

Video Surveillance



Integrated CCTV System

Video Monitoring and Control System

CCTV Video Monitoring System



Video monitoring (CCTV = Closed Circuit Television) has become a standard for increased safety and comfort on board ships, e. g. by monitoring public and private areas, unmanned engine rooms, gangways, accesses, visual support of docking and undocking maneuvers, as well as other areas. The Video Monitoring System AHD-VCS was developed

for operating up to 16 video cameras separately, including pan/tilt and zoom control. Here, the system components can easily be integrated into a Böning ship alarm system, because the same displays are used. Even the data communication runs on the same CAN bus. There is no need for special, separately installed camera monitors. An unlimited number of control units can be connected.

The system's main components are: Video Distribution Control Unit AHD-VDCU (for 8, or 16 cameras), Video Control Panel AHD-VCP, and the touch screen color displays AHD 1215/AHD 1219 or AHD 880 with individual, separate control units. The Video Distribution Control Unit AHD-VDCU processes and controls the camera signals and forwards their video signals to the connected displays.

You can choose from various models for standard and special applications. The robust cameras meet the requirements of a maritime environment and are protected against vandalism. As a rule, they are controlled and powered by the Video Distribution and Control Unit AHD-VDCU. Models with a higher current consumption or nonstandard power supply are powered by a separate source.

The video monitoring system can be expanded with an optional Video Quad Processor, by which four selected cameras can be viewed on a single screen. Another available option is the Digital Video Data Recorder AHD-VC VR8 with 8 loop through inputs, 320 GB internal hard disk (data compression MPEG-4), DVD-RW, and several other functions.

Video Control Panel

The video control panel is used for selecting and controlling the video cameras connected to the video monitoring system. The unit is connected to the CAN bus, communicating with the video distribution control Unit AHD-VDCU. The AHD-VCP is provided with several push buttons and indication displays, which allow the selection of camera video signal source by channel selection, control of pan, tilt, zoom ...

All available function for controlling the camera can easily and comfortably selected by keystrokes.



Power supply	18...32V DC
Power consumption	appr. 30 mA (24V DC)
Interfaces	1xCAN Bus (In-and Output)
Operation temperature	-25°C...+70°C
Storage temperature	-30°C...+85°C
Degree of protection	IP 67 (Front side) IP 20 (Rear side)
Dimension W x H x D	70mm x 130mm x 65mm
Panel Cut-Out W x H	60mm x 112,5mm
Req. Installation depth	min. 100mm
Weight	Appr. 0.2 Kg
Installation	Built-in casing

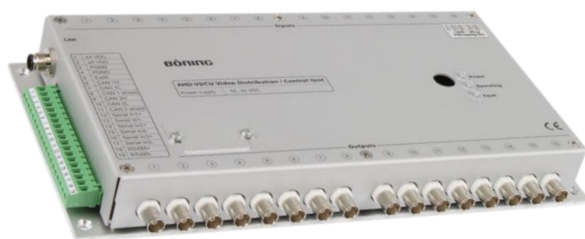
AHD-VDCU

item-no. (see below)

Video Distribution Control Unit

Video distribution control unit for the distribution and control of video signals received from video systems (video cameras). The video signals may be transferred to displays, television sets, video data recorders and other video processing systems.

The unit is operated via CAN bus or RS-485 with a separate video control element on the connected color displays' visualization pages.



AHD-VDCU Versions

- AHD-VDCU 8/8 item-no.11417
- AHD-VDCU 16/16 item-no.11605

Video Inputs	RJ45 (8x or 16x) (depending on AHD-VDCU type)
Video Outputs	1.0 Vpp 75Ω, BNC (depending on AHD-VDCU type)
Power supply	18 ... 32 V DC
Power consumption	max. 300mA without cameras (max. appr. 400 mA/camera in addition)
Interfaces	2 x CAN Bus (Communication) 1 x RS232 1 x RS 485 (Option) 3 x serial In (Optocoupler)
Operating temperature	-25°C ... +70°C
Storage temperature	-30°C ... +85°C
Dimension W x H x D	330mm x 160mm x 32mm
Weight	appr. 1.30 kg
Installation	Surface mounting, installation on mounting plate

Mini Marine Dome Camera

The VC 035 has been designed especially to provide the highest possible image quality in the smallest possible form factor, so as to blend in seamlessly to the lines and curves of the leisure marine aesthetic.



