Vision is our mission

MARINE
ORLACO CCTV
SOLUTIONS

ORLACO
Specialised Camera Solutions

**See more
Work more**

4		6	
advantages		vision solutions	

30	37	50
sets	products	vision

ORLACO

Select your vessel

Let us improve your every day job
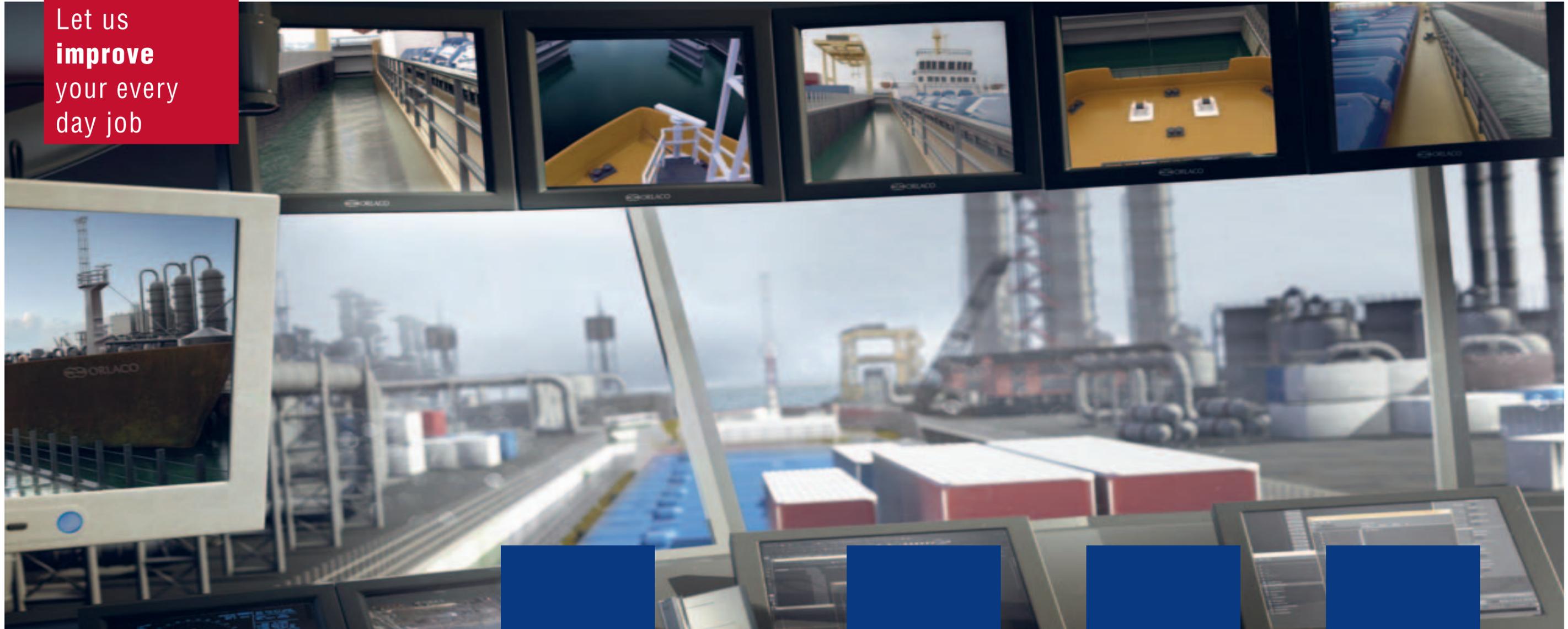
Improved safety

Camera monitor systems play an important role in maintaining the safety conditions onboard ships. Used for an overview of crew working areas, process monitoring and any other type of surveillance, they are an added value to secure the safety of personnel and equipment being used. With the aid of an Orlaco camera monitoring system the CCTV operator can detect possible safety issues in time and act accordingly to prevent any emergencies from happening. In case an emergency does occur, the operator will have a complete overview of the situation and will be able to make the right decisions, preventing escalation of the situation.

More efficiency

In their day to day work many ship operators experience the advantage of using a camera monitoring system. With an improved view of the working areas onboard and the ships surroundings, they have superior control of the situation. If for instance used for maneuvering, ship crane operations or dredging operation, with the support of a camera monitoring system their work is performed more efficiently and accurately.

Reduced damage

Despite the effort made to prevent accidents from happening, accidents do occur. Operating in confined areas with a lot of blind spots can cause damages to equipment and possible injuries to people. An Orlaco camera monitor system will provide the operator with an extra «pair of eyes» in spite of the equipment he is working with or the situation he is in. Unnecessary personal injuries and Lost Time Incidents (LTI) can be prevented.

Better ergonomics

In most situations the use of cameras contributes to the ergonomics and comfort of the operators. The use of cameras also allows for less people working in dangerous areas, preventing unnecessary risk. Video images can be distributed over a network to enable multiple employees with different tasks to overlook the situation in real-time. Effective decisions can be made based upon the visual live feedback from any remote location.

Marine **sight** solutions

Observation-view

For surveillance of the areas onboard and around the yacht a PTZ Dome camera is the right solution. With the possibility to maneuver the camera in a left/right and up/down position the whole area can be scanned. With the integrated zoom camera objects can be viewed in full detail.

Thermal image

The thermal camera is a night vision camera placed on a pan & tilt unit, used for security reasons and maneuvering on open water. Without the need of a light source this camera will generate a picture. When maneuvering at night time the TIC camera will enable the operator to spot any objects on or in the water.

Deck-view

The deck view camera provides the operator with a good view of people working on deck, machinery and stowed equipment.

Winchview

The winch camera provides the operator with a view of the winch and the Tow cable.

Observation-view

By placing a fixed Dome camera under an overhead the operator has a good view of the gangway access, pool area, passenger area and any other area that needs observation.
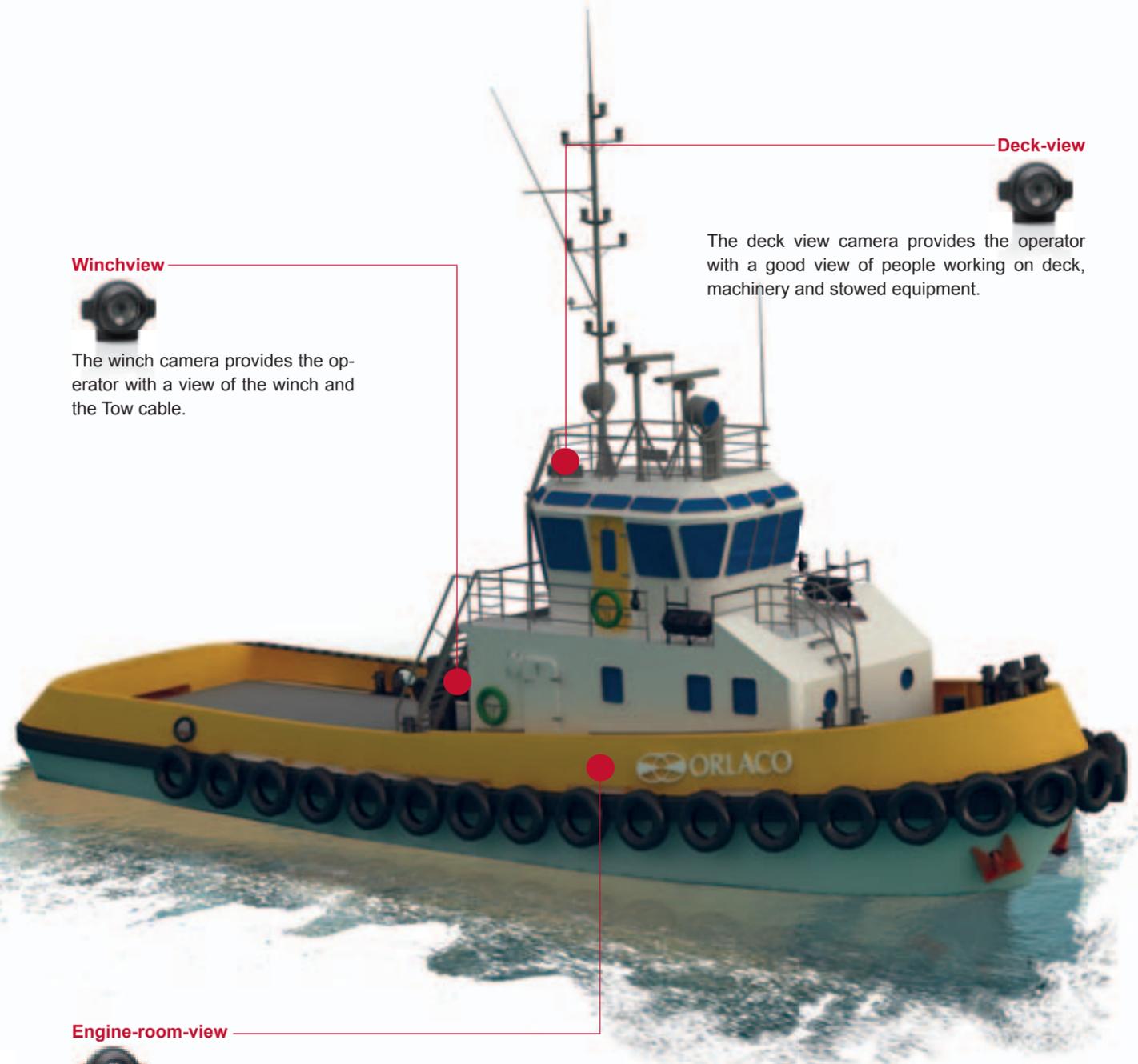
FWD-view

The forward view camera takes away the blind spot and provides the operator with a better view of what is in front of the bow.

Engine-room-view

With an unmanned engine room the operator has no visual of this area. With the help of a camera, with or without LED lights, the operator can detect oil spills or smoke forming, before any of the detection systems gives a warning.

Yachting

For observation, maneuvering or security reasons Orlaco can provide the right solution. Our line of camera products include fixed cameras for observation of gangways, passenger areas and engine room. PTZ cameras are used for observation of the area around the ship. Thermal Image Cameras for night observation. Combined with an Orlaco control system, like the VCU or Smartview solution, the operator will always be in control of the situation he is in.

Tugboat

When maneuvering the Tug an Orlaco camera monitor system supports the captain in his operation. With cameras placed at the several locations and a monitor in the wheelhouse he will have an overview of the winch, towing cable and engine room.

Bridge-wing-view

The bridge wing camera provides the operator a view of the people working on deck when reeling in the nets.

Deck-view

The deck view camera provides the operator with a good view of people working on deck, machinery and stowed equipment.

