Vision is
our mission®

MARITIME
CCTV SOLUTIONS

Stoneridge | ORLACO

**See more
Work more**

3

Why Orlaco

6

Vision
solutions

24

Products

43

Certification

Select
your
vessel

Why Orlaco?

Welcome to the Orlaco product catalogue. We are personally committed to bringing you the best camera and monitor solutions possible. To help create safer and more secure workplaces around the world. Our professional team has spent over twenty-five years designing and manufacturing a variety of certified, reliable and complete camera display solutions that effectively eliminate the blind spots around vehicles, machinery and vessels. We are confident that the options offered in this catalogue will not only help you to improve the safety, security and efficiency of your fleet, but also to enhance the ergonomics and comfort for your operators. That is what Orlaco stands for. We invite you to share your ideas and experiences with us.

That's
why!

Let us **improve** your every day job
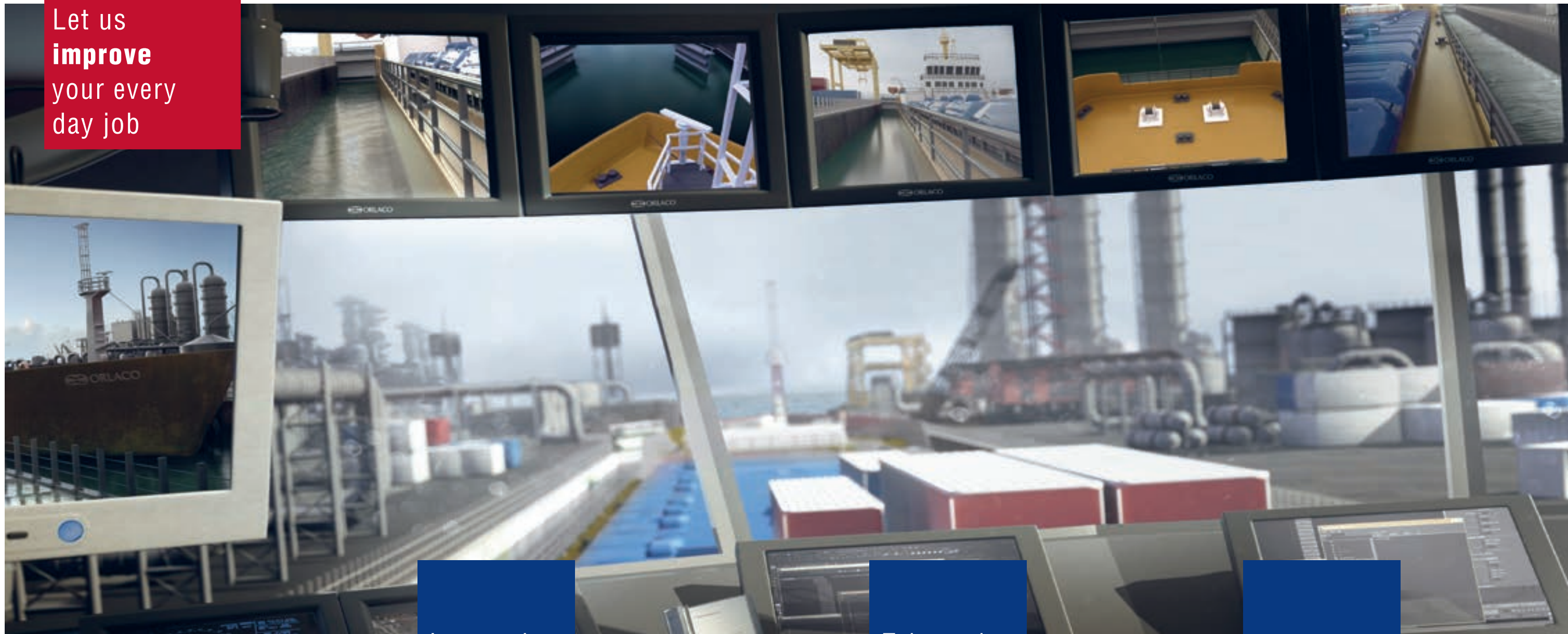
Improved Safety and Efficiency

Camera monitoring systems can play an important role in maintaining safety conditions and efficiency onboard ships. Next to that, ship operators might find that the extra visual coverage helps them keep a better eye on the ship, its crew and its surroundings. An Orlaco camera monitoring system could help the CCTV operator detect possible safety issues in time and prevent any incidents. An improved view of the on-board working areas and the ship's surroundings could help ship operators be more efficient in their work. Orlaco cameras can give a real-time overview of crew working areas, process monitoring and any other type of surveillance. On-board camera systems could add value to the security, safety and efficiency of ship personnel and the equipment they use.

Enhanced Ergonomics and Comfort

Efforts can be made to prevent accidents, but they still happen. Operating in confined areas with a lot of blind spots can cause damage to equipment and possible injuries to the crew. An Orlaco camera monitor system could provide the operator with an 'extra pair of eyes'. For instance, a good camera monitoring system is helpful when maneuvering, and during ship crane operations or dredging operations. This could help reduce unnecessary personal injuries and help to prevent Lost Time Incidents (LTI). Additionally, the use of cameras can contribute to the ergonomics and comfort of the operators. What's more, video images can be distributed over a network to aid multiple employees with real-time reviewing of any given situation. Effective decisions could be made based upon the visual live feedback from any remote location.

Certified Quality

At Orlaco, quality is never taken lightly. We keep a clear and persistent focus on customer satisfaction. A focus that is maintained throughout the manufacturing process of our quality products, which are custom designed in various formats. We are able to uphold our level of quality by providing detailed servicing. To top it all off, we have secured the highest achievable automotive certification: TS16949. At Orlaco, we invest in continuous improvement in order to secure a long term, satisfied customer base. We believe that compatibility in products, systems, and operations is the key element to creating reliable partnerships. All our products are controlled and clearly documented to give our customers a zero-defect product with operation that works right, every time.