Key Features

- Ultra Wide Angle View : 120° Horizontal field of view
- 700 TVL Resolution
- High Performance IR LED - 8 Meter Range
- Mechanical IR Cutout filter for True Day/Night Operation
- IP66 Ingress Protection
- Small, Compact Housing
- Wide Operating Temperature Range
- Compatible with all Chart Plotters with Composite Video Input

Power supply	12 V DC
Current consumption	< 100 mA
Dimensions (øxH)	48mm x 48mm
Degree of protection	IP 66
Infrared range	8 m
Operation temperature	-30°C ~ +60°C
Weight	0.2 Kg
Color	white
Video signal converter	11957 AHD-VSC QC

High Resolution Fixed Mini-Dome with OSD Setup

The VC 066 is part of best VC 06x range of dome cameras, made successful due to its stylish, miniature design and quality reliable performance. A great all-round camera with superb resolution, day/night operation and neat, unobtrusive styling, all in a tiny, robust housing.



Key Features

- Wide Angle View: 80° Horizontal field of view
- 1000 TVL Resolution
- High Performance IR LED - 10 Meter Range
- Mechanical IR Cutout filter for True Day /Night Operation
- IP66 Ingress Protection
- Small, Compact Housing
- Wide Operating Temperature Range
- Compatible with all Chart Plotters with Composite Video Input

Power supply	12 V DC
Current consumption	< 350 mA
Dimensions (øxH)	59mm x 56mm
Degree of protection	IP 66
Infrared range	10 m
Operation temperature	-30°C ~ +60°C
Weight	0.2 Kg
Color	white
Video signal converter	11957 AHD-VSC QC

Mini Marine Dome Camera

Stylish and robust recess mounting marine camera used for a multitude of applications, from monitoring decks and companionways, engine rooms and bathing platforms to cabins, saloons and cabins. The VC036 looks at home on luxury craft as well as in commercial boating applications.



Key Features

- Marine Grade A316 Stainless Steel Housing
- 1000 TVL Resolution
- Wide Operating Temperature Range
- IP66 Ingress Protection
- Small, Compact Housing

Power supply	12 V DC
Current consumption	< 100 mA
Dimensions	Bezel Diameter: 86mm /Panel Cutout
Degree of protection	IP 66
Operation temperature	-30°C ~ +60°C
Weight	0,3 Kg
Color	VC 036P : stainless steel VC 036PW : stainless steel - white
Video signal converter	16856 AHD-VSC B

Stainless Steel Vari-Focal Static Dome Camera

The 085's 316 stainless steel housing provides the ultimate protection in the harsh marine environment and is therefore the perfect solution for deck monitoring aboard work boats, fishing vessels and passenger vessels, whilst fitting in equally as well with the high end aesthetic of luxury vessels and mega yachts.



Key Features

- Machined from 316 Marine Grad11957 AHD-VSC QC Stainless Steel
- High Resolution 1000 TVL
- Built In Infra-Red LED Illumination (30m Range)
- Extremely Low Power Consumption
- IP66 Environmental Protection
- Vari-Focal 2.8~12mm Lens
- Wide Operating Temperature Range
- Compatible with all MFD's with Composite Video Inputs

Power supply	12 V DC
Current consumption	< 2 A
Dimensions (øxH)	142mm x 92.5mm
Degree of protection	IP 66
Infrared range	30 m
Operation temperature	-20°C ~ +55°C
Weight	1.3 Kg
Color	VC 085P : stainless steel VC 085PW : stainless steel - white
Video signal converter	11957 AHD-VSC QC

316 Marine Grade Stainless Steel Static Dome Camera

The new S060 made successful due to its stylish, miniature design and quality reliable performance . Measuring only 58mm high by 60mm in diameter, the S060 is small enough to provide unobtrusive surveillance and also for use in areas where space is tight, such as engine rooms or anchor wells.



