with high resolution.

The delivery takes place with adjusted lens.

When the delivery takes place without adjusted lens, the focus can be adjusted by turning in and out of the lens. After focussing the lens should be fixed with resin, locktide or beeswax.

Micro CMOS Camera Series I B/W Version A



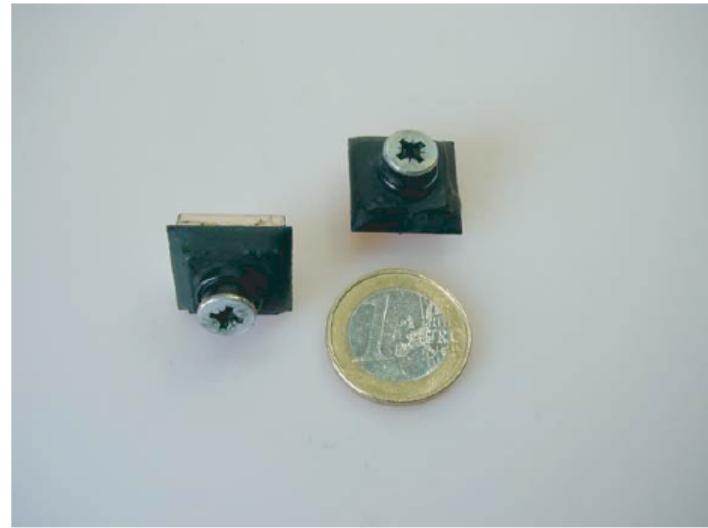
Technical Data:

Image sensor:	1/3" CMOS
Lens angle (objective) H/D:	90°/118°
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 0,2 LUX @ f1.2
Weight:	8 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 480 TV lines
Power Supply:	7 - 12 V (5 V DC option)
Power consumption:	35 mA
S/N ratio:	> 48 dB
Video exit:	1 V, 75 Ohm
Dimensions:	16 (L) x 16 (B) x 10 (H) mm
Lens system:	Pinhole standard
Options:	5 V refitting Different camouflaged lenses are available at additional charge.

Special features:

This camera is because of its high resolution, the small dimensions and the low power consumption our recommendation for container construction. Adapter for BNC and power supply is included in delivery.

Micro CMOS Camera Series I Colour Version A



Technical Data:

Image sensor:	1/3" CMOS
Lens angle (objective) H/D:	90°/118°
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 3,0 LUX @ f1.4
Weight:	8 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 350 TV lines
Power supply:	7 - 12 V (5 V DC option)
Power consumption:	35 mA
S/N ratio:	> 48 dB
Video exit:	1 V, 75 Ohm
Dimensions:	16 (L) x 16 (B) x 10 (H) mm
Lens system:	Pinhole standard
Options:	5 V refitting Different camouflaged lenses are available at additional charge.

Special Features:

This camera is because of its high resolution, the small dimensions and the low power consumption our recommendation for container construction. Adapter for BNC and power supply is included in delivery.

Micro CMOS Camera Series I B/W Version B



Technical Data:

Image sensor:	1/3" CMOS
Lens angle (objective) H/D:	90°/118°
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 0,2 LUX @ f1.2
Weight:	10 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 480 TV lines
Power supply:	7 - 12 V (5 V DC option)
Powe consumption:	35 mA
S/N ratio:	> 48 dB
Video exit:	1 V, 75 Ohm
Dimensions:	24 (L) x 22 (B) x 10 (H) mm
Lens system:	Pinhole standard
Options:	5 V refitting Different camouflaged lenses are available at additional charge.

Special features:

This camera is integrated in an elaborately machined casing of full material. The advantages are better heat lead-away (12 V version) and mechanical protection against damage by rough handling as well as a shield from the outside (lines frequency which can be located by special detectors). Adapter for BNC and power supply is included in delivery.