Aft-view

With the aft view camera the operator has a good view of the area behind the ship. This camera is mostly used for docking purposes to support the operator to maneuver the ship in the right position. This camera also provides a good view of persons and vehicles embarking and disembarking the ferry.

Thermal image

The TIC camera is a night vision camera used for maneuvering on open water. Without the need of a light source this camera will generate a picture and will warn the operator of any object on or in the water that is in the path of the Ferry.

Winchview

With the winch camera the operator can see if the cable is running properly onto the reel. It is also possible to detect any damages to the cable in time.

Engine room-view

Most of the time the engine room is unmanned and there is no visual of this area. With the help of a camera, with our without LED lights, the operator can detect Oil spills or smoke forming, before any of the detection systems gives a warning.

Observation-view

By placing a Fixed CCC Dome camera under an overhead the operator has a good view of the passenger areas and any other area that needs observation such as the auto deck.

Sideview

By placing a side view camera the operator has a good view of the gangway access area and can observe persons embarking or disembarking the Ferry.

Ferry

For observation, maneuvering or security reasons Orlaco can provide the right solution. Our line of camera products include fixed cameras for observation of gangways, passenger areas and engine room. PTZ cameras are used for observation of the area around the ship. Thermal Image Cameras for night observation. Combined with an Orlaco control system, like the Switchbox or Video Control Unit (VCU), the operator will always be in control of the situation he is in.

Fishing vessel

When the operation on a fishing vessel is in full progress the captain does not have a visual of all the locations onboard of the vessel. Especially a good overview of the crew reeling in the nets is a must. With the use of an Orlaco camera monitor system the captain can concentrate on operating the vessel and will also have a good overview, creating a safer working environment.

vision solutions

vision solutions

Bridge wing FWD-view

With the bridge wing camera the operator can maneuver the ship into locks and on narrow waterways. The camera is also used to view the front Bolder and people working on deck.

Hatch crane-view

Unsafe situations can occur during operation of the hatch crane. The Hatch crane camera system will improve safety during operation of the crane. On both sides of the crane two CCC compact cameras will be installed. One camera for a good overview of the gangway, the other camera is aimed at the hook of the spreader. Now the operator is always able to see if the gangway is clear and if the hook is properly locked.

FWD-view

The forward view camera is used to overlook the waterway and maneuver the ship into a Lock. This camera also takes away the blind spot in front of the bow, making it possible to observe smaller boats in time to prevent accidents.

Aft-deck-view

Engine room-view

Most of the time the engine room is unmanned and there is no visual of this area. With the help of a camera, with our without LED lights, the operator can detect Oil spills or smoke forming, before any of the detection systems gives a warning.

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Inland shipping and Coaster ship

When positioning a vessel in front of a lock and maneuvering into the lock, a camera monitor system is of great help. With the installation of a zoom camera on the bridge wings and a fixed camera on the mast, the captain has a good overview of the situation. The fixed camera on the mast is also used to eliminate the blind spot in front of the vessel. He can overlook the waterway to see if any smaller vessels like pleasure boats are in front of the vessel. This ensures safe operation of the vessel.

Anchor-winchview

With the winch camera the operator can see if the cable is running properly onto the reel. It is also possible to detect any damages to the cable in time.

Deck-ramp-view

This camera is used to view the loading and unloading of the ship. As an additional security precaution the deck ramp camera will give the operator a clear view of the ramp being properly closed or opened.
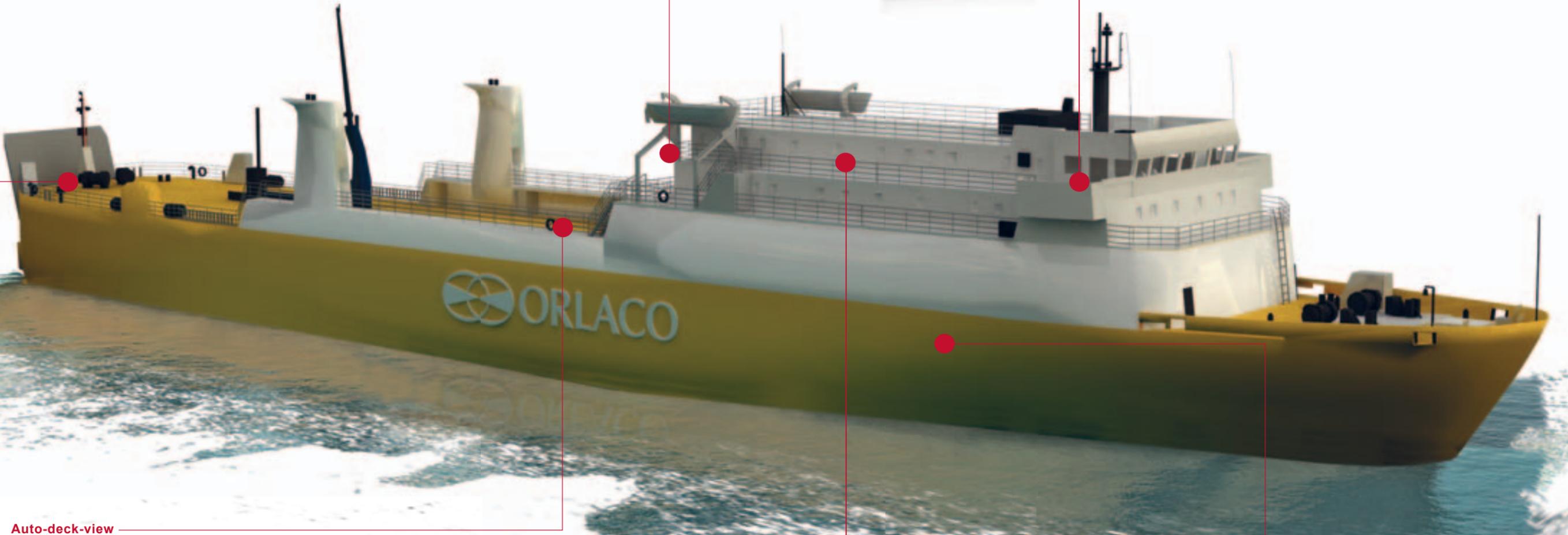
Aft-deck-view

The deck view camera provides the operator with a good view of people working on deck, machinery and stowed equipment.

Bridge-wing-view

The Bridge wing camera is used by the operator for observation of the ships gangways and for maneuvering and mooring of the ship.

Auto-deck-view

The deck view camera provides the operator with a good view of the parked trailers.

Ro-ro vessel

With a lot of activities happening during the loading and unloading of the vessel a camera monitor system will give the operator a better view of all the operations that are going on. Positioning deck view cameras on strategic positions will give the operator a good view of the load and deck areas and possible passenger quarters he cannot oversee from the wheelhouse. As a final safety precaution the Deck ramp camera will show the operator if the ramp has been properly opened or closed.
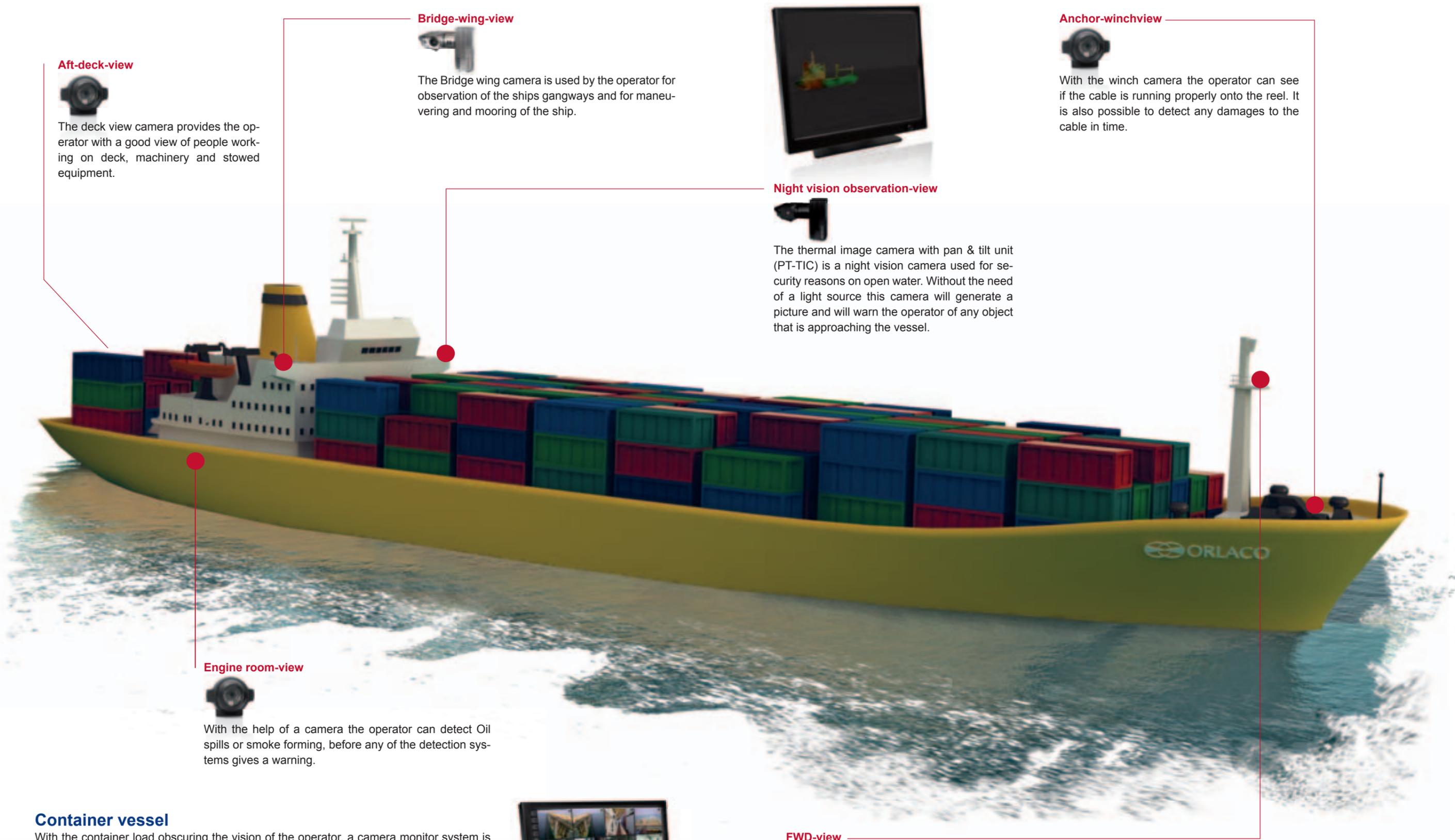
Observation-view

By placing a PTZ Dome camera under an overhead the operator has a good view of the passenger area and any other area that needs observation

Engine room-view

With the help of a camera the operator can detect oil spills or smoke forming, before any of the detection systems gives a warning.