Winch-view

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

Deck-view

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

Engine room-view

With a unmanned engine room the operator has no supervision of this area. By placing a camera in this room, optional with or without LED lights, the operator can easily detect oil spills or beginning of smoke development, before the detection system gives a warning.
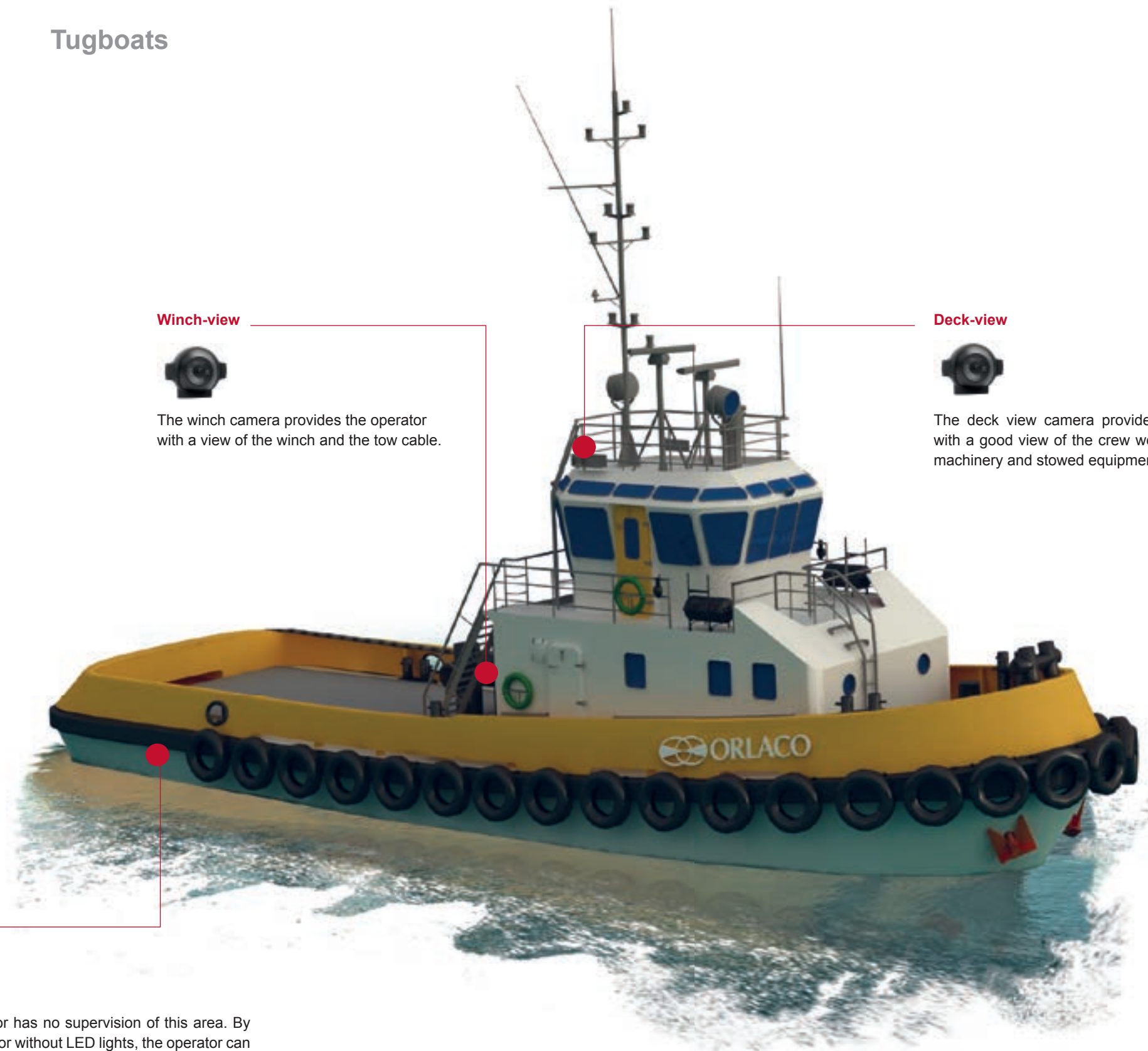
Tugboat

When maneuvering the Tug, an Orlaco camera monitor supports the captain in this operation. By placing several Orlaco cameras at locations that need to be supervised, the captain has a clear overview on the monitor in the wheelhouse. Locations as the winch, towing cable and engine room can be monitored closely. This will benefit in efficient and safer operations.

Load-view HD

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 HD 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 provide a optimal view 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.

Crane overview HD

Heavy lifting and Special Transport vessel

A HD camera monitor system is the right solution for vessels where load obscures the vision of the operator. By positioning HD cameras at strategic positions the operator has an optimal supervision of the container load and deck areas.

As an added value a HD 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 and the crew can take the necessary precautions.

Aft deck-view

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

Marine **sight** solutions

Bridge wing-view

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

Deck-view

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

Winch-view

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

Engine room-view

With a unmanned engine room the operator has no supervision of this area. By placing a camera in this room, optional with or without LED lights, the operator can easily detect oil spills or beginning of smoke development, before the detection system gives a warning.

Fishing vessel

When the operation on a fishing vessel is in full progress the captain does not have a view 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.

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 the crew 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 Compact Cameras with an IR lamp will be installed. One camera for a good overview of the gangway, the other camera is aimed at the hook of the spreader. Day or night, 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 brings the area in front of the bow in sight 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 view of this area. With the help of a camera, optional with our without LED lights, the operator can detect Oil spills or smoke forming, before any of the detection systems gives a warning.

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.

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.

Aft deck-view

The deck view camera provides the operator with a good view of the crew working on deck, machinery and stowed equipment. An IR lamp enhances the view in the dark.

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.

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.

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.

Aft deck-view

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

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.

Deck-view

The deck view camera will give the operator a good view of the crew 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 the crew working on deck, machinery and stowed materials.
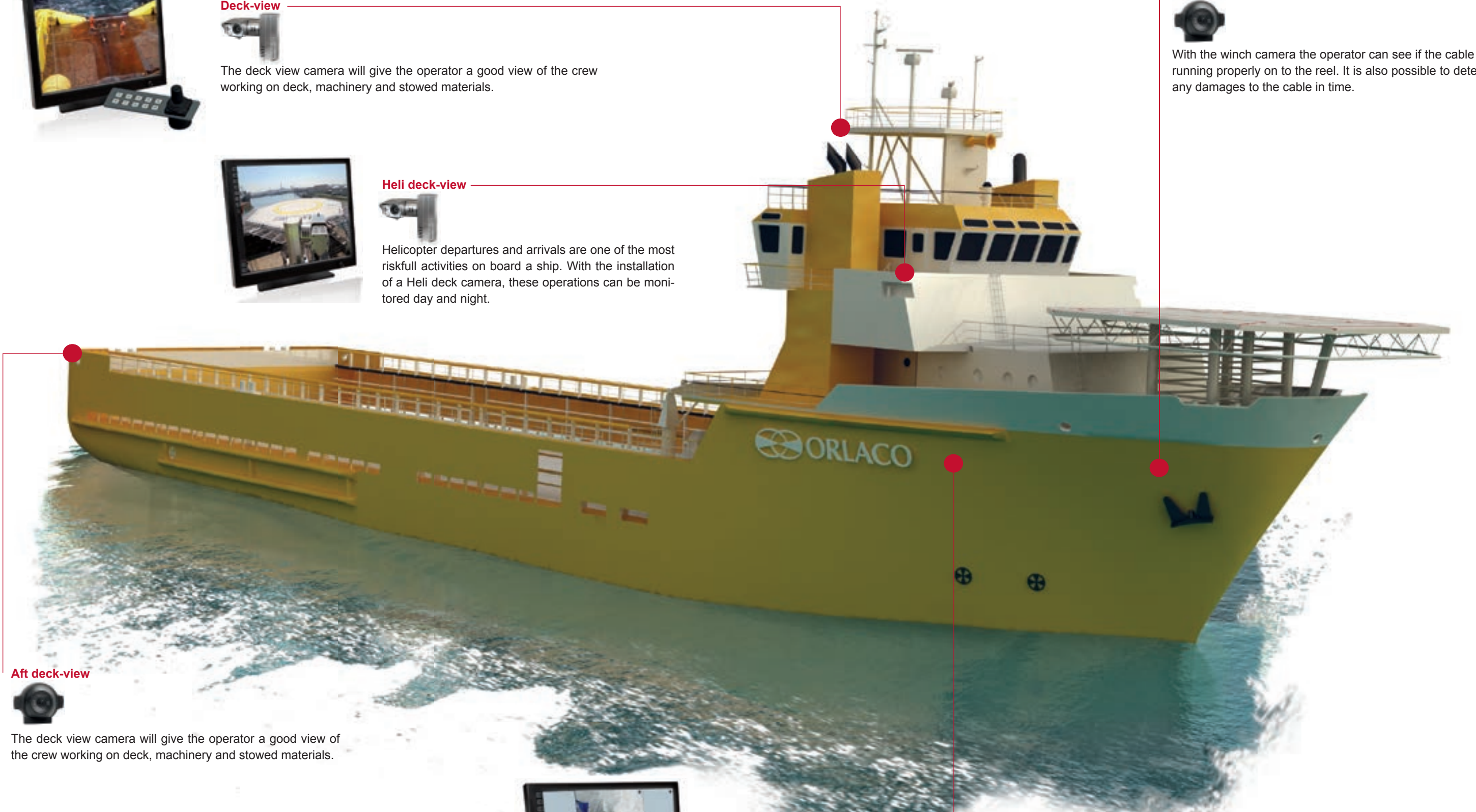
Engine room-view

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 development , before any of the detection systems gives a warning.