Micro CMOS Camera Series I Colour Version B



Technical Data:

Image sensor:	1/3" CMOS
Lens angle (objective) H/D:	90°/118°
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 2,5 LUX @ f1.4
Weight:	12 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 350 TV lines
Power supply:	7 - 12 V (5 V DC option)
Power consumption:	35 mA
S/N ratio:	> 48 dB
Video exit:	1 V, 75 Ohm
Dimensions:	24 (L) x 22 (B) x 10 (H) mm
Lens system:	Pinhole standard
Options:	5 V refitting Different camouflaged lenses are available at additional charge.

Special features:

This camera is integrated in an elaborately machined casing of full material. The advantages are better heat lead-away (12 V version) and mechanical protection against damage by rough handling as well as a shield from the outside (lines frequency which can be located by special detectors). Adapter for BNC and power supply is included in delivery.

Micro CMOS Button Camera Series I B/W Version B



Technical Data:

Image sensor:	1/3" CMOS
Lens angle (objective) H/D:	90°/118°
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 0,2 LUX @ f1.2
Weight:	10 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 480 TV lines
Power supply:	7 - 12 V (5 V DC option)
Power consumption:	35 mA
S/N ratio:	> 48 dB
Video exit:	1 V, 75 Ohm
Dimensions:	24 (L) x 22 (B) x 10 (H) mm
Lens system:	Pinhole button
Options:	5 V refitting Button in two different sizes available (please indicate when ordering): big 20 mm or small 15 mm; colour black

Special features:

This camera is integrated in an elaborately machined casing of full material. The advantages are better heat lead-away (12 V version) and mechanical protection against damage by rough handling as well as a shield from the outside (lines frequency which can be located by special detectors).

On request special buttons can be made at additional cost. The kit contains **one** camouflaged button lens. An additional six buttons can be found in the case corresponding to the ordered lens. Adapter for BNC and power supply are included in the delivery.

Micro CMOS Button Camera Series I Colour Version B



Technical Data:

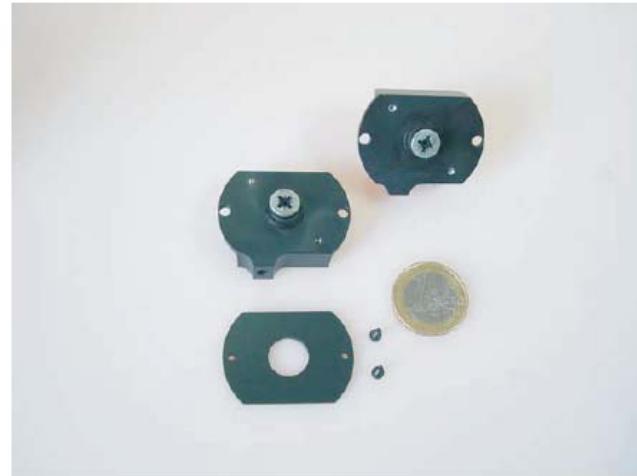
Image sensor:	1/3" CMOS
Lens angle (objective) H/D:	90°/118°
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 2,5 LUX @ f1.4
Weight:	10 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 350 TV lines
Power supply:	7 - 12 V (5 V DC option)
Power consumption:	35 mA
S/N ratio:	> 48 dB
Video exit:	1 V, 75 Ohm
Dimensions:	24 (L) x 22 (B) x 10 (H) mm
Lens system:	Pinhole button
Options:	5 V refitting Button in 2 different sizes available (Please indicate when ordering): big 20 mm or small 15 mm; colour black

Special features:

This camera is integrated in an elaborately machined casing of full material. The advantages are better heat lead-away (12 V version) and mechanical protection against damage by rough handling as well as a shield from the outside (lines frequency which can be located by special detectors).

On request special buttons can be made at additional cost. The kit contains **one** camouflaged button lens. An additional six buttons can be found in the case corresponding to the ordered lense. Adapter for BNC and power supply are included in the delivery.