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Aft-deck-view

The deck view camera provides the operator with a good view of people working on deck, machinery and stowed equipment.

Bridge-wing-view

The Bridge wing camera is used by the operator for observation of the ships gangways and for maneuvering and mooring of the ship.

Anchor-winchview

With the winch camera the operator can see if the cable is running properly onto the reel. It is also possible to detect any damages to the cable in time.

Night vision observation-view

The thermal image camera with pan & tilt unit (PT-TIC) is a night vision camera used for security reasons on open water. Without the need of a light source this camera will generate a picture and will warn the operator of any object that is approaching the vessel.

Engine room-view

With the help of a camera the operator can detect Oil spills or smoke forming, before any of the detection systems gives a warning.

Container vessel

With the container load obscuring the vision of the operator, a camera monitor system is the right solution for this problem. Positioning deck view cameras at strategic positions will give the operator a good view of the container load and deck areas he cannot oversee from the wheelhouse. As an added value a camera monitor system can also be used for detecting possible Piracy attacks. With a day time camera and a night time thermal camera, approaching vessels can be detected in time by the crew and the necessary precautions can be taken.

FWD-view

With his sight obscured by the containers on deck, the operator has no visual of the front of the ship. With a pan & tilt zoom camera the operator can have a view of the front part of the ship and is also able to look out over the waterway.

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Aft deck-view

The deck view camera provides the operator with a good view of people working on deck, machinery and stowed materials.

Draghead / Bridge wing-view

A PTZ camera is used for a view of the Draghead position either on SB or PS of the vessel. With the possibility to maneuver the camera in a left/right and up/down position the whole area can be scanned. With the integrated zoom camera the operation can be viewed in full detail.

Hopper overflow-view

This camera is used to see the water draining through the overflow. With a vision on the overflow the operator can take immediate action if anything goes wrong during the operation.

Pump room-view

Most of the time the pump room is unmanned and there is no visual of this area. With the help of a camera the operator has a good view of the dredging pump.

Engine room-view

Most of the time the engine room is unmanned and there is no visual of this area. With the help of a camera the operator can detect Oil spills or smoke forming, before any of the detection systems gives a warning.

Dredging vessel

For any operation onboard a Dredging vessel an Orlaco camera monitor system is an added value. Either being used for a view of the draghead, pump room, engine room or the overflow, a camera system will give the operator an overview of all operations in one view. With the possibility of choosing between a fixed, zoom or pan & tilt zoom camera observation, the right type of camera can be selected for any of the processes.

Deck-view

The deck view camera provides the operator with a good view of people working on deck, machinery and stowed equipment.

Loadview

A Boom tip camera reduces the risk during crane operations. Installed in combination with the Orlaco Oil damped bracket, the crane operator is provided with the best possible view of the load and the area under the load.

Deck-view

The deck view camera provides the operator with a good view of people working on deck, machinery and stowed equipment.

Bridge-wing-view

The Bridge wing camera is used by the operator for observation of the ships gangways, maneuvering and mooring of the ship.

Engine room-view

Most of the time the engine room is unmanned and there is no visual of this area. With the help of a camera the operator can detect Oil spills or smoke forming, before any of the detection systems gives a warning.

Anchor-winchview

With the winch camera the operator can see if the cable is running properly onto the reel. It is also possible to detect any damages to the cable in time.

Reel-view

From his position the operator has no view of the cable running from the reel. With the reel camera he is able to observe the reel operation and can take immediate action if necessary.

Cable Laying vessel

For any operation onboard a cable laying vessel an Orlaco camera monitor system is an added value. Whether being used for a view of the turntable, anchor winches, engine room or deck areas where the crew is working, a camera system will give the operator an overview of all operations in one view. With the possibility of choosing between a fixed, zoom or pan & tilt zoom camera observation; the right type of camera can be selected for any of the processes. Using an Orlaco camera monitor system will not only improve your operation but will also add to a safer working environment.

Loadview

A Boom tip camera reduces the risk during crane operations. Installed in combination with the Orlaco Oil damped bracket, the crane operator is provided with the best possible view of the load and the area under the load.

Night vision observation-view

The thermal image camera with pan &tilt unit (PTTIC) is a night vision camera used for security reasons on open water. Without the need of a light source this camera will generate a picture and will warn the operator of any object that is approaching the vessel.

Engine room-view

Most of the time the engine room is unmanned and there is no visual of this area. With the help of a camera the operator can detect Oil spills or smoke forming, before any of the detection systems gives a warning.

Winchview

With the winch camera the operator can see if the cable is running properly on to the reel. It is also possible to detect any damages to the cable in time.

Heavy lifting and Special Transport vessel

With the load obscuring the vision of the operator, a camera monitor system is the right solution to this problem. Positioning deck view cameras at strategic positions will give the operator a good view of the container load and deck areas he cannot oversee from the wheelhouse. As an added value a camera monitor system can also be used for detecting possible Piracy attacks. With a day time camera and a night time thermal camera, approaching vessels can be detected in time by the crew and the necessary precautions can be taken.

Aft-deck-view

The deck view camera provides the operator with a good view of people working on deck, machinery and stowed equipment.

Deck-view

The deck view camera will give the operator a good view of people working on deck, machinery and stowed materials.

Anchor-winchview

With the winch camera the operator can see if the cable is running properly on to the reel. It is also possible to detect any damages to the cable in time.

Heli deck-view

Helicopter departures and arrivals are one of the most riskfull activities on board a ship. With the installation of a Heli deck camera, these operations can be monitored day and night.

Aft-deck-view

The deck view camera will give the operator a good view of people working on deck, machinery and stowed materials.

Platform Supply Vessel

For any operation onboard a Supply vessel an Orlaco camera monitor system is an added value. Whether being used for a view of the engine, deck areas or Heli deck, a camera system will give the operator an overview of all operations in one view. With the possibility of choosing between a fixed, zoom or pan & tilt zoom camera observation; the right type of camera can be selected for any of the processes.

Engine room-view

Most of the time the engine room is unmanned and there is no visual of this area. With the help of a camera the operator can detect Oil spills or smoke forming, before any of the detection systems gives a warning.

set **UNI System**

With the installation of the plug & play Orlaco Uni system the operator will get a good overview of the area that need to be observed. In combination with the Orlaco 7 or 10 inch monitor this system is the solution to many vision problems.
With the possibility to expand the system up to 3 cameras, a simple but efficient solution is created. Cameras are selected by means of a push button on the monitor front.
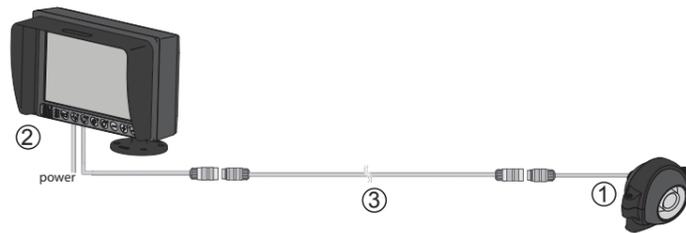
application **possibilities**

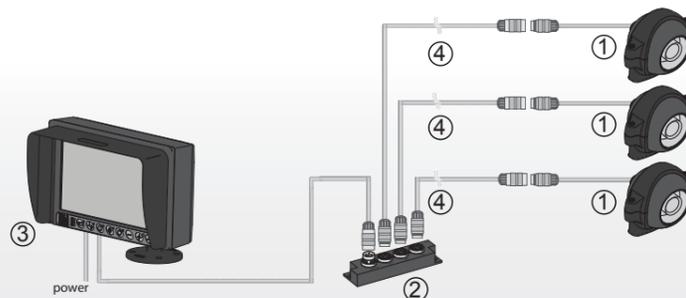This set can be used on every type of vessel.

application **possibilities**

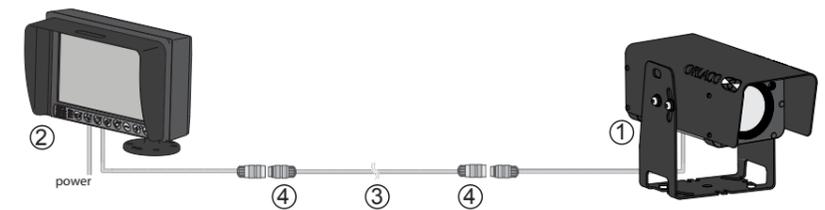This set can be used on every type of vessel.

set **UNI zoom System:**

With the installation of the plug & play Orlaco Uni system the operator will get a good overview of the area that needs to be observed. The zoom camera functions are controlled by means of push buttons on the front of the monitor display. In combination with the Orlaco 7 or 10 inch monitor this system is the solution to many vision problems. With the possibility to expand the system with 2 Compact cameras to a total of 3 cameras, a simple but efficient solution is created. Cameras are selected by means of a push button on the monitor front.

set **OS1100**
① **AF-Zoom Camera**
 0103530 - page 38
② **Display RLED 7" serial**
 0208631 - page 42
③ **Multicable**
 1220150 - page 40
④ **Connectors 7 pins**
 1322401 & 1311201 - page 41

set **OS1000**
① **Compact Color Camera CCC**
 0120000 - 0120060 - page 37
② **Display RLED 7"**
 0208671 - page 42
③ **Cable 4 pins**
 0301870 to 0301940 - page 40

set **OS1030**
① **Compact Color Camera CCC**
 0120000 - 0120060 - page 37
② **Switcher**
 0404040 - page 44
③ **Display RLED 7"**
 0208671 - page 42
④ **Cable 4 pins**
 0301870 to 0301940 - page 40