Key Features

- Machined from 316 Marine Grade Stainless Steel
- High Resolution 1000 TVL
- Wide Operating Temperature Range
- Built In Infra-Red LED Illumination (10m Range)
- IP66 Ingress Protection
- Extremely Low Power Consumption
- Small, Compact Housing

Power supply	12 V DC
Current consumption	< 200 mA
Dimensions (øxH)	60mm x 58mm
Degree of protection	IP 66
Infrared range	10 m
Operation temperature	-30°C ~ +60°C
Weight	0.5 Kg
Color	VC S060P : stainless steel VC S060PW : stainless steel – white
Video signal converter	16856 AHD-VSC B

Miniature Marine PTZ Dome

The VC106 Micro PTZ has been especially designed to provide boat owners an all-round, cost effective camera option that packs a punch in terms of high-end features and actually complements the boats aesthetic.



Key Features

- A316 Stainless Steel Bezel
- Smallest Marine PTZ Available
- 10x Optical & 10x Digital Zoom
- 700 TVL Resolution
- IP66 Ingress Protection
- 360° Continuous Rotation
- Compatible with Chart Plotters with Composite Video Input.

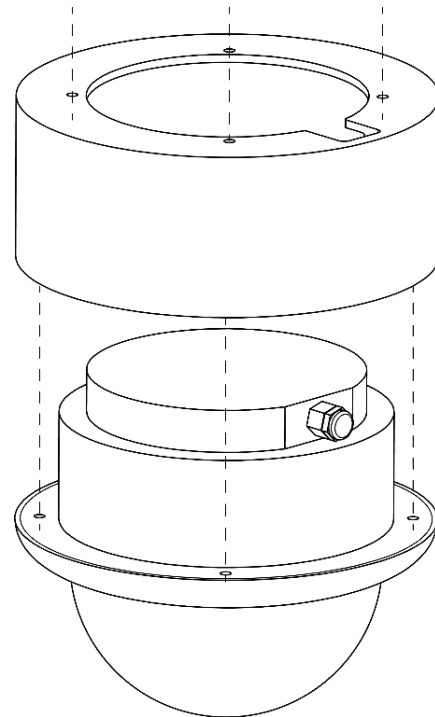
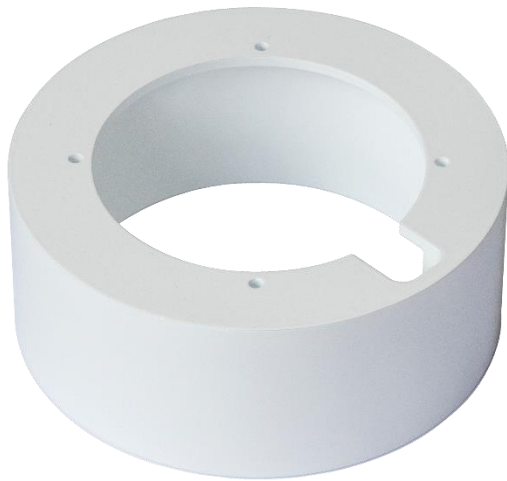
Power supply	12 V DC
Current consumption	< 2 A
Dimensions	154mm x 129.7mm
Degree of protection	IP 66
Operation temperature	-30°C ~ +60°C
Weight	1.15 Kg
Color	VC 106P : chrome VC 106PW : white
Video signal converter	17525 AHD-VSC CI

VC BRK106 W

item-no.20000

Installation bracket for VC 106P / PW

Required for scenarios where the cameras cannot be flush mounted. The camera body is encased in this coated aluminum bracket and mounted below the ceiling with only the connecting cable needing to be run inside it.