Mini CMOS Camera Series II B/W Version A



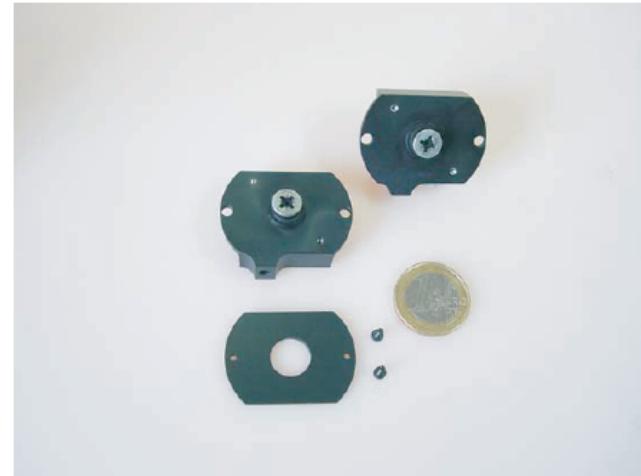
Technical Data:

Image sensor:	1/3" CMOS
Lens angle (objective) H/D:	90°/118°
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 0,2 LUX @ f1.2
Weight:	12 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 480 TV lines
Power supply:	5 / 12 V switchable with DIP switch
Power consumption:	35 mA
S/N ratio:	> 48 dB
Video exit:	1 V, 75 Ohm
Dimensions:	21 (L) x 21 (B) x 11 (H) mm
Lens system:	Pinhole standard
Options:	Different camouflaged pinhole lenses Can be manufactured on request.

Special features:

This new generation of high resolution TV cameras is based on the newest CMOS technology. The small dimensions and the low power consumption recommend the camera container construction. The extensive dynamic range of the camera is an excellent overexposure protection. High resolution and contrast are obtained by the automatically self adjusting definitions correction as to exclude minimal contortions such as white vertical lines in the lighter parts of the picture.

Mini CMOS Camera Series II Colour Version A



Technical Data:

Image sensor:	1/3" CMOS
Lens angle (objective) H/D:	90°/118° pinhole standard
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 2,5 LUX @ f1.4
Weight:	12 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 350 TV lines
Power supply:	5/12 V switchable with DIP switch
Power consumption:	35 mA
S/N ratio:	> 48 dB
Videoexit:	1 V, 75 Ohm
Dimensions:	21 (L) x 21 (B) x 11 (H) mm
Special function:	AGC for external use to be switched off
Options:	On request different camouflaged pinhole lenses are available.

Special features:

This new generation of high resolution TV cameras is based on the newest CMOS technology. The small dimensions and the low power consumption recommend the camera for container construction. The extensive dynamic range of the camera is an excellent overexposure protection. High resolution and contrast are obtained by the automatically self adjusting definitions correction, as to exclude minimal contortions such as white vertical lines in the lighter parts of the picture.

Mini CMOS Button Camera Series II B/W Version B



Technical Data:

Image sensor:	1/3" CMOS
Lens angle (objective) H/D:	90°/118°
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 0,2 LUX @ f1.2
Weight:	12 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 480 TV lines
Power supply:	5 / 12 V switchable with DIP switch
Power consumption:	35 mA
S/N ratio:	> 48 dB
Video exit:	1 V, 75 Ohm
Dimensions:	21 (L) x 21 (B) x 11 (H) mm
Lens system:	Pinhole button
Options:	Button available in 2 different sizes (Please indicate when ordering): big 20 mm or small 15 mm; colour black

Special features:

This camera is integrated in an elaborately machined casing of full material. The advantages are better heat lead-away (12 V version) and mechanical protection against damage by rough handling. The small dimensions and low power consumption recommend the camera for portable body worn usage. The extensive dynamic range of the camera is an excellent overexposure protection. High resolution and contrast are obtained by the automatically self adjusting definitions correction as to exclude even minimal contortions of the picture.

On request special buttons can be made at additional cost. The kit contains **one** camouflaged button lens. An additional six buttons can be found in the case corresponding to the ordered lense.

Adapter for BNC and power supply are included in the delivery.