set **OS1130**
① **AF-Zoom Camera**
 0103530 page 38
② **Compact Color Camera CCC**
 0120000 to 0120060 - page 37
③ **Switcher serial**
 0404060 - page 44
④ **Display RLED 7" serial**
 0208631 - page 42
⑤ **Multicable**
 1220150 - page 40
⑥ **Connectors 7 pins**
 1322401 & 1311201 - page 41
⑦ **Cable 4 pins**
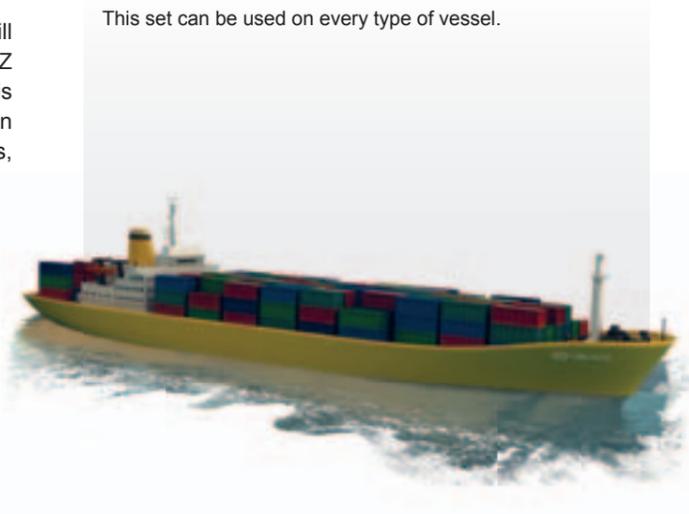 0301870 to 0301940 - page 40
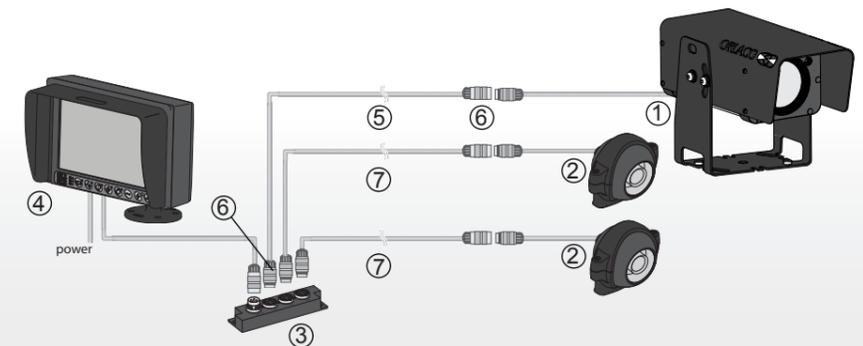
set **UNI PTZ system**

With the installation of the Orlaco PTZ camera the operator will be able to scan the area that needs to be observed. The PTZ camera functions are controlled by means of a keyboard. This keyboard is available in a handheld and panel mount version. In combination with an Orlaco monitor ranging from 7 to 21 inches, this system is the solution to many vision problems.

application **possibilities**

This set can be used on every type of vessel.

application **possibilities**

This set can be used on every type of vessel.

set **Multiview system**

With the installation of the plug & play Orlaco Uni MultiView system the operator will get a good overview of the areas that need to be observed. In combination with the Orlaco 7 or 10 inch monitor (serial) this system is the solution to many vision problems. The possibility to display the 4 Compact cameras in a single (1), split (2), Quad (4) or customize view provides the operator full flexibility in the screen settings.

Options for channel 1-4:

NOR ALL DUA

TRI REA D+B

Default channel 5:

QUAD

set **OS1200**
① **PTZ Camera**
0506950 - page 39
② **Control Interface**
0502920 - page 44
③ **Display RLED 7"**
0208671 - page 42
④ **Handheld Control serial**
0502610 - page 45
⑤ **Multicable**
1220150 - page 40
⑥ **Connectors 7 pins**
1322401 & 1311201 - page 41

power

set **MV1300**
① **Compact Color Camera CCC**
0120000 to 0120060 - page 37
② **MultiView Box**
0404110 - page 44
③ **Display RLED 7" serial**
0208631 - page 42
④ **Cable 4 pins**
0301870 to 0301940 - page 40

power

set **MultiView system**

With the installation of the Orlaco MultiView system the operator will get good overview of the areas that need to be observed. In combination a monitor ranging from 10 to 21 inches, this system is the solution to many vision problems. The cameras can be displayed in a single (1) or Quad (4) view. The cameras are selected by means of a selection keyboard / control panel.
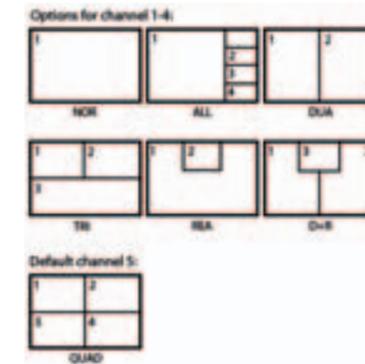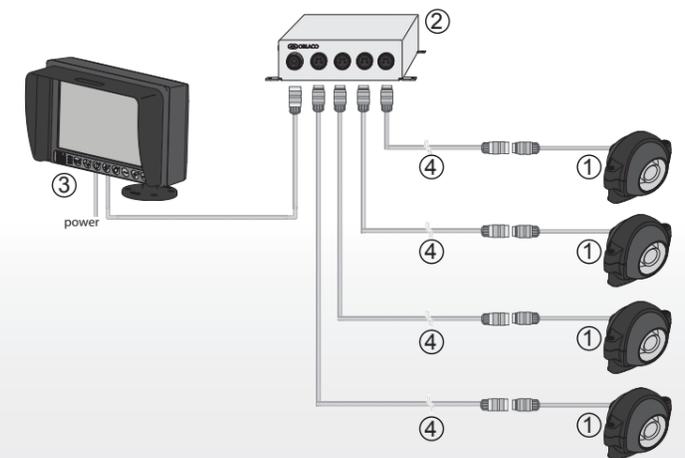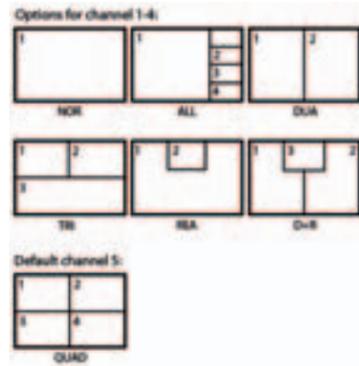

application **possibilities**

This set can be used on every type of vessel.

set **MV1400**

set **MV1440**

set **MV1400**
① **Compact Color Camera CCC**
   0120000 to 0120060 - page 37
② **MultiView Box**
   0404110 - page 44
③ **Display Marine Line ORM 10,4"**
   page 43
④ **Cable 4 pins**
   0301870 to 0301940 - page 40
⑤ **Selector keyboard**
   please contact your dealer
⑥ **Selector Interface**
   please contact your dealer

set **MV1440**
① **Compact Color Camera CCC**
   0120000 to 0120060 - page 37
② **PTZ Camera**
   0506950 - page 39
③ **MultiView Box**
   0404120 - page 44
④ **Display Marine Line ORM 10,4"**
   page 43
⑤ **Cable 4 pins**
   0301870 to 0301940 - page 40
⑥ **Control Panel mount**
   0502620 - page 45
⑦ **Multicable**
   1220150 - page 40
⑧ **Connectors 7 pins**
   1322401 & 1311201 - page 41
⑨ **Selector Interface**
   please contact your dealer
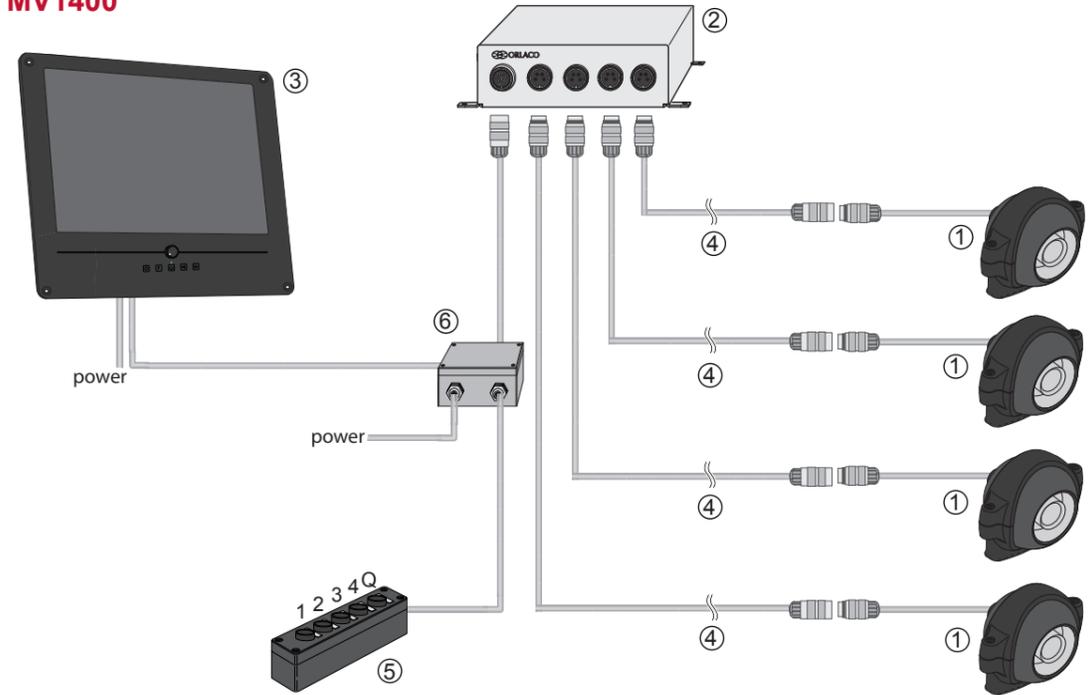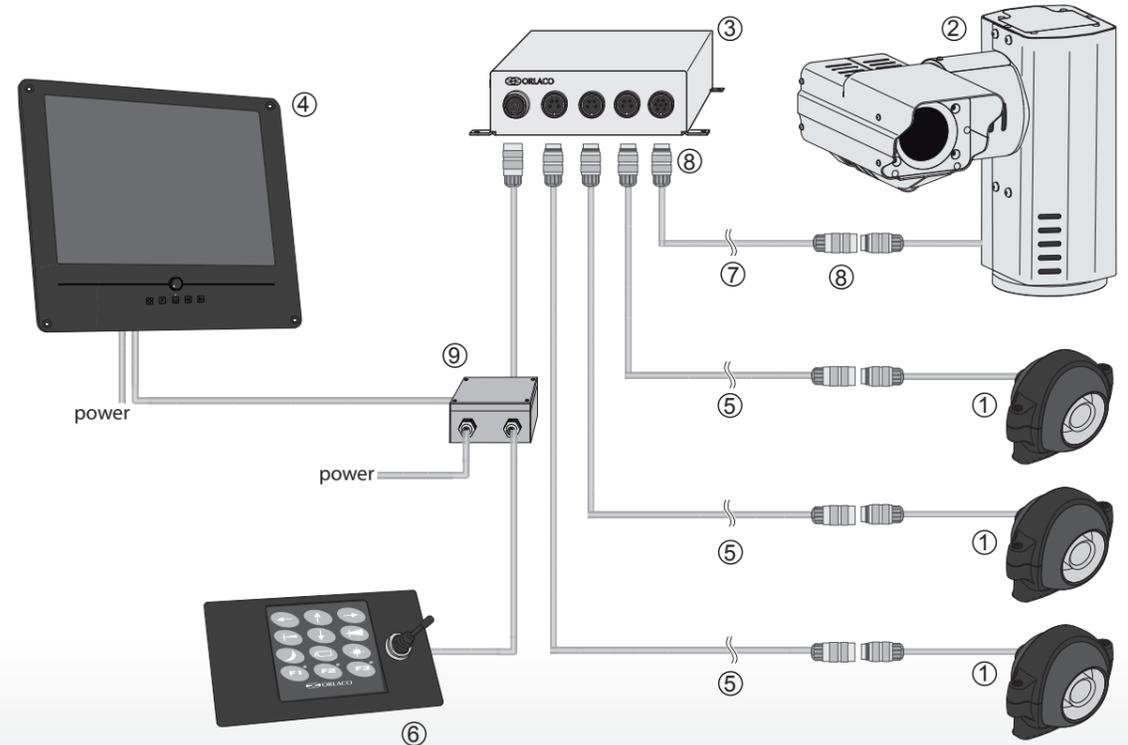
set **Switchbox 8/16 Compact Camera**

With the switchbox solution each operator has a good overview of all the camera locations.