Hi-Res Analogue Thru-Hull

With an ingress protection rating of IP68 and manufactured from high quality materials, the 730 is an amazing underwater camera guaranteed to provide superb images to your chart plotter, monitor or TV. With this camera you can gaze in wonder at sub aquatic marine life and seascapes.



Key Features

- Aluminum Bronze Bezel
- IP68 Waterproof Design
- 800TVL Hi Resolution Colour Analogue Camera
- Composite Video Output
- Compatible with Chart Plotters Supporting Composite Video inputs
- Compatible with AV Inputs on TV's and Monitors
- Simple Plug'n'Play Operation
- Hole Cut Out: 90mm
- Hard Anodized Aluminum Shaft

Power supply	12 V DC
Current consumption	< 100 mA
Dimensions	118mmø Bezel ; L: 120mm ; Ø:89mm
Degree of protection	IP 68
Weight	1.8 Kg
Video signal converter	11957 AHD-VSC QC

Professional PTZ Camera for Extreme Environments

Designed to withstand the harshest conditions VC S118 cameras are made from machined and cast aluminium body sections which are anodised and powder coated for maximum protection. Featuring new high spec oil seals and improved stepper motors, the VC S118 cameras move quickly and smoothly with great accuracy.

The VC S118 PTZ houses a Sony block camera module with 580TVL analogue resolution, 36x Optical and 12x Digital zoom, auto and manual focus and a host of other features expected from a high end imager. An array of 4 high power second generation infra red LED's provide auto/manual illumination in low light to a range of around 150ft. The IRIS-S118 is water resistant to IP66 and features a heater and anti-fogging facility.



Key Features

- Single & Dual Payload Models
- Built In Infra Red LED Illumination (50m Range)
- 550 TVL Resolution
- Low-Light,H-Resolution Analogue modules
- IP66 Environmental Protection
- Rugged Aluminium Housing, Anodysed and Powder Coated
- Built In Heater & Cooling Fan
- Fast, Smooth PTZ Control

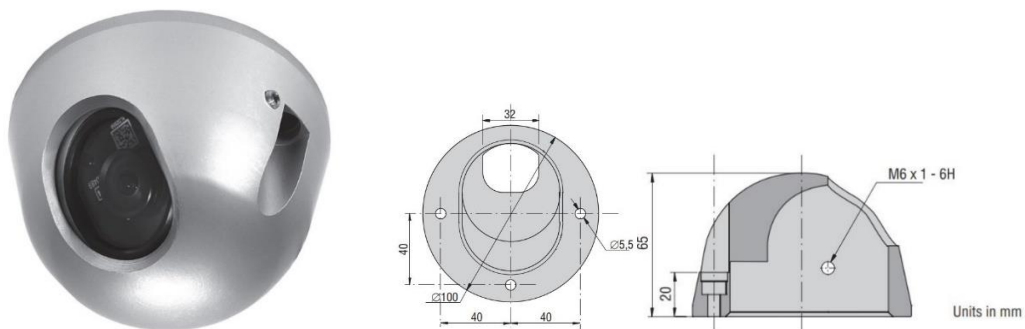
Dimensions (øxH)	191mm x 220mm
Degree of protection	IP 66
Zoom	36x Optical / 12x Digital
Color	white

Camera FAMOS

item-no. (on request)

Professional PTZ Camera for Extreme Environments

The new FAMOS Camera is an extreme sturdy, compact industrial camera that can be used in virtually all vision solutions on machines, vehicles and vessels. The Advanced CMOS sensor camera is shock and vibration-proof, 100% waterproof, has heated lens glass and provides the best possible image in all weather conditions. In addition, the integrated Safety ticker detects 'frozen' images, so that you definitely know that the camera is active.