Platform Supply Vessel

For any operation on board 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.

ORLACO

Vision solutions

Vision solutions

Mooring winchview

With the installation of an Ex compact camera the operator can remotely view all the whinch operations.

Bridge wing-view

PTZ Ex camera for eliminating any blind spots alongside the ship or viewing the immediate surrounding of the ship.

General process-view

With the installation of a single or multiple Ex compact cameras a direct overview of the process area is secured.
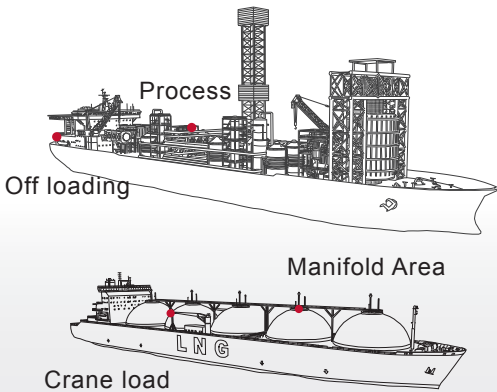
Loadview

The Ex zoom camera fitted on the boom is looking vertically downwards onto the top of the hook providing the crane operator with a clear view of the working area and load he is maneuvering.
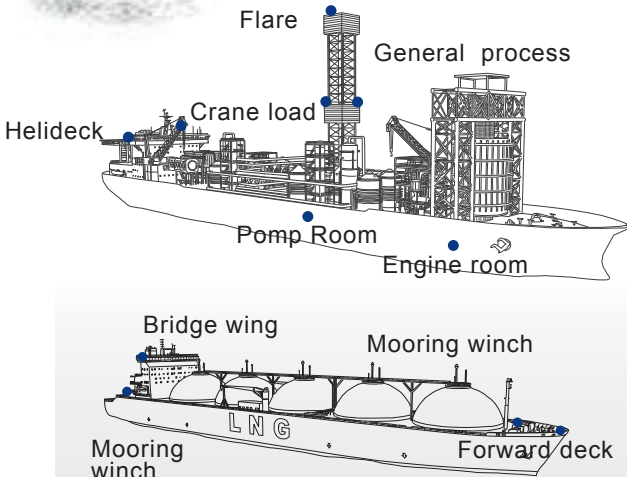
Observation-view

PTZ Ex camera for overview of the area near or away from the ship.

Process

Off loading

Manifold Area

Crane load

• Operations

For any operation onboard an Offshore vessel an Orlaco camera display system is an added value. Wether being used for the observation of the manifold area, mooring winch or engine room operations, a camera system will give the cctv operator an overview of all operations in one glance. By selecting a camera in any of the operating areas, an operator can have a detailed look at the operating process.

Flare

General process

Crane load

Helideck

Pomp Room

Engine room

Bridge wing

Mooring winch

Mooring winch

Forward deck

• Safety and Security

Safety onboard of any vessel is of great importance. Either for crew, equipment or the vessel itself safety at all times should be guaranteed. An Orlaco camera system can be of assistance in maintaining the safety onboard the vessel. By placing cameras in strategic positions the cctv operator has a general overview of all the areas where a possible safety incident could occur. With the decreasing amount of the number of crew members onboard the vessels the camera "eyes" are of an added value.

General process-view

With the installation of a single or multiple Ex compact cameras a clear overview of the process area is secured.

Helideck-view

Helicopter arrivals and departures are one of the most hazardous activities on board an offshore rig. With the installation of a Heli deck camera these activities can be monitored and recorded day and night.

Loadview

A Boom Tip crane 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 he is manoeuvring and the areas under the load.

ORLACO

Crown block

Finger board

Top drive

Drill floor

Pipe handling

Blowout preventers

General process

Crane load

Flame

Engine room

Pump room

Thruster room

Winches

• Operations

For any operation onboard of a rig an Orlaco camera display system is an added value. Either being used for the general, drilling or crane loading and offloading operations, a camera system will give the operator an overview of all his operations in one glance. The use of a camera system will increase operator profitability because of the reduction of operators downtime.

• **Safety and Security**

The number of crew members working on an offshore rig is decreasing. This is a recent trend in the offshore industry since a few years. During the operation of the rig, a lot of activities are going on. A good alternative to display these activities, as well as the many blind spots on the rig, is an Orlaco camera display system. Activities can be monitored and recorded. These images can be used to train the crew to avoid future incidents from happening.

Vision solutions

Vision solutions
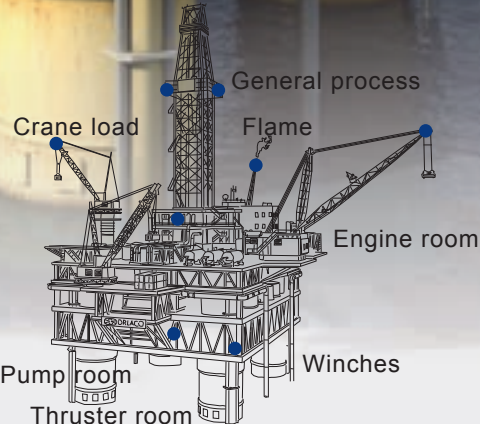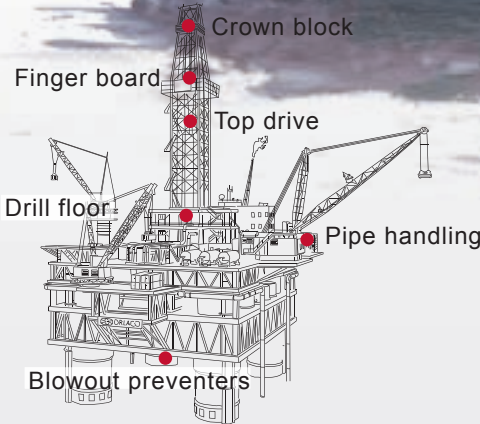
Set HD IP

Orlaco's HD-IP cameras support the TCP/IP protocol. This enables streaming of high resolution video images via digital networks. You have the flexibility to connect the HD IP cameras to any location in your network and PC-monitors. Through a single network cable you have access to all camera images. With the Orlaco Smartview software, you have a complete view on operations.
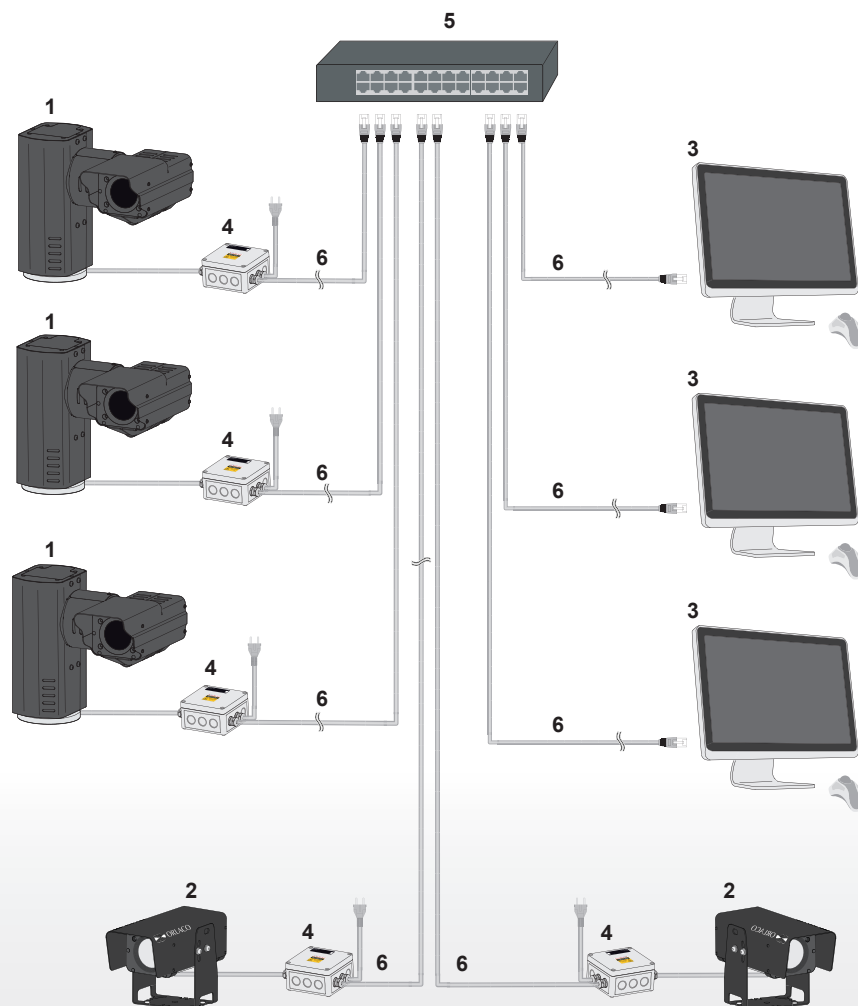
1. Camera PTZ HD-IP
Make your choice-page 36