The Orlaco Switchbox has been designed to accommodate an easy installation of the system. The Switchbox is completely prepared for connection of all compact cameras, keyboards and displays. Cameras and keyboards are powered by the Switchbox.

application **possibilities**

This set can be used on every type of vessel.

set **SB1808** (8 cams) / **SB1816** (16 cams)
① **Compact Color Camera CCC**
0120000 to 0120060 - page 37
② **Switchbox**
page 44
③ **Switchbox Keyboard**
page 45
④ **Display Marine Line 10,4" - 21,3"**
page 43
⑤ **Multicable**
1220150 - page 40
⑥ **Connectors 4 pins**
1310841 & 1312001 - page 41

power 230V/DC

Cam 1 - 4
Cam 5 - 8
Cam 9 - 12
Cam 13 - 16
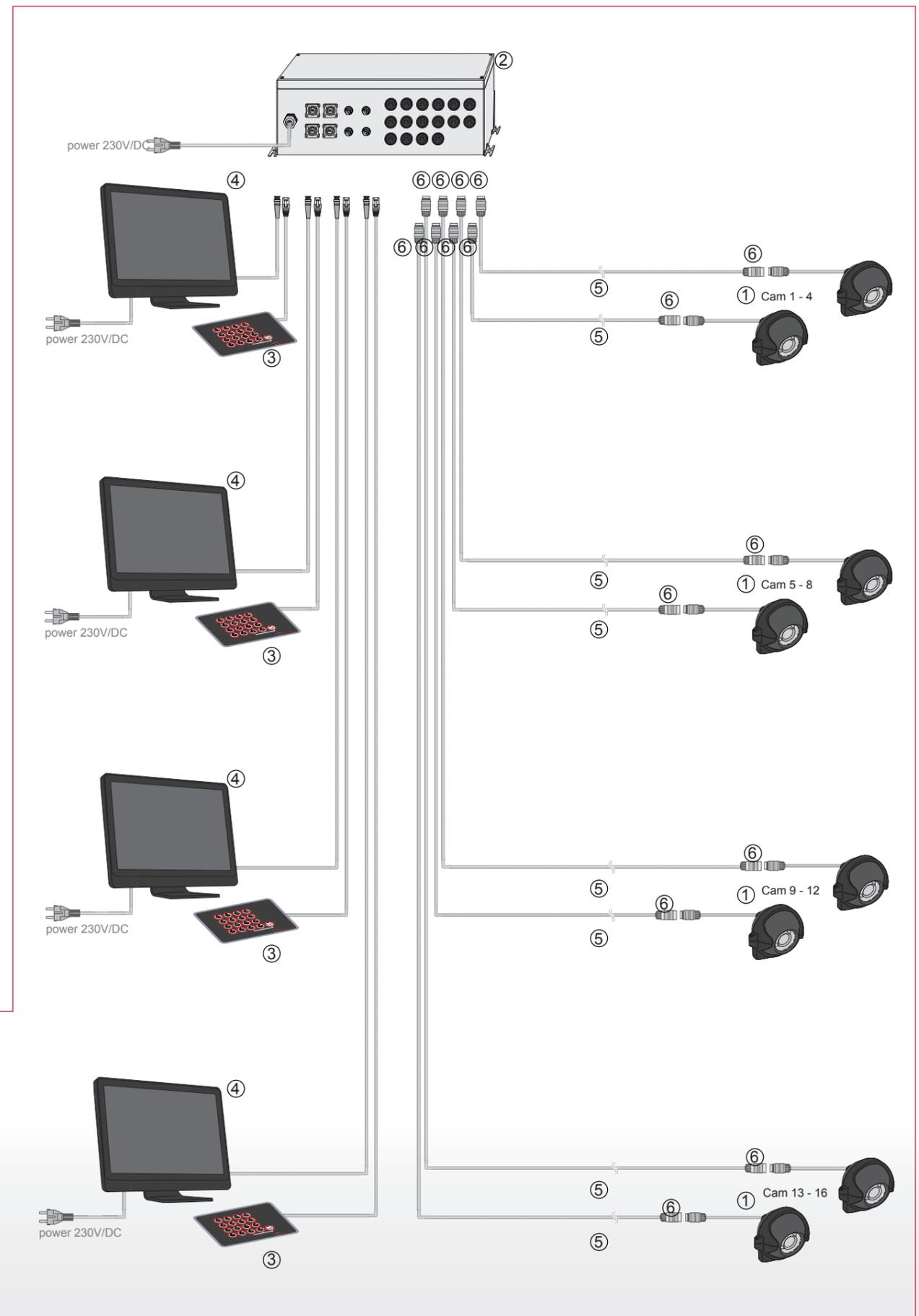
set **Video Control unit 8/16 camera***

The VCU solution makes it possible to select and control a mix of fixed, zoom and PTZ cameras at 4 individually controlled display stations. The Orlaco VCU has been designed to accommodate an easy installation of the system. The VCU is completely prepared for connection of all cameras, keyboards and displays. Cameras and keyboards are powered by the VCU box. Optionally it is possible to integrate recording with the VCU system.

The Orlaco Video Control Unit is available in an 8 and 16 camera version. The Camera images can be monitored at 1 to 4 individually controlled control stations. Optionally it is possible to display 4 cameras on one screen with the integration of 1 tot 4 Quad units.

***Note: Selection of cameras can vary between Compact, Zoom and PTZ cameras.**

application **possibilities**

This set can be used on every type of vessel.

set **VC1908** (8 cams***)   /   **VC1916** (16 cams***)
① **Compact Color Camera CCC**
  0120000 to 0120060 - page 37
② **PTZ Camera**
  0506950 - page 39
③ **AF-Zoom Camera**
  0103530 - page 38
④ **VCU 1808**
  page 45
⑤ **VCU Keyboard 8 cams / 16 cams**
  page 45
⑥ **Display Marine Line 10,4" - 21,3"**
  page 43
⑦ **Multicable**
  1220150 - page 40
⑧ **Connectors 4 pins**
  1310841 & 1312001 - page 41
⑨ **Connectors 7 pins**
  1322401 - 1311201 - page 41

110/230V

power 230V/DC

power 230V/DC

power 230V/DC

power 230V/DC
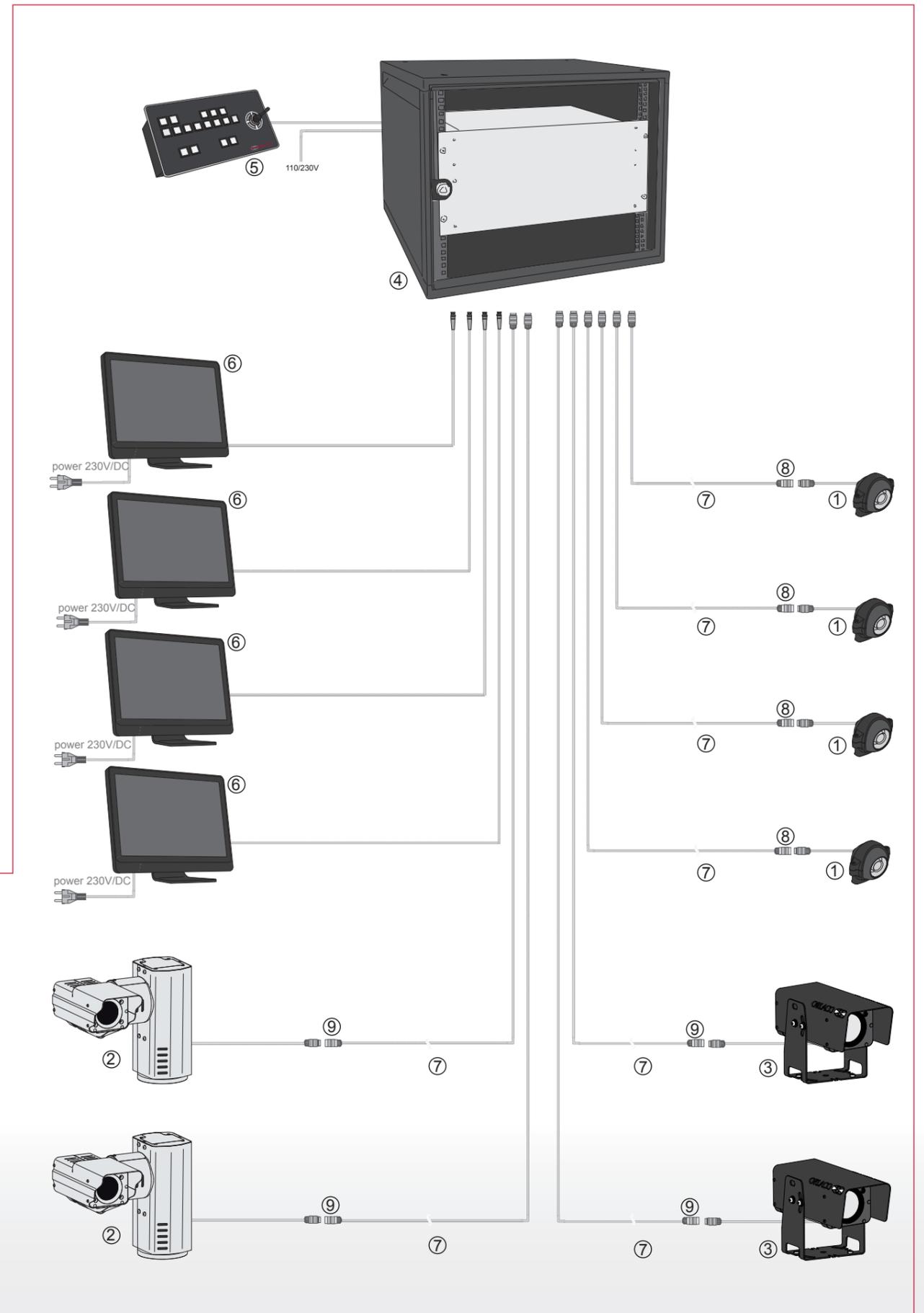
set SmartView

With the Orlaco SmartView H.264 TCP/IP based video solution, it is possible to select and control a mix of fixed, zoom and PTZ cameras at multiple PC control stations. The selection and control of the camera stations is done by means of a graphic interface. Either controlled by mouse, track ball, keyboard or touch-screen, the operator has full control over the situation. Camera images can be displayed in full, split, triple, quad or multi screen. Preset, Master preset and lock function, among other functions are standard features. The Smartview system can be completed with an optional Network Video Recorder.