Mini CMOS Button Camera Series II Colour Version B



Technical Data:

Image sensor:	1/3" CMOS
Lens angle (objectives) H/D:	90°/118° Pinhole button
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 2,5 LUX @ f1.4
Weight:	12 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 350 TV lines
Power supply:	5 / 12 V switchable with DIP switch
Power consumption:	35 mA
S/N ratio:	> 48 dB
Video exit:	1 V, 75 Ohm
Dimensions:	21 (L) x 21 (B) x 11 (H) mm
Special functions:	AGC for external use can be switched off
Options:	Button available in two different sizes (please indicate when ordering): big 20 mm or small 15 mm; colour black

Special features:

This camera is integrated in an elaborately machined casing of full material. The advantages are better heat lead-away (12 V version) and mechanical protection against damage by rough handling. The small dimensions and low power consumption recommend the camera for portable body worn usage. The extensive dynamic range of the camera is an excellent overexposure protection. High resolution and contrast are obtained by the automatically self adjusting definitions correction, as to exclude even minimal contortions of the picture. On request special buttons can be made at additional cost. The kit contains one camouflaged button lens. An additional six buttons can be found in the case corresponding to the ordered lense.

Adapter for BNC and power supply are included in the delivery.

Mini CMOS Camera Series II B/W Version C



Technical Data:

Image sensor:	1/3" CMOS
Lens angle (objective) H/D:	150° wide angle / 28° telephoto lens
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 0,2 LUX @ f1.2
Weight:	12 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 480 TV lines
Power supply:	5 / 12 V switchable with DIP switch
Power consumption:	35 mA
S/N ratio:	> 48 dB
Video exit:	1 V, 75 Ohm
Dimensions:	21 (L) x 21 (B) x 12 (H) mm
Lens system:	wide angle or telephoto lens
Options:	On request different camouflages can be manufactured of black IR penetrable plastic.

Special features:

This new generation of high resolution TV cameras is based on the newest CMOS technology. The small dimensions and the low power consumption recommend the camera for container construction. The extensive dynamic range of the camera is an excellent overexposure protection. High resolution and contrast are obtained by the automatically self adjusting definitions correction as to exclude minimal contortions such as white vertical lines in the lighter parts of the picture.

Mini CMOS Camera Series II Colour Version C



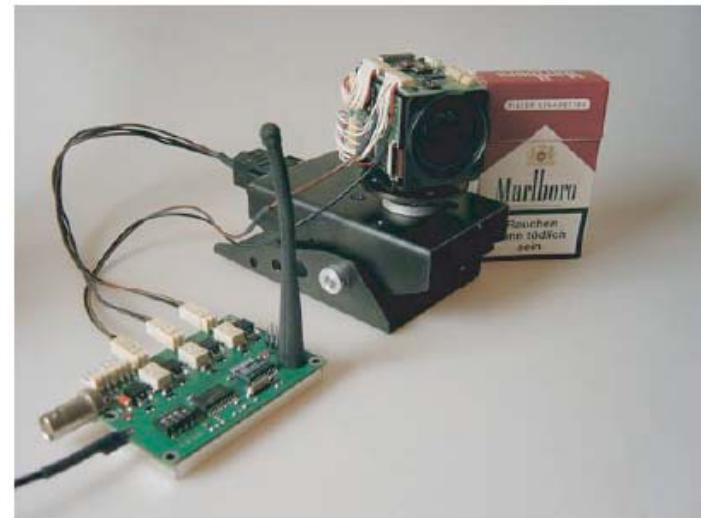
Technical Data:

Image sensor:	1/3" CMOS
Lens angle (objective) H/D:	150° wide angle / 28° telephoto lens
Auto electronic exposure:	1/50 - 1/16000
Minimum illumination:	< 2,5 LUX @ f1.4
Weight:	12 gr.
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	508 x 492 NTSC, 628 x 582 PAL / 350 TV lines
Power supply:	5/12 V switchable with DIP switch
Power consumption:	35 mA
S/N ratio:	> 48 dB
Video exit:	1 V, 75 Ohm
Dimensions:	21 (L) x 21 (B) x 12 (H) mm
Lens system:	wide angle or telephoto lens
Options:	On request different camouflages can be made of black IR penetrable plastic.