2. Camera AFZ HD-IP
Make your choice-page 36

3.Monitor Marine Line
Make your choice-page 38-39

4. Junction Box
Contact Orlaco for advise

5. Switch
To be ordered separately. Contact Orlaco for advise

6. Cables
To be ordered separately.

Set UNI PTZ System OS1200

1. PTZ Camera
Make your choice - page 36

2. Monitor 10,4" Marine Line
Make your choice - page 38-39

3. Control Interface
0502920 - page 41

4. Junction box
0504840

5. Keyboard build-in Serial
0502620 - page 41

6. Joystick
0506500 - page 41

7. Cables
To be be ordered separately,
see page 37
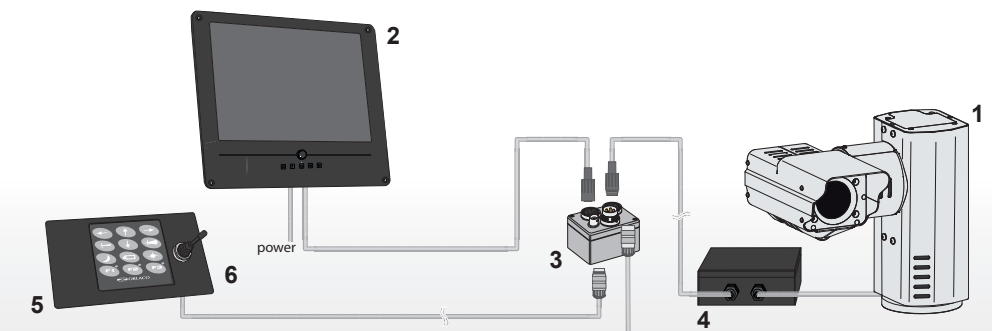
Set Loadview Ex

1. AF-Zoom Camera PAL Serial
0192031 - page 44

2. RLED 7" Display including bracket
0208632 - page 38

3. Oil damped camera bracket
0701200

4. Junction box
0504791 - page 46

5. Control box
0504812 - page 46

6. Cables
To be be ordered separately, see page 37

Set Quad-view System MV1300

1. Camera FAMOS (4x)
Make your choice - page 34

2. Monitor 12" RLED Serial
0411130 - page 38

3. MultiView box
0405100 - page 40

4. Multi cables 4p
Make your choice - page 37

Optional:

Monitor 7" RLED Serial
0208632 - page 38

power

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Set QuadView System MV1400

1. Camera FAMOS (4x)
Make your choice - page 34

2. Monitor 10,4" Marine Line
Make your choice - page 38-39

3. QuadBox
QB1404 - page 40

4. Keyboard build-in
2230680 - page 41

5. Multi cables 4p
Make your choice - page 37

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5 1
power
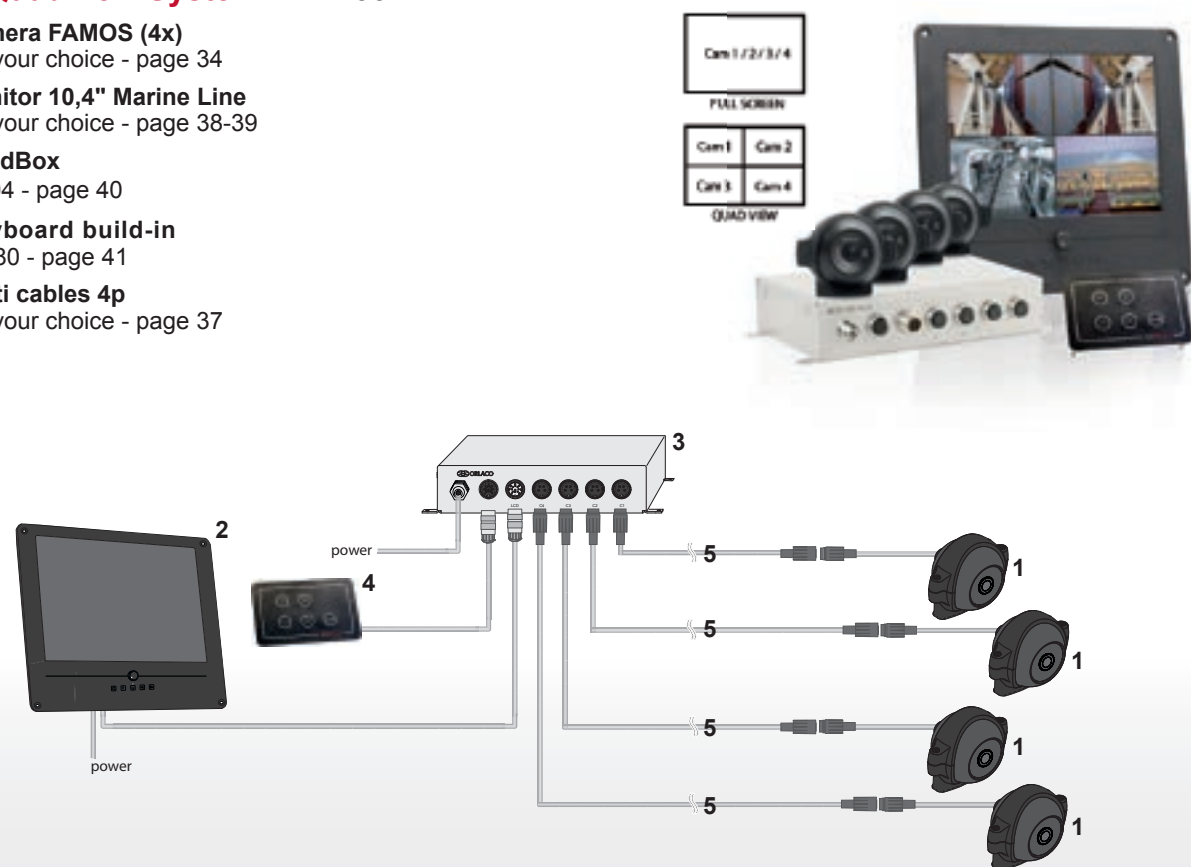
Set QuadView System MV1440