With the installation of the Smartview Connection Boxes installation of the camera stations is made easy and time saving. Each box holds all the equipment needed to make a quick connection to the Ships network. By strategically allocating the boxes over the vessel, the amount of cable needed can be reduced.

Note: Selection of cameras can vary between Compact, Zoom and PTZ cameras.

application possibilities

This set can be used on every type of vessel.

TCP/IP

set **SV2104** (4 cams*) / **SV2108** (8 cams*) / **SV2112** (12 cams*) / **SV2116** (16 cams*)
① **Compact Color Camera CCC**
 0120000 to 0120060 - page 37
② **PTZ Camera**
 0506950 - page 39
③ **AF-Zoom Camera**
 0103530 - page 38
④ **SmartView software**
 page 46
⑤ **SmartView interface box**
 page 45
⑥ **Multicable**
 1220150 - page 40

⑦ **Connectors 4 pins**
 1310841 & 1312001 - page 41
⑧ **Connectors 7 pins**
 1322401 - 1311201 - page 41

Or design your system yourself

The following pages give a clear overview of all of the Or-laco products. If none of the sets that we have put together offer a seamless solution to your wishes, you can design a system yourself.
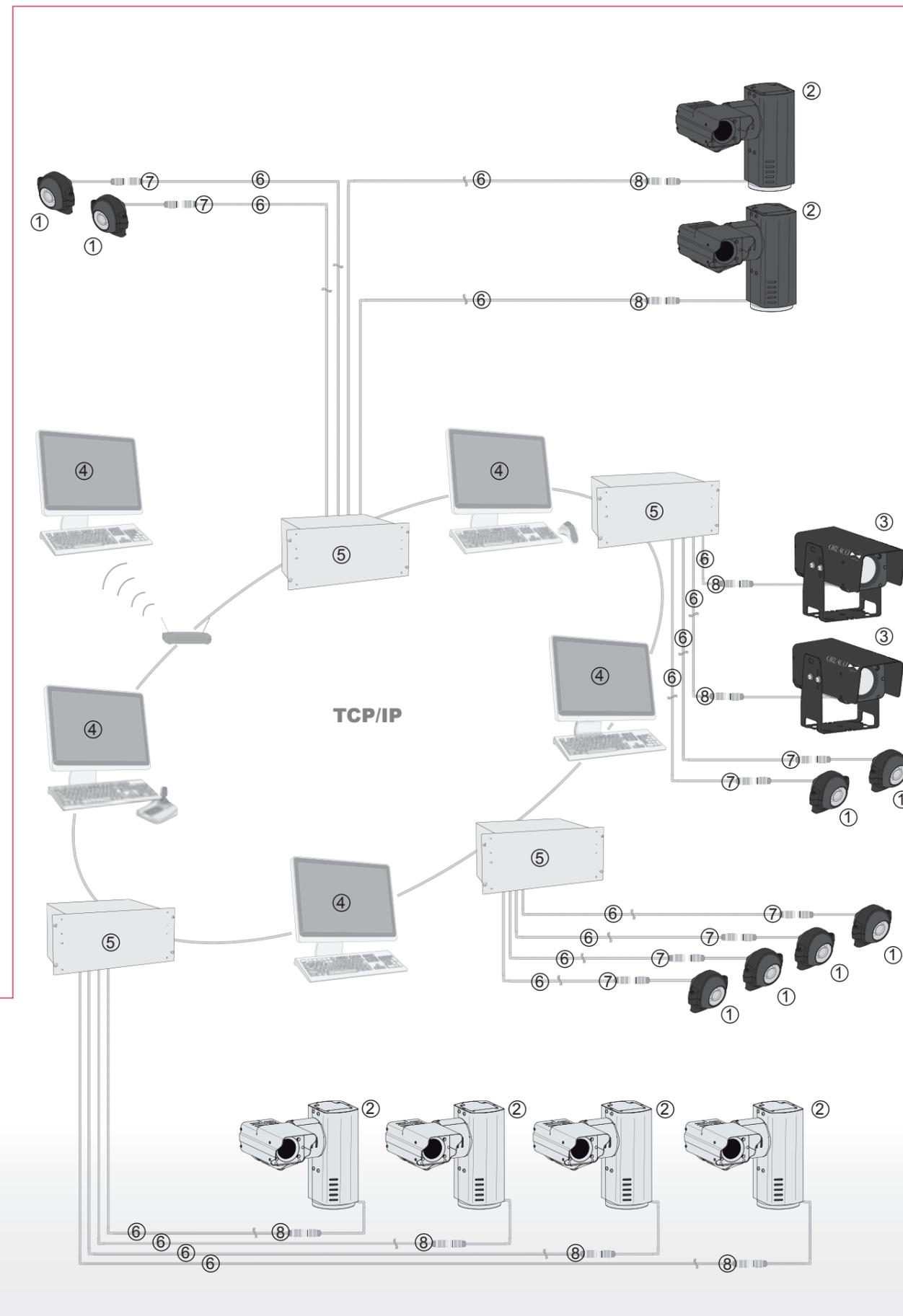
You can select additional products from the list of accessories, such as switchers, connectors or splitters, Whatever you select, the system can always be easily installed and are plug- andplay. Our salessupport will offcourse gladly help you to find the solution you need.

The qualifications of our Compact Color Cameras

- operating temperature between -40°C to +85°C
- SLR (SunLight Resistant) glass. Bright image whether the sun is blazing or low to the ground
- chemically hardened glass
- light sensitivity 0.5 lux
- nitrogen-filled housing, watertight (IP 69K)
- heated lens glass,

therefore no problems with condensation or frost
- high resolution
- impact and vibration proof
- the camera has a 0,5m cable including a

waterproof 4 pins connector
- there is an aperture angle for every vision solution
- fixed lens

CCC 131° — 4m, 3m, 1m
CCC 115° / CMOS 115° — 3m, 2,2m, 1m
CCC 102° — 2m, 1,5m, 1m
CCC 78° / CMOS 78° — 1,5m, 1,1m, 1m
CCC 54° — 1m, 0,8m, 1m
CCC 32° — 0,5m, 0,4m, 1m
CCC 17° — 0,3m, 0,2m, 1m

The measurements given above are theoretical. Practical situations may deviate.

Compact Color Cameras (CCC) - 12...30V/DC
- CMOS sensor

| 0146000 | CCC 78° | PAL |
| 0146060 | CCC 115° | PAL |

Compact Color Cameras (CCC) - 12V/DC
- CCD sensor

0120060	CCC 131° SLR	PAL
0120050	CCC 115° SLR	PAL
0120000	CCC 102° SLR	PAL
0120010	CCC 78° SLR	PAL
0120020	CCC 54° SLR	PAL
0120030	CCC 32° SLR	PAL
0120040	CCC 17° SLR	PAL
0140800	CCC 78° High Bright LEDs	PAL

• with additional lighting

0123000	CCC 78° Stainless steel 316	PAL
0123010	CCC 102° Stainless steel 316	PAL
0123050	CCC 115° Stainless steel 316	PAL

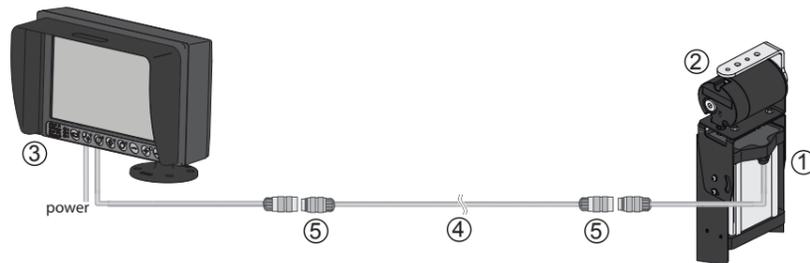• with stainless steel housing

set UNI Loadview system

The zoom camera fitted on the boom together with an Oil damped bracket is positioned in such a way that it looks vertically downwards on to the top of the hook providing the crane operator with a clear view of the working area and load he is maneuvering. The zoom camera functions are controlled by means of push buttons on the front of the monitor display. In combination with the Orlaco 7 or 10 inch monitor this system is the solution vision problems of the crane operator.

application possibilities

set LV1500
① AF-Zoom Camera
0103530 - page 38
② Oil Damped Bracket
0701200 - page 47
③ Display RLED 7" serial
0208631 - page 42
④ Multicable
1220150 - page 40
⑤ Connectors 7 pins
1322401 & 1311201 - page 41

set LV1530
① AF-Zoom Camera
0103530 - page 38
② Oil Damped Bracket
0701200 - page 47
③ Compact Color Camera CCC
0120000 - 0120060 - page 37
④ Display RLED 7" serial
0208631 - page 42
⑤ Switcher serial
0404060 - page 44
⑥ Multicable
1220150 - page 40
⑦ Connectors 7 pins
1322401 & 1311201 - page 41
⑧ Cable 4 pins
0301870 to 0301940 - page 40

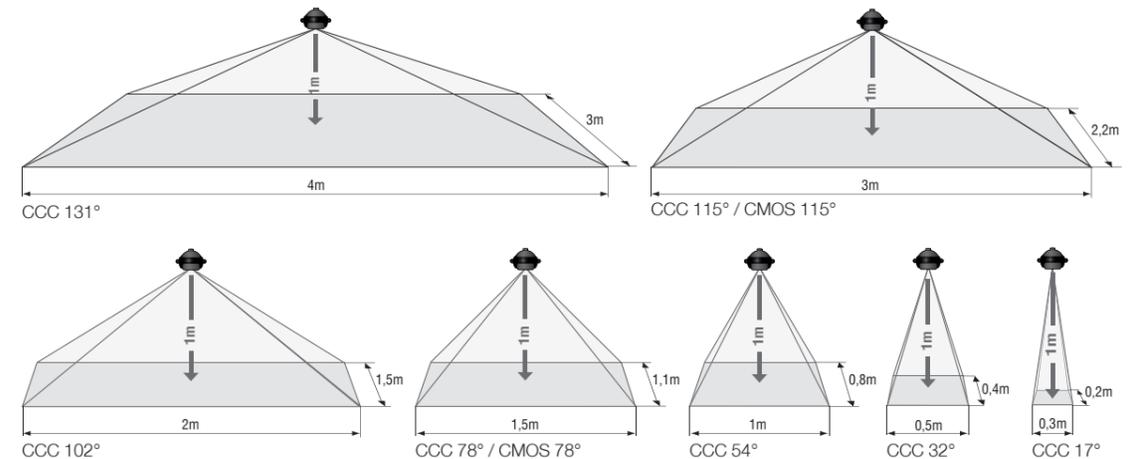## The qualifications of our Zoom Cameras