Camera FAMOS 20°/129° PAL/NTSC

	FAMOS 20°	FAMOS 40°	FAMOS 60°	FAMOS 80°	FAMOS 102°	FAMOS 118°	FAMOS 129°
Lens specified	20°	40°	60°	80°	102°	118°	129°
Horizontal lens angle	20°	40°	60°	80°	102°	118°	129°
Vertical lens angle	15°	31°	44°	57°	73°	89°	97°

Specifications

Power supply	12 – 24 V DC
Degree of protection	IP 68
Operation temperature	-40°C ~ +85°C
Weight	0.21 Kg
Material	Aluminium, anodized 20µm
Color	Alu natural-suitable for spraypainting
Weight	0.546 Kg
Mounting material	3x BT Cyl. M5x25mm RVS 2pen DIN 85

SC-04MHD

item-no.19244

Video Quad-Screen Processor Unit

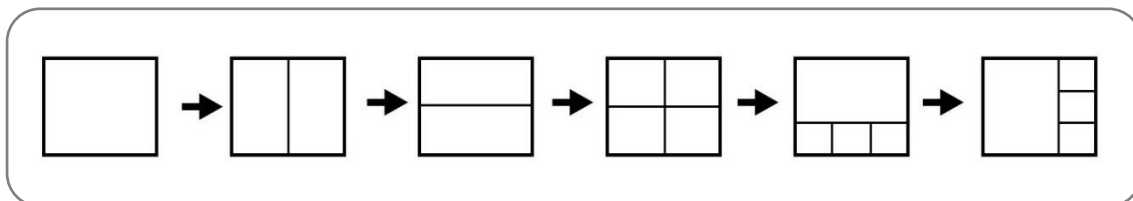
SC-04MHD, Digital Full HD Splitter, receives HD Analog (AHD, TVI, CVI) and/or CVBS video signals from Max. four cameras and displays them in various split modes and formats. In addition, it displays the video clearly in a Full HD monitor with 1920x1080p high resolution. With SeeEyes SC-04MHD, it is possible to amplify video signals to external devices such as DVRs via loop through output ports and also the remote control is available through RS-485 port. It displays the date, time, the name of each channel, current status on the monitor as well as the channel loss.



Key Features

- Multi-format quad screen splitter with real time display
- Display high resolution pictures through high image processing
- Various video input: AHD/TVI/CVI(~1080p), CVBS (NTSC/PAL)
- Various video output (1920x1080p, 1920x1080i, 1280x1024)
- Various output resolutions (HDMI, 15Pin D-Sub, CVBS, Loop through output)
- Various split mode: 1, 2V, 2H, 4B, 4R, 4
- Auto sequence mode
- Alarm In / Out (4 In / 1 Out)
- RS-485 communication port for external devices

Split mode



SC-04MHD

item-no.19244

Specifications

Video Inputs	BNC-F (75Ω 1Vp-p) x 4 (AHD/TVI/CVI/CVBS)
Video Outputs	BNC-F (Looped through output / 75Ω 1Vp-p) x 4 HD X 1, D-SUB X 1, BNC-F x2
Power supply	2P Terminal Block DC 12V/0.5A
Power consumption	6W
Operation temperature	0°C ~ +50°C
Dimension W x H x D	220mm x 44mm x 190mm
Weight	2 Kg



FLIR Thermal Cams

item-no. (on request)

Premium Multi-Sensor Systems for Maritime Applications

The M-Series is available in different versions. It is available as a single payload night vision thermal imaging camera or combines a thermal imaging camera with a low light camera. All cameras provide crisp, clear thermal imagery in total darkness and light fog or smoke. Packaged in a small, ultra-compact gimbal they are designed for the most demanding maritime applications.

The FLIR M-Series are perfect tools for night time navigation, shipboard security, man overboard situations, anti-piracy and many other applications. The FLIR M-Series are the standard for maritime thermal imaging systems against which all others are compared.

Most variants can be fully integrated into our CCTV solution.



NOTES

A large rectangular area filled with a light gray grid pattern, intended for handwritten notes. The grid consists of approximately 30 columns and 40 rows of small squares.

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