1. Camera FAMOS (3x)
Make your choice - page 34

2. PTZ Camera
Make your choice - page 36

3. Monitor 10,4" Marine Line
Make your choice - page 38-39

4. MultiView box
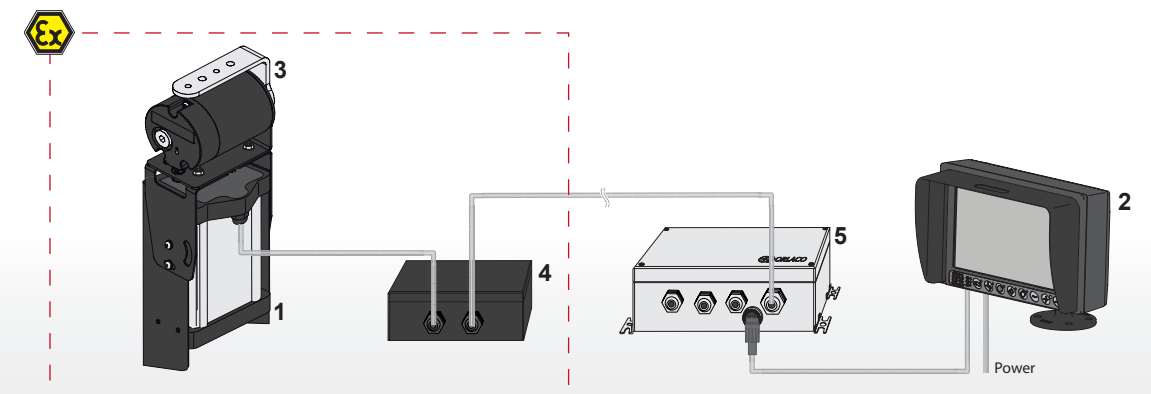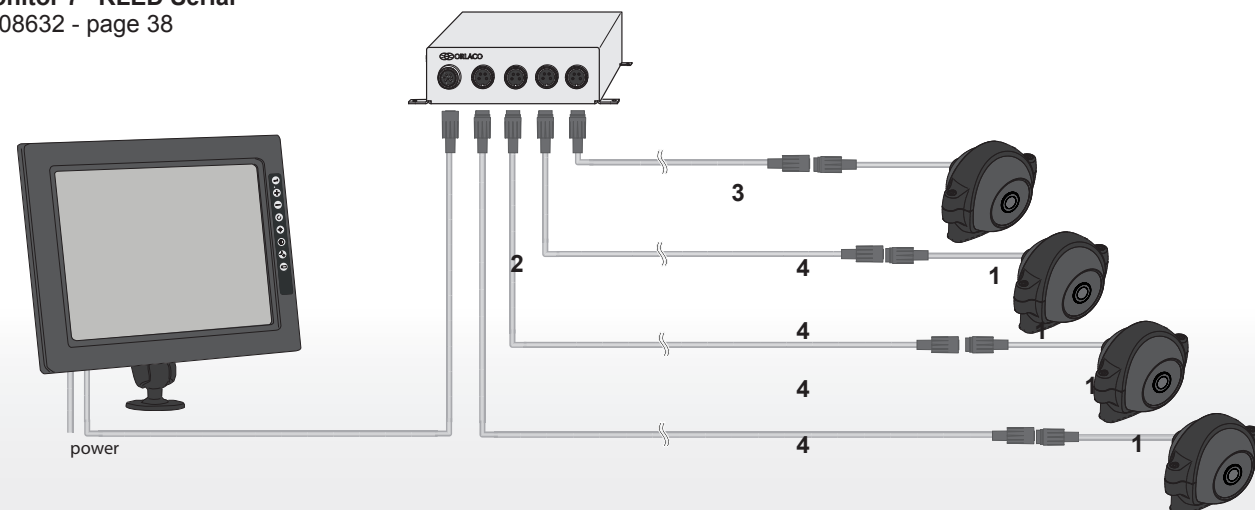0405110 - page 40

5. Junction box
0504840

6. Keyboard build-in Serial
0502620 - page 41

7. Joystick
0506500 - page 41

8. Control Interface
0502920 - page 41

9. Cables
To be be ordered separately, see page 37

6
7
power
power
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1

Set **Citadel / Safe room System** CS1500

1. Compact Cameras (4x / 8x / 16x)
Make your choice - page 34

2. Monitor 10,4" - 19" Marine Line
Make your choice - page 38-39

3. Power supply box CS1500 (4Cams / 8Cams / 16Cams)
Please contact Orlaco for advice

4. HD Recorder (4Cams / 8Cams / 16Cams)
Please contact Orlaco for advice

5. Mouse / Trackball
Please contact Orlaco for advice

6. Multi cables 4p
Make your choice - page 37

Citadel / Safe room
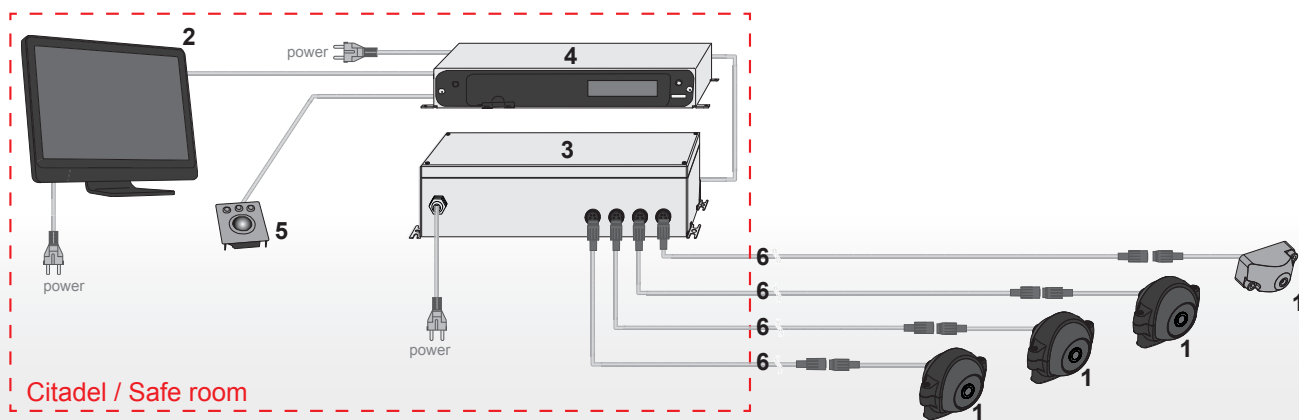
Set **All Time Day-Night Vision System** AV1600

1. AF-Zoom Camera PAL Serial
0103532 - page 35

2. Thermal Imaging Camera TIC 320 9Hz
0103732 - page 35

3. Monitor 10,4" - 19" Marine Line
Make your choice - page 38-39

4. Control box ATV System
Please contact Orlaco for advice

5. Keyboard build-in Serial
0502620 - page 41

6. Joystick
0506500 - page 41

7. Pan & Tilt unit 24V/DC
0507040 - page 42

8. Fastening plate
0507100 - page 42

9. Cables
To be be ordered separately, see page 37
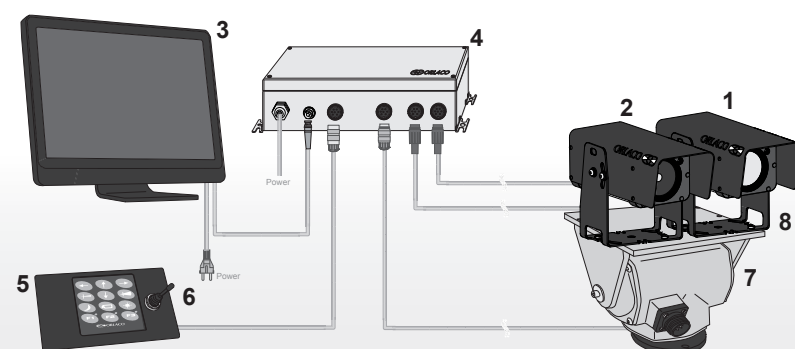
Set **Switchbox System** SB1808 (8 cams) / SB1812 (12 cams) / SB1816 (16 cams)