Special features:

This new generation of high resolution TV cameras is based on the newest CMOS technology. The small dimensions and the low power consumption recommend the camera for container construction. The extensive dynamic range of the camera is an excellent overexposure protection. High resolution and contrast are obtained by the automatically self adjusting definitions correction as to exclude minimal contortions such as white vertical lines in the lighter parts of the picture.

Mini Pan and Tilt Head with Zoom Camera and PCB Control Board



Technical Data Pan and Tilt Head:

Horizontal pan angle:	360°
Vertical tilt:	40°
Preset accuracy:	2°
Power supply:	5 to 12 V
Operation consumption:	200 mA
Dimensions:	100 x 70 x 40 mm
Weight:	430 g (without camera)

Technical Features:

- Small overall dimensions
- Silent operation
- Highly accurate
- Two rotation planes
- Pan/Tilt speed control 2 steps
- External control PCB board (optional)
- Solid metal construction
- Works with most digital P/T/Z controllers
- Optional radio system for full remote control

For successful operation we recommend:

100x Zoom Mini Camera

220x Zoom Camera

High Resolution CCD Jacket Camera Colour



Technical Data:

Image sensor:	1/4"
Lens angle (objective) H/D:	92°/118° pinhole
Auto electronic exposure:	1/50 - 1/100000
Minimum illumination:	1 LUX F: 1.2
Automatic brightness control:	3 levels
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	512 x 492 NTSC, 512 x 582 PAL / 470 TV lines
Power supply:	8 - 12 V
Power consumption:	65 mA
Dimensions:	29 x 25 x 10 mm
Lens system:	Pinhole standard

Special features:

This new generation of high resolution cameras are based on the latest CCD chip technology. The small dimension and low power consumption recommend this camera for container construction. The extensive dynamic range of the camera is an excellent over exposure protection. A small audio amplifier with a highly sensitive microphone and connecting cable to countersink into the connecting cable at hand can be purchased from MIB. The power consumption of the available 5 V version is slightly higher.

High Resolution CCD Tie Camera Colour



Technical Data:

Image sensor:	1/4"
Lens angle (objective) H/D:	92°/118° pinhole
Auto electronic exposure:	1/50 - 1/100000
Minimum illumination:	1 LUX F: 1.2
Automatic brightness control:	3 levels
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	512 x 492 NTSC, 512 x 582 PAL / 470 TV lines
Power supply:	8 - 12 V
Power consumption:	65 mA
Dimensions:	29 x 25 x 10 mm
Lens system:	Pinhole standard

Special features:

This new generation of high resolution cameras are based on the latest CCD chip technology. The small dimension and low power consumption recommend this camera for container construction. The extensive dynamic range of the camera is an excellent over exposure protection. A small audio amplifier with a highly sensitive microphone and connecting cable to countersink into the connecting cable at hand can be purchased from MIB. The power consumption of the available 5 V version is slightly higher.

High Resolution CCD Universal Rearview Mirror Camera



Technical Data:

Image sensor:	1/4"
Image angle (objective) H/D:	92°/118° Pinhole
Range Control:	1/50 to 1/100000 secs.
Minimum illumination:	1 LUX F: 1.2
Automatic brightness control:	3 level
Objective:	0,8 - 1,2 mm
Resolution pixel:	512 x 492 NTSC, 512 x 582 PAL / 470 TV lines
Power supply:	8 - 12 V
Power consumption:	65 mA
Dimensions:	29 x 25 x 10 mm
Lens system:	Pinhole standard

Special features:

This rearview mirror is equipped with a new generation of high resolution cameras based on the latest CCD chip technology. Also equipped with automatic backlight-control (BLC), important for pictures taken from a car under extreme light conditions. The professional digital image processing of the colour camera in use is of such high quality, that it meets maximum standards. The camera comes with reverse polarity proof 3 m connecting cable for the remote LANC control unit. Included in the set is also a universal quick change mounting with special glas fixation for fast installation in almost any car.