- operating temperature between -40°C to +85°C
- built-in brightness function to ensure better visibility on dark areas
- 216x zoom, 2,8° to 48° horizontal opening angle
- built-in night vision

function (0 lux mode)
- nitrogen-filled housing, 100% watertight (IP 69K)
- heated lens glass, therefore no problems with condensation or frost
- shock and vibration resistant

Zoom wide
Zoom tele
1m
5cm   4cm
0,I
1m
AF Zoom 2,8° - 48°

AF-Zoom Cameras
- including 6m multicable fitted with 7 pins connector (female)
- power supply 12V - 24V/DC when cable is <50m
  power supply 18V - 24V/DC when cable is >50m
- dimensions: 260x140x122mm (without bracket)

0103530   AF-Zoom Camera Aluminium

0103480   AF-Zoom Camera Stainless steel 316

Thermal Image Camera (TIC)
- including 6m multicable fitted with 7 pins connector (female)
- power supply 12V to 30V/DC (24V/DC preferred voltage)
- dimensions: 260x140x122mm (without bracket)

0103730   TIC Aluminium

01037   TIC Stainless steel 316**

PTZ Dome Camera
0506920
- 2600g
- dimensions: 150x250mm
- operating temperature between -20°C to +55°C
- waterproof IP69K (high pressure wash resistant)

Washer Wiper
- reservoir 8L with 6m rubber hose
- wall mount reservoir housing h647 x w436 x d250mm
- electrical pump activated
- controlled by Orlaco SmartView or VCU System (not included)

04058 Washer Wiper Installation PTZ Camera**
- including mounting plate, nozzle and wiper stainless steel 316
- only in combination with the stainless steel PTZ (0506910)

04058 Washer Installation AF-Zoom Camera**
- including nozzle holder stainless steel 316
- only in combination with AF-Zoom Cameras

The qualifications of our Pan & Tilt Zoom Cameras (PTZ)

- operating temperature between -40°C to +85°C
- built-in brightness function to ensure better visibility on dark areas
- 216x zoom, 2,8° to 48° horizontal opening angle
- built-in night vision function (0 lux mode)

- nitrogen-filled camera housing, 100% watertight (IP 69K)
- heated lens glass, therefore no problems with condensation or frost
- shock and vibration resistant
- dimensions: HxWxD 284x307x141mm

- including 5m cable with 7 pins connector
- 6 presets for camera positions
- pan angle 340° (170° to left, 170° to the right)
  tilt angle 180° (90° up, 90° down)
- pan & tilt speed 12,5°/sec

Pan & Tilt Zoom Cameras (PTZ)

0506950   PTZ Camera Aluminium
- power supply 18V to 30V/DC
- aluminium housing

0506910   PTZ Camera Stainless steel 316
- power supply 18V to 30V/DC
- stainless steel housing

Pan & Tilt Thermal Image Camera (PTTIC)

0506970   PTTIC Aluminium
- power supply 18V to 30V/DC
- aluminium housing

0506980   PTTIC Stainless steel 316
- power supply 18V to 30V/DC
- stainless steel housing

The advantages of Orlaco cables

• all cables are specially developed by Orlaco engineering for the applications mentioned in this catalogue
• special lengths or versions are available upon request

• all cables have EMC screening for optimum performance of the equipment in crowded areas with electromagnetic noise
• resistant to oil and petrol

• watertight cable connectors

Armored cable (type 1220280)
• operating temperature -40°C to +85°C
• This cable offers good protection against severe conditions. This is due to the additional internal galvanised braided steel wire armor.

with 4 pins connectors (1312050 & 1310850):

0303341	1,5m
0303351	3m
0303471	5m
0303361	7,5m
0303371	9m
0303481	11m
0303491	16m
0305020	20m
0305010	28m

Multicable standard (type 1220150)
• operating temperature -30°C to +80°C
• This standard cable can be used if no special requirements like mechanical protection of the cable is needed.

with 4 pins connectors (1310841 & 1312001):

0301960	1m
0301870	2m
0301890	3m
0301880	5m
0301930	8m
0301900	11m
0301920	16m
0301940	21m

with 4 pins female connector (1310841) & open wired:

0302150	20m

with 7 pins female connector (1311201) & open wired:

0302160	20m

Cable per metre (without connectors)
Any required connectors can be ordered separately. (page 41)

1220150   Multicable
• 1 x video coax + 5 x wires

1220110   Multicable
• 1 x video coax + 2 x power + 1 x data PUR

1220280   Multicable armored
• 1 x video coax + 5 x wires armoured

1220250   Multicable
• 1 x video coax + 12 x wires PUR

1220260   Multicable armored
• 1 x video coax + 12 x wires armoured

Connectors

1310841   Connector 4 pins female Gold
recommended for cable (1220150 & 1220110)

1312001   Connector 4 pins male Gold
recommended for cable (1220150 & 1220110)

1310850   Connector 4 pins female PG9 Gold
recommended for cable (1220280)

1312050   Connector 4 pins male PG9 Gold
recommended for cable (1220280)

1311201   Connector 7 pins female Gold
recommended for cable (1220100 & 1220150)

1322401   Connector 7 pins male Gold
recommended for cable (1220100 & 1220150)

1311250   Connector 7 pins female PG9 Gold
recommended for cable (1220280)

1322450   Connector 7 pins male PG9 Gold
recommended for cable (1220280)

0357010   Bulkhead connector
• 4 pins
• suitable for lead-through on bodywork

0357050   Bulkhead connector
• 7 pins
• suitable for through the wall applications

The possibilities offered by Orlaco monitors

- operating temperature between -40°C to +85°C
- impact and vibration resistance that meets the stringent requirements
- power protected against:
  - -induction voltages
  - -load dumps
  - -over- and undervoltage

- mirror image setting
- bright image. High resolution of 430.000 pixels
- high resolution pixel WVGA 800xRGBx480
- brightness automatically adjusts to the ambient light
- option of a marker line per camera on

the screen for the optimum determination of distance
- integrated sun visor
- IP67 according to IEC 60529
- full On-Screen-Display (OSD) in 13 languages
- input Voltage 12...60V/DC +/-10%

Monitors

0208671 Display 7" RLED R 4

- 4m multicable (power) open wired, 4m multicable (video) with 4 pins female connector
- user-adjustable 144mm mounting bracket

0208631 Display 7" RLED Serial R 6

- 6m multicable (power) open wired, 6m multicable (video) with 7 pins female connector
- user-adjustable 144mm mounting bracket

0208202 Display 7" LEDD 2

- for double DIN slide opening
- 2m multicable (power) open wired, 2m multicable (video) with 4 pins female connector
- input Voltage 12...60V/DC +/-10%
- operating temperature between -40°C to +85°C

0208231 Display 7" LEDD Serial 6

- for double DIN slide opening
- 6m multicable (power) open wired, 6m multicable (video) with 7 pins female connector
- input Voltage 12...60V/DC +/-10%
- operating temperature between -40°C to +85°C

0206501 Display 10" Z 4

- 4m multicable (power) open wired, 4m multicable (video) with 4 pins female connector
- input Voltage 18...30V/DC +/-10%
- operating temperature between -35°C to +70°C
- standard bracket

0206530 Display 10" Serial Z 6B

- 6m multicable (power) with 8 pins male connector, 6m multi cable (video) with 7 pins female connector
- input Voltage 18...30V/DC +/-10%
- operating temperature between -35°C to +70°C
- standard bracket

Marine Line monitors

- anti-reflection protection glass plate
- IP65 sealing (front)
- input composite (BNC),VGA,DVI-D,S-video
- 0-100% dimming with IP67 twistknob
- 110 to 230V/AC

options:
- capacitive touchscreen (RS232 & USB)
- resistive touchscreen (RS232 & USB)
- optical bonding
- transflective
- 9-34V/DC

020ORM10.4" Panelmount TFT Monitor

- 10,4" picture diagonal
- 400 Candela/m2
- contrast 1200:1
- dimension WxHxD: 245 x 268 x 57,6mm

020IK10.4" Panelmount TFT Monitor

- 10,4" picture diagonal
- 400 Candela/m2
- contrast 500:1
- dimension WxHxD: 310 x 257 x 51mm

020IK17.0" Panelmount TFT Monitor
- 17" picture diagonal
- 280 Candela/m2
- contrast 1500:1
- dimension WxHxD: 468 x 386,2 x 61mm

020IK19.0" Panelmount TFT Monitor
- 19" picture diagonal
- 270 Candela/m2
- contrast 1000:1
- dimension WxHxD: 483 x 399 x 65mm

020IK21.3" Panelmount TFT Monitor
- 21,3" picture diagonal
- 300 Candela/m2
- contrast 1000:1
- dimension WxHxD: 556 x 448 x 69,7mm

020DT10.4" Desktop TFT Monitor
- 10,4" picture diagonal
- 400 Candela/m2
- contrast 500:1

020DT17.0" Desktop TFT Monitor
- 17" picture diagonal
- 280 Candela/m2
- contrast 1500:1

020DT19,0" Desktop TFT Monitor
- 19" picture diagonal
- 270 Candela/m2
- contrast 1000:1

020DT21,3" Desktop TFT Monitor
- 21,3" picture diagonal
- 300 Candela/m2
- contrast 1000:1

Switchers
• inputs and power supply for three cameras, and in combination with a Y-split cable 4 cameras
• cameras can be switched over automatically or manually

0404040 Switcher UNI
• waterproof IP54 according to IEC 60529
• 4 pins output for monitor

0404060 Switcher Serial
• waterproof IP54 according to IEC 60529
• only in combination with a Serial monitor
• possibility to connect 1 serial Orlaco camera (AF-Zoom/PTZ)
• 7 pins output for monitor

Interface Control panel (serial)
0502920
• for control serial zoom camera
• including 4m power supply cable
• can control each type of monitor

Multiview split
0404110   MultiView box
• 4 channels (4x Compact Camera)
• serial Orlaco Monitor needed