1. Camera FAMOS
Make your choice - page 34

2. Monitor 10,4" - 19" Marine Line
Make your choice - page 38-39

3. Switchbox
Make your choice - page 40

4. Keyboard build-in
2231630 - page 41

5. Multi cables (per metre)
Make your choice - page 37

6. Connectors 4p
1310841 & 1312001 - page 37

1. Cam 1 - 4

1. Cam 5 - 8

1. Cam 9 - 12

1. Cam 13 - 16
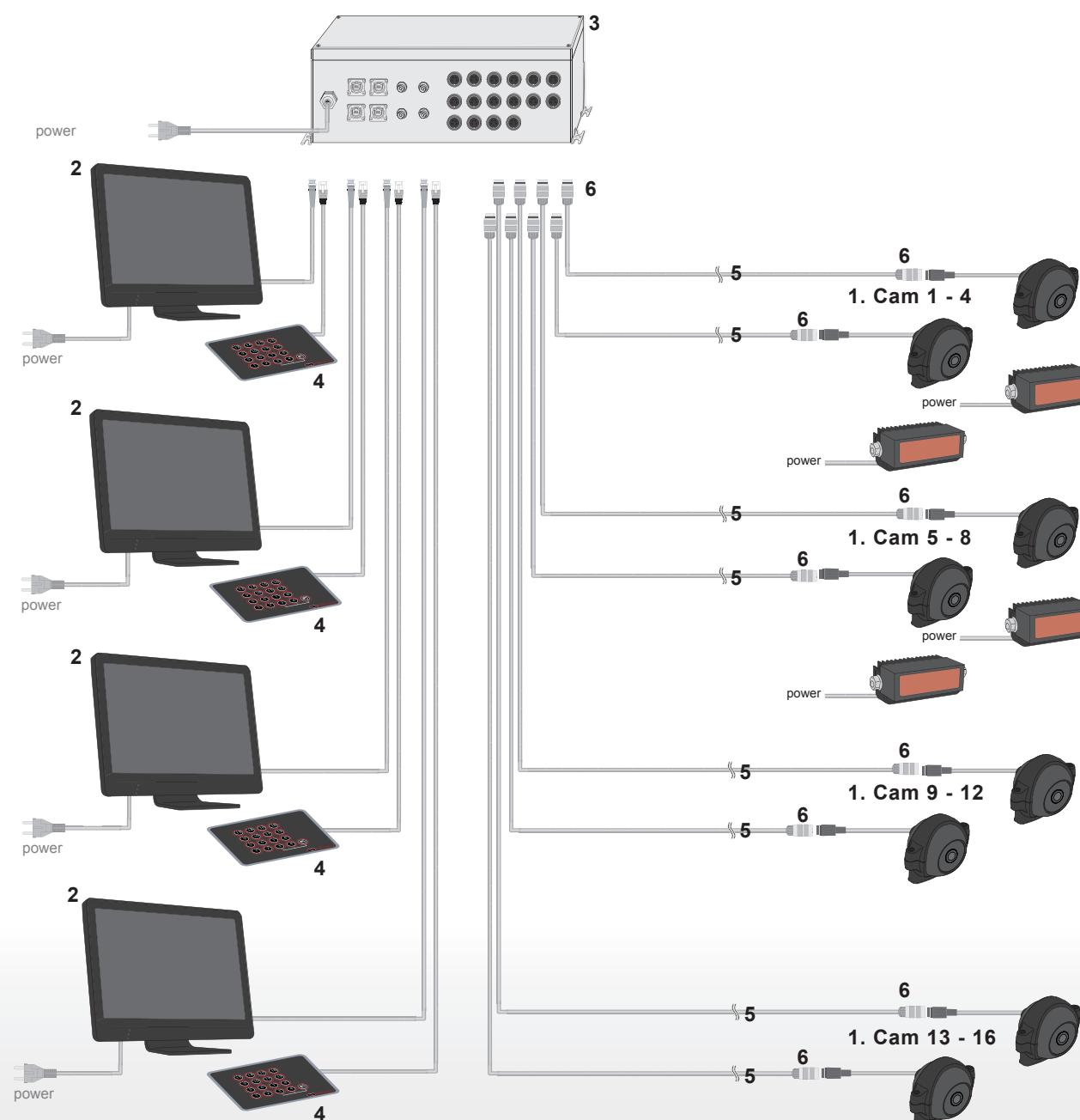
Set **Switchbox recording** (8 cams) / (16 cams)

1. Camera FAMOS
Make your choice - page 34

2. Monitor 10,4" - 19" Marine Line
Make your choice - page 38-39

3. Switchbox
Make your choice - page 40

4. Keyboard build-in
2231630 - page 41

**5. HD Recorder (4Cams / 8Cams / 16Cams)**
Please contact Orlaco for advice

6. Mouse / Trackball
Please contact Orlaco for advice

7. Multi cables (per metre)
Make your choice - page 37

8. Connectors 4p
1310841 & 1312001 - page 37

power

3

8

7   8
1. Cam 1 - 4
7   8

power
2. Monitor 1 - 2
4. Keyboard 1 - 2

7   8
1. Cam 5 - 8
7   8

power
2. Monitor 3 - 4
4. Keyboard 3 - 4

power
5

6

7   8
1. Cam 9 - 12
7   8

7   8
1. Cam 13 - 16
7   8

Ethernet

power
2. Monitor 5
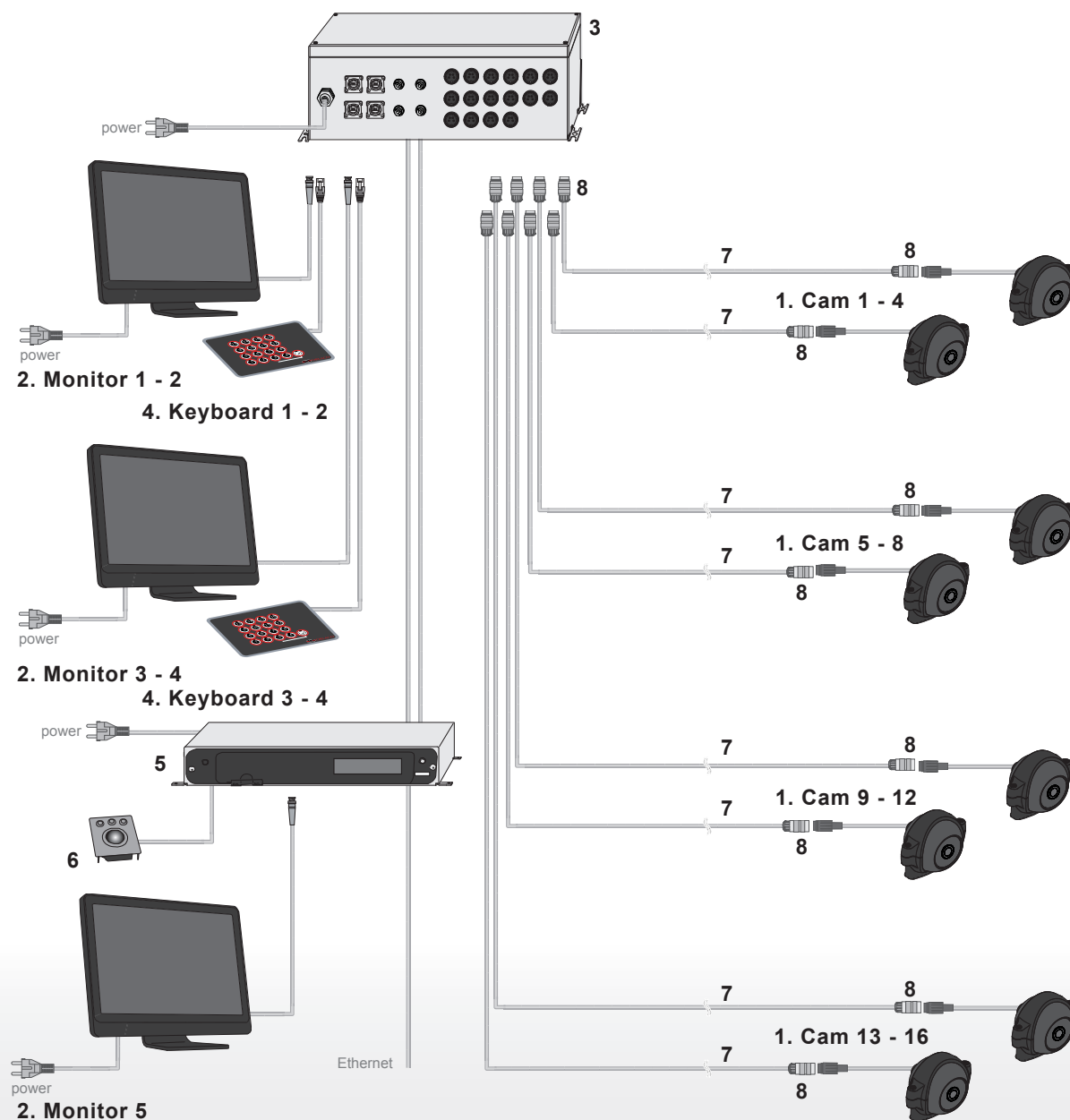
Set **SmartView**

The Orlaco Smartview solution is an IP based CCTV system based on the Orlaco Smartview software for the connection of multiple control and camera stations. By combining the Smartview camera interfaces, a system design based on a TCP/IP network can be made.