High Resolution CCD Mini Button Camera Series II Colour



Technical Data:

Image sensor:	1/4"
Lens angle (objective) H/D:	92°/118° pinhole button
Auto electronic exposure:	1/50 - 1/100000
Minimum illumination:	1 LUX F: 1.2
Automatic brightness control:	3 levels
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution horizontal:	470 TV lines
Power supply:	8 - 12 V
Power consumption:	65 mA
Dimensions:	29 x 25 x 10 mm
Options:	Button available in 2 different sizes (Please indicate when ordering): big 20mm or small 15mm; colour black

Special features:

With this set, fastening the camera onto garments such as jackets or shirts is easy and simple. True to detail we make different lenses with special camouflages, e.g. jeans buttons, broches, pins, etc. Even the threads of the buttons are recreated. The camera is integrated in an elaborately machined casing of full material. This assures a higher heat lead-away, when the camera is body worn.

Contents:

The kit contains a camera with a camouflaged standard button lens and an additional 10 special extra buttons. A connecting cable with micro connector, a BNC video exit and a power supply port (9 V block battery) with built-in reverse battery protection are also included in the set. The kit comes ready for use in a robust plastic case.

Option:

A small audio amplifier with a highly sensitive microphone and a connecting cable to countersink into the connecting cable at hand can be purchased from MIB. The available 5 V version has a slightly higher power consumption.

High Resolution CCD Mini Camera Series II Colour



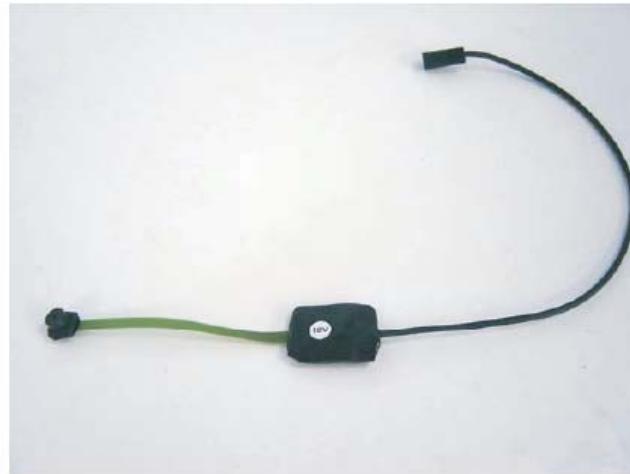
Technical Data:

Image sensor:	1/4"
Lens angle (objective) H/D:	92°/118° pinhole
Auto electronic exposure:	1/50 - 1/100000
Minimum illumination:	1 LUX F: 1.2
Automatic brightness control:	3 levels
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	512 x 492 NTSC, 512 x 582 PAL / 470 TV lines
Power supply:	8 - 12 V
Power consumption:	65 mA
Dimensions:	29 x 25 x 10 mm
Lens system:	Pinhole standard
Options:	On request different camouflaged pinhole lenses can be manufactured.

Special features:

This new generation of high resolution cameras are based on the latest CCD chip technology. The small dimension and low power consumption recommend this camera for container construction. The extensive dynamic range of the camera is an excellent over exposure protection. A small audio amplifier with a highly sensitive microphone and connecting cable to countersink into the connecting cable at hand can be purchased from MIB. The power consumption of the available 5 V version is slightly higher.