0404120   MultiView box
• 4 channels (3x Compact Camera 1x AF-Zoom Camera)
• serial Orlaco Monitor needed

Quadbox
• serial Orlaco Monitor needed
• control connection
• stainless Steel IP66
• central power supply 110-230 V/AC

QB16   Quadbox**
• 4 camera inputs

Switchbox
• 4 keyboard / video-display outputs (BNC)
• stainless Steel IP66
• central power supply 110-230 V/AC
• dimensions 300mm (d) x 400mm (w) x 160mm (h)

SB1808 Switchbox
• 8 compact camera inputs

SB1816 Switchbox
• 16 Compact camera inputs

Video Control Units (VCU)
• frame 19" 221,45 x 460mm (5U)
• power supply 110-230V/AC
• optional cabinet
• option to connect 4 VCU control keyboards
• option to connect 4 video-displays(BNC)

VC1908 VCU
• Interface for control of max 7 PTZ zoomcameras
• 8 video inputs

VC1916 VCU
• interface for control of max 14 PTZ zoomcameras
• 16 video inputs

SmartView Interface box
SV2104 SmartView Interface 4 cam
SV2108 SmartView Interface 8 cam
SV2112 SmartView Interface 12 cam
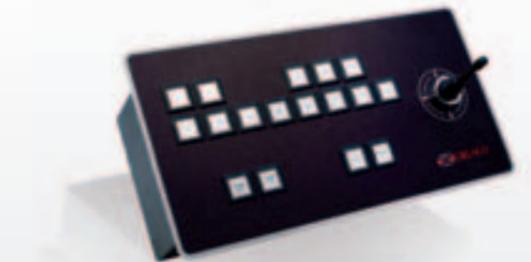SV2116 SmartView Interface 16 cam

Control Unit panels (for VCU)
• foil keyboard with push buttons with text inlay
• selection of camera images
• joystick pan & tilt control
• panel mount housing with snaps 320 x 160 x 90 mm

VC1908 Control panel
• control of max 8 camera

VC1916 Control panel
• control of max 16 camera

Control Unit panel mount (for Switchbox)
• CAT5 cable connection

SB1808 Control panel mount
• control of max 8 camera

SB1816 Control panel mount
• control of max 16 camera
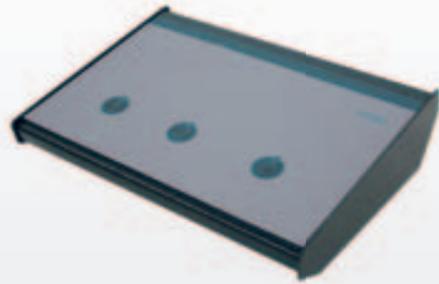
Control Serial (for AF-Zoom or PTZ cameras)
0502610 Handheld
• for activating camera functions
• zoom function
• including 5m power supply cable with 7 pin connector

0502620 Panel mount
• dimensions: 140x116x80mm
• joystick (0506500) not included

Switchers in – out
• composite BNC connection
• 230 volt/AC 50 Hz
• dimensions 110mm(d) x 160mm(w) x 40mm(h)

0404510 2 in - 1 out
• 2 camera inputs - 1 monitor output

0404100 4 in - 1 out
• 4 camera inputs - 1 monitor output

Orlaco SmartView

0060310 Licence Smartview software
• viewing of high quality video for multiple cameras in multiple configurations
• support H.264 digital video codec
• low latency and a high quality image
• multiple display settings (full, split, quadviews, 8 and 16 cams on 1 screen)
• individual camera presets and master presets for controlling multiple PTZ simultaneously
• sequential camera switcher
• video loss detection
• motion detection
• individual lock functions PTZ
• supplied on USB memory stick

Screen splitter / Quad box
• full screen video image
• sequence (adjustable time)
• quad image (4)
• 230V/AC 50Hz by means of enclosed adapter
• dimensions 235mm(d) x 285mm(w) x 44mm(h)

0002090
• 2 camera inputs - 1 monitor output

0002100
• 4 camera inputs - 1 monitor output

Joystick
0506500
• built-in
• operating temperature between -30°C and +75°C
• IP40
• telemanique

Pan & Tilt units
0507060
• IP 68 watertight
• maximum weight 6 Kg
• left/right reach 360° speed: 30° sec.
• reach up 30° down 90° speed: 10° sec.
• 24V/DC

0507050
• IP 68 watertight
• left/right reach 360° speed: 6° sec.
• reach up 60° down 90° speed: 3° sec.
• maximum weight 8 Kg
• 230V/AC 50Hz

Mounting parts

0507100 Fastening plate
• for quick mounting of camera on Pan & Tilt unit (only for 0507050)

0701200   Oil damped camera bracket
Designed for usage on cranes to have a camera permanently pointed verticaly downwards. The damper absorbs sudden movements and procure stability to all Orlaco cameras. Others have to be checked to determine the position of their centre of gravity.

• adjustable damping
• made entirely from Stainless Steel

If cranes have a tilting angle of >130° (e.g. Knuckle boom cranes) it is possible to connect 2 pieces 0701200 to achieve a tilting angle up to 260°.

0402450   Camera Housing Dome
• ceiling mount for Orlaco Compact Camera
• aluminium
• including mounting hardware
• camera not included

0402320   Protection cap

• for the Compact Camera (CCC) series

0402310   Aerodynamic cover plus pressure wash nozzle

• for the Compact Camera (CCC) series
• Thanks to this nozzle, the lens can be additionally cleaned using air or water. This is in particular necessary in extremely dirty circumstances.
• excluding accessories

Power supply

0004600   Power supply 9-36V

• maximum cable length 200m
• power input 9-36V/DC
• power output 12V/DC
• dimensions 100mm(d) x 100mm(w) x 27mm(h)

0504030   AC/DC unit

• power supply for the Compact Camera (CCC) series
• power input 110-230V/AC
• power output 12V/DC
• dimensions 100mm(d) x 100mm(w) x 27mm(h)

Video distribution amplifier

0406300

• 1 input - 4 outputs composite video (BNC)
• 110V-230V/AC, 50 Hz
• dimensions 216mm(d) x 240mm(w) x 44mm(h)

Spectrum Scanner wireless video transmitter & receiver

• including powercable and 2 adjustable brackets for transmitter and receiver
• 8 video channels
• full On Screen Display (OSD) functionality for system settings
• please contact your dealer for further advice

0004091   LineMax 400

• directional antenna with vertical orientation
• maximum range 400m (dependent on surroundings)

Counter display

0996091 model: Maritime

The camera system used for the `counter display` reflects directly an image which is taking place in front of the camera lens. The system, which takes up very little space due to its compact design, catches the eye of almost every visitor due to the moving images on the monitor. The system is easy and light to transport and can quite easily be taken to site for client presentations. A special holder for brochures is also included in the set.

• 7" LEDD serial Display
• AF-Zoom Camera
• Compact Camera Color
• power supply and power cable

Demonstration unit

model: Maritime

Orlaco offers a demonstration unit (in combination with a system) at a reduced rate. If you would like to receive more information regarding this unit, please inquire at our sales department.

• 7" LEDD serial display
• AF-Zoom Camera
• multi cable 5m
• power supply and power cable

Demonstration case

Orlaco offers a compact portable demonstration kit called the `demonstration case`. This case can be used to demonstrate on location the advantages of the Orlaco camera systems. The driver or operator sees immediately on hand the advantages of the system in his own crane.

• demonstration case
• 7" RLED Display
• Compact Camera Color
• multi cable 5m
• power supply, power cable and uni plug for cigarette lighter

We take away concerns, so you can stay **focused**

Vision

Orlaco`s vision is that every process, whether it is on-shore or offshore will be monitored with multiple cameras and displays. Not just because of Legal regulation but because it improves safety, security, ergonomics, comfort and efficiency. These are advantages that benefit everyone. Orlaco's activities are based on a well-founded strategy to help our customers achieve such complex installations and integrations. We supply a professional vision solution for every situation in a segment that is developing into one of the largest global accessory markets. And we do so using a method that provides the freedom to develop for the future.

Mission

Vision is our Mission. After all, we want to offer optimum vision. A ready-made and tailored solution that you can rely on. To realise this, we want to be the leading partner of professional companies. A reliable and innovative partner. Pro-active. We align our activities to the market demands to result in enthusiastic customers who strengthen our image in the market through word-of-mouth advertising.

Route

But how do we achieve this? How do we get there? Here, all of our activities are crucial. From development to delivery, with carefully employed resources and efficiently structured processes. Every day we work on certifications, testing our products and improving ease of use. All of this with the aim of delivering quality and tailor-made solutions. The guarantee must be solid and service goes without saying.
Moreover, we make as little impact on the environment as possible using our ISO14001 certification in action.
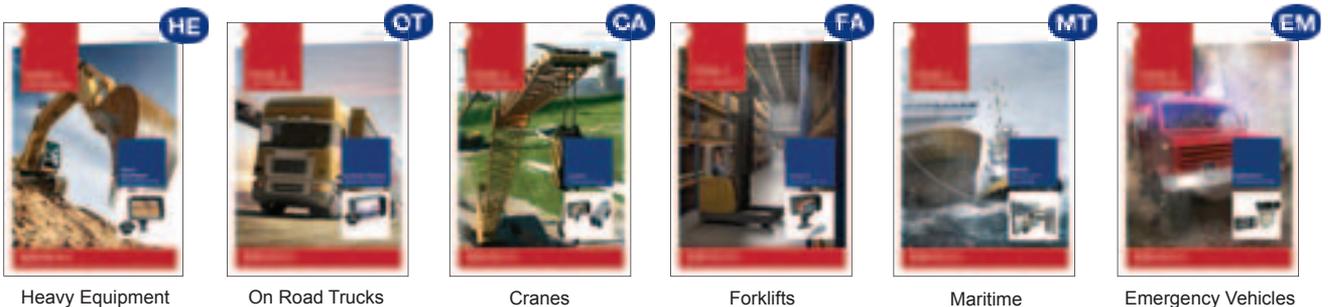
Result

Safety, security, improved ergonomics, comfort and efficiency are fantastic goals. But the best achievement would be an partnership with Orlaco so you no longer need to worry about CCTV. We want to be a reliable partner and supply products that are just as reliable. We will always be of service and will help you to find the right solution to your operational problems.
The result? You can focus your full attention on your core activities. We remove the concern, so that you can do the work you are best at!

Vision
is our
mission

ORLACO | WORLDWIDE VISION

Our vision solutions:

| HE | OT | CA | FA | MT | EM |

Heavy Equipment   On Road Trucks   Cranes   Forklifts   Maritime   Emergency Vehicles

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Specialised Camera Solutions

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