TCP/IP

1
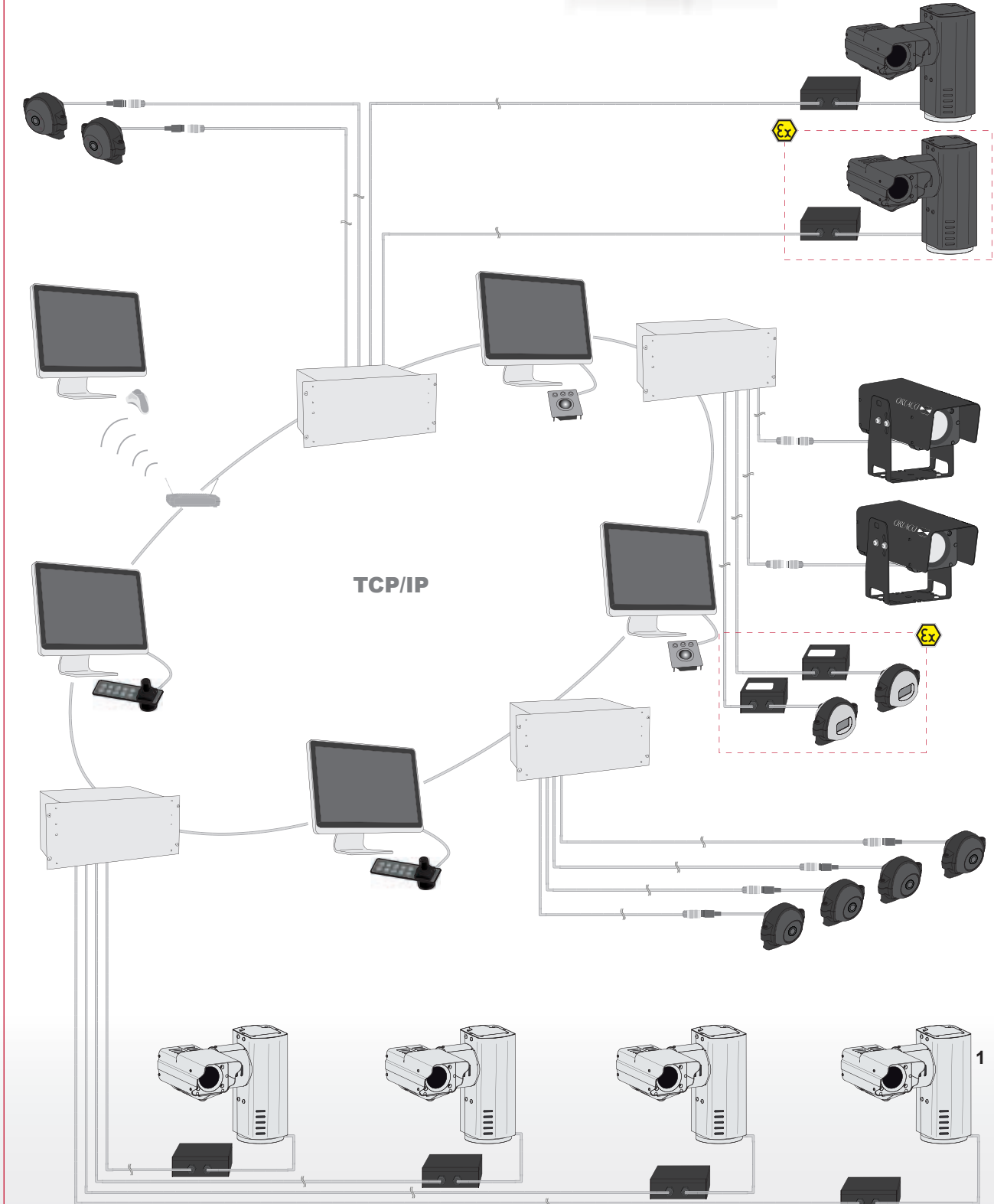
The qualifications of our FAMOS Compact Cameras

- Next generation CMOS sensor
- Light sensitivity 0.05 lux
- Integrated *Safety ticker* to show that camera is running and active
- Optimized impact- and vibration-resistance
- Chemically hardened lens

- Automotive molding-filled housing, watertight IP69K according to DIN 40050-9
- Improved EMC-standards
- Operating temperature between -40°C to +85°C
- Heated lens glass, therefore no

problems with condensation or frost
- Fixed lens
- IP68 dust- and waterproof according to IEC 60529
- The camera has a 0,5m cable including a waterproof molded 4p male connector

401cm (157")
2286cm (900")
FAMOS 170°

242cm (95")
419cm (165")
FAMOS 129°

194cm (76")
333cm (131")
FAMOS 118°

147cm (58")
247cm (97")
FAMOS 102°

112cm (44")
168cm (66")
FAMOS 80°

82cm (32")
115cm (45")
FAMOS 60°

56cm (22")
73cm (28")
FAMOS 40°

27cm (11")
35cm (14")
FAMOS 20°

Cameras FAMOS

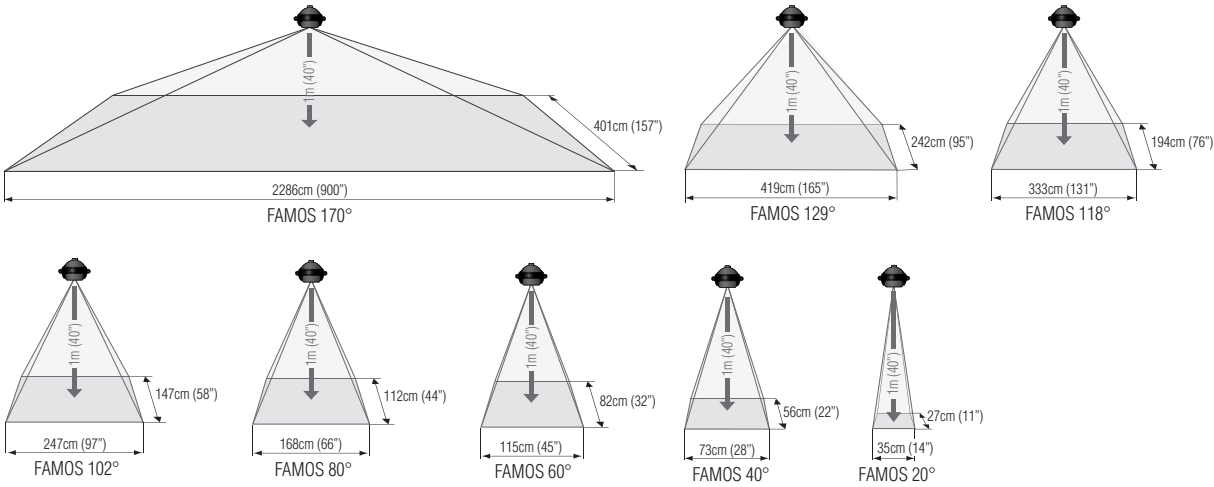| Type	Art. no. PAL	Art. no. NTSC
20°	0171060	0171160
40°	0171050	0171150
60°	0171040	0171140
80°	0171030	0171130
102°	0171020	0171120
118°	0171010	0171110
129°	0171000	0171100
170°	0171070	0171170