High Resolution CCD Mini Camera Series II Colour with Separate Camera Head



Technical Data:

Image sensor:	1/4"
Lens angle (objective) H/D:	92°/118° pinhole
Auto electronic exposure:	1/50 - 1/100000
Minimum illumination:	1 LUX F: 1.2
Automatic brightness control:	3 levels
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	512 x 492 NTSC, 512 x 582 PAL / 470 TV lines
Power supply:	12 V
Power consumption:	65 mA
Dimensions:	29 x 25 x 10 mm
Lens system:	Pinhole standard
Options:	On request different camouflaged pinhole lenses can be manufactured.

Special features:

This new generation of high resolution cameras are based on the latest colour CCD chip technology. The small dimensions of the lens holder with camera chip separated with a cable or flexible band from the main board and the low power consumption recommend this type of camera for flexible container construction. Because of the different lens types and different camouflages, installation possibilities in all fields of application are possible where regular cameras fail.

A small audio amplifier with a highly sensitive microphone and connecting cable to countersink into the connecting cable at hand can be purchased from MIB. The power consumption of the available 5 V version is slightly higher.

High Resolution CCD Mini Stick Camera Series II Colour



Technical Data:

Image sensor:	1/4"
Lens angle (objective) H/D:	92°/118° pinhole
Auto electronic exposure:	1/50 - 1/100000
Minimum illumination:	1 LUX F: 1.2
Automatic brightness control:	3 levels
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	512 x 492 NTSC, 512 x 582 PAL / 470 TV lines
Power supply:	8 - 12 V
Power consumption:	65 mA
Dimensions:	29 x 25 x 10 mm
Lens system:	Pinhole standard
Options:	On request different camouflaged pinhole lenses can be manufactured.

Special features:

This new generation of high resolution cameras are based on the latest CCD chip technology. The small dimension and low power consumption recommend this camera for container construction. The extensive dynamic range of the camera is an excellent over exposure protection. A small audio amplifier with a highly sensitive microphone and connecting cable to countersink into the connecting cable at hand can be purchased from MIB. The power consumption of the available 5 V version is slightly higher.

High Resolution CCD Camera Series III B/W



Technical Data:

Image sensor:	1/3" CCD
Lens angle (objective) H/D:	90°/118°
Auto electronic exposure:	1/50 zu 1/120000 sec.
Minimum illumination:	< 0,05 LUX F: 1.2
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	542 x 492 NTSC, 542 x 582 PAL / 570 TV Linien
Power supply:	12 V
Power consumption:	90 mA
S/N ratio:	> 60 dB
Video exit:	1 V, 75 Ohm
Dimensions:	37 x 37 x 12 mm
Lens system:	Pinhole standard
Optional:	Different camouflaged pinhole lenses are available at additional charge.

Special features:

This new generation of high resolution cameras are based on the latest CCD chip technology. The small dimensions and the low power consumption recommend ths camera for container construction. The extensive dynamic range of the camera functions as excellent over exposure protection.

A small audio amplifier with a highly sensitive microphone and connecting cable to countersink into the connecting cable at hand can be purchased from MIB-Electronic.

This camera has a 2x digital tele zoom function. All functions (BLC, mirror, zoom and On) can be controlled by the DIP switch. The zoom function can also be externally controlled by a switch or a radio remote control.

Please note that in the zoom mode the resolution is reduced.

High Resolution CCD Camera Series III Colour



Technical Data:

Image sensor:	1/3" CCD
Lens angle (objective) H/D:	90°/118°
Auto electronic exposure:	1/50 zu 1/120000 sec.
Minimum illumination:	< 0,6 LUX F: 1.2
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	542 x 492 NTSC, 542 x 582 PAL / 570 TV Linien
Power supply:	12 V
Power consumption:	90 mA
S/N ratio:	> 60 dB
Video exit:	1 V, 75 Ohm
Dimensions:	37 x 37 x 12 mm
Lens system:	Pinhole standard
Optional:	Different camouflaged pinhole lenses are available at additional charge.

Special features:

This new generation of high resolution cameras are based on the latest CCD chip technology. The small dimensions and the low power consumption recommend this camera for container construction. The extensive dynamic range of the camera functions as excellent over exposure protection.
A small audio amplifier with a highly sensitive microphone and connecting cable to countersink into the connecting cable at hand can be purchased from MIB-Electronic.

This camera has a 2x digital tele zoom function. All functions (BLC, mirror, zoom and On) can be controlled by the DIP switch. The zoom function can also be externally controlled by a switch or a radio remote control.

Please note that in the zoom mode the resolution is reduced.

High Resolution CCD Camera Colour Series IV with Tele Lens



Technical Data :

Image Sensor:	1/4" CCD
Lens Angel (Objective) H/D:	10,0 mm/27°; 15 mm/18°; 30 mm/9°
Auto electronic exposure:	1/60 (1/50) zu 1/120 000 sec.
Minimum illumination:	< 1 LUX F: 2.0
Automatic brightness controls:	3 levels
Entrance pupil diametert objective:	2,2 - 3 mm
Resolution pixel:	570 TV lines
Power supply:	10,5 - 12 V DC
Power consumption:	90 mA
Dimensions:	26 mm diameter x 89 mm (L)
Lens system:	Tele lens Pinhole

High Resolution CCD Camera Series V Colour



Technical Data:

Image sensor:	1/3" CCD
Lens angle (objective) H/D:	90°/118°
Auto electronic exposure:	1/50 zu 1/120000 sec.
Minimum illumination:	< 0,6 LUX F: 1.2
Entrance pupil diameter objective:	0,8 - 1,2 mm
Resolution pixel:	542 x 492 NTSC, 542 x 582 PAL / 570 TV Linien
Power supply:	12 V
Power consumption:	90 mA
S/N ratio:	> 60 dB
Video exit:	1 V, 75 Ohm
Dimensions:	37 x 37 x 12 mm
Lens system:	Pinhole standard
Optional:	Different camouflaged pinhole lenses are available at additional charge.

Special features:

This new generation of high resolution cameras are based on the latest CCD chip technology. The small dimensions and the low power consumption recommend this camera for container construction. The extensive dynamic range of the camera functions as excellent over exposure protection.

A small audio amplifier with a highly sensitive microphone and connecting cable to countersink into the connecting cable at hand can be purchased from MIB-Electronic.

This camera has a 2x digital tele zoom function. All functions (BLC, mirror, zoom and On) can be controlled by the DIP switch. The zoom function can also be externally controlled by a switch or a radio remote control.

Please note that in the zoom mode the resolution is reduced.

Colour / B/W Camera Series V with Illumination Regulated Automatic Filter Switch



Technical Data:

Image sensor:	1/3" I CCD image sensor (ExView HAD)
Effective pixels:	752 (H) x 582 (V)
Synchronisation:	internal / external
Horizontal resolution:	450 TV lines
Minimum illumination:	0.01 Lx (at video output 50%, AGC=ON +39dB, F1.4) 0.5 Lx (at video output 50%, AGC=ON +24dB, F1.4) 50 dB (AGC=OFF) + 39dB max. (Analogue 24dB + digital 15dB)
S/N ratio:	selectable 8 modes by Jumper land setting (maximum +48 dB)
AGC:	E. Iris ON: 1/50 1/30,000sec/ OFF: 1/50sec. ATW ON (2600°K.9000°K) / OFF (3200°K) / 5600°K BLC On (Center) /OFF selectable
Electronic iris/shutter:	DC +12V +/- 10%
White balance:	10mm
BLC:	approx. 37 g
Power requirements:	operation: 0 to + 40 deg. C under Rh 20 - 80%
Pinhole Tele Lens:	32 x 32 mm + 42 x 42 mm (without the mountings)
Weight:	standard 4x
Temperatures:	RS 232C/TTL Interface
Board size:	
Digital zoom:	
Remote control:	

Special features:

This new camera type contains a illumination controlled IR filter removal mechanism; the IR filter being pulled away from the chip by a small electric motor when switching from colour to b/w mode.



If you would like further Information about ELAMAN, or would like to discuss a specific requirement or project, please contact us at:

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