Cameras FAMOS IR
870 / 940nm IR sensitive camera.

| Type	Art. no. PAL	Art. no. NTSC
80°	0178000	-
118°	0178010	-
118° MIRROR	0178020	-

Cameras FAMOS IR LED
Day-night camera including 4 High Power Infrared LEDs 850nm. The IR LED's will be automatically activated. Based on the output of the CMOS sensor the IR illumination value will be set to ensure the best possible image.

Type	Art. no. PAL	Art. no. NTSC
80°	0171610	0171630
118°	0171600	0171620

- UV-transparent front cover

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
- 40x optical zoom, 1,6° 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

3cm   2cm
0,64m
0,89m
AF Zoom 1,6° - 48°
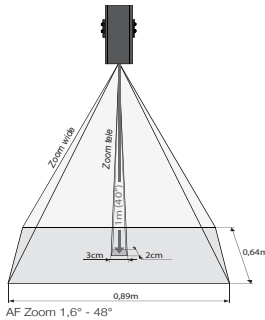
AF-Zoom Cameras

- Including 6m multi cable fitted with 7p connector (female)
- Power supply 12V - 24V/DC when cable is <50m
  Power supply 18V - 24V/DC when cable is >50m

0103513	AF-Zoom Camera Aluminium (HW)
0103532	AF-Zoom Camera Aluminium
0113532	AF-Zoom Camera Aluminium RS 485
0103482	AF-Zoom Camera SSt 316
0113482	AF-Zoom Camera SSt 316 RS 485

Infrared illuminator
For Compact or AF-Zoom Cameras.

0507300   IR-CIV870 Lamp

- 870nm IR light
- Max. 15W
- IP67
- Maximum range 75m

Thermal Imaging Camera

- Thermal Imager Uncooled VOx microbolometer
- Including 6m multi cable fitted with 7p connector (female)
- 25° lens (up to 450m detection)
- Nitrogen-filled housing, 100% waterproof IP69
- Operating temperature between -40°C to +80°C
- 12-30V/DC max 8W
- 2x and 4x zoom

0103732   TIC Aluminium 9Hz

0103742   TIC SSt 316 9Hz

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
- 40x optical zoom, 1,6° 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 7p connector
- 6 presets for camera positions

- Pan angle 360° (180° to left, 180° to the right) tilt angle 180° (90° up, 90° down)
- Pan & tilt speed 12,5°/sec
- Power supply 18V to 30V/DC

Pan & Tilt Zoom Cameras (PTZ)
0506953   PTZ Camera Aluminium
0516952   PTZ Camera Aluminium RS 485
- Aluminium housing

0506912   PTZ Camera SSt 316
0516912   PTZ Camera SSt 316 RS 485
- Stainless steel housing

Pan & Tilt Thermal Image Camera (PTTIC)
0506972   PTTIC Aluminium 9Hz
- Aluminium housing

0506982   PTTIC SSt 316 9Hz
- Stainless steel housing

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)

0405810   Washer Wiper Installation PTZ Camera
- Including mounting plate, nozzle and wiper stainless steel 316
- Only in combination with the stainless steel PTZ (0506910)

The additional qualifications of our HD-IP zoom cameras

- HD Image CMOS Sensor
- Chemically hardened lens
- 30x zoom
- Resolution: 1920 x 720 at 60 fps

- Video streaming over TCIP/IP
- Operating temperature between -40°C and +60°C
- Input Voltage 18...30V/DC

- Including 5m ethernet cable
- 32 presets for camera positions
- Watertight IP69K

AF Zoom HD-IP Cameras
0103810   AF-Zoom HD-IP Camera Aluminium
0103820   AF-Zoom HD-IP Camera SSt

0506810   PTZ HD-IP Camera Aluminium
0506820   PTZ HD-IP Camera SSt

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
- Operating temperature -40°C to +85°C

Cable per metre (without connectors)
Any required connectors can be ordered separately. (page 36)
1220170   Multi cable 1x coax, 5x wires
- Halogen free

1220280   Multi cable armored 1x coax, 5x wires

1220250   Multi cable 1x coax, 10x wires PUR

1221330   Multi cable 1x coax, 6x wires
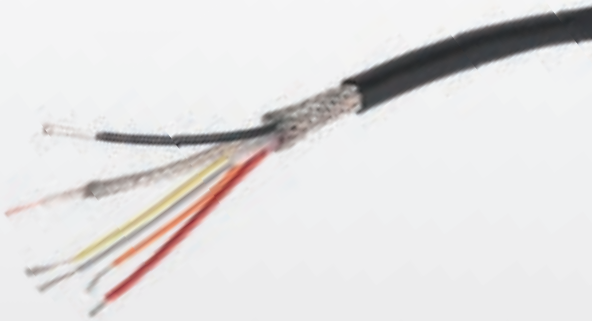
Multi cable standard (type 1220170)
This standard cable can be used if no special requirements like mechanical protection of the cable is needed. Available with 4p and 7p molded connectors in various lengths.

Including 4p molded connector & open wired:
0302150   20m

Including 7p female connector (1311201) & open wired:
0302160   20m

Connectors
Recommended for multi cable (1220170).
1310841   Connector 4p female Gold
1312001   Connector 4p male Gold
1311201   Connector 7p female Gold
1322401   Connector 7p male Gold

Recommended for armored cable (1220280).
1310850   Connector 4p female PG9 Gold
1312050   Connector 4p male PG9 Gold
1311250   Connector 7p female PG9 Gold
1322450   Connector 7p male PG9 Gold

0357011   Bulkhead connector 4p
- Suitable for lead-through on bodywork

0357050   Bulkhead connector 7p
- Suitable for through the wall applications

The possibilities offered by Orlaco LED monitors

- Automotive 7inch TFT liquid crystal display module, LED backlight
- Operating temperature between -40°C to +85°C
- Impact and vibration resistance meet the stringent requirements
- Power protected against:
  - Induction voltages
  - Load dumps

- Over- and undervoltage
- Mirror image setting
- 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 12 languages
- Watertight molded connectors

Monitors

0208672   Monitor 7" RLED
- 4m multi cable (power) open wired, 4m multi cable (video) including 4p female connector
- Input Voltage 12...60V/DC +/-10%
- User-adjustable 132mm mounting bracket

0208632   Monitor 7" RLED Serial
- For serial connection (Zoom- , PTZ- or TIC cameras)
- 6m multi cable (power) open wired, 6m multi cable (video) including 7p female connector
- Input Voltage 18...30V/DC +/-10%
- User-adjustable 132mm mounting bracket

0411000   Monitor 12"
- 4m multi cable (power) open wired, 4m multi cable (video) including 4p female connector
- Input Voltage 12...30V/DC +/-10%
- User-adjustable 190mm mounting bracket

0411130   Monitor 12" Serial
- For serial connection (Zoom- , PTZ- or TIC cameras)
- 6m multi cable (power) open wired, 6m multi cable (video) including 7p female connector
- Input Voltage 18...30V/DC +/-10%
- User-adjustable 190mm mounting bracket

2291230   Sunmask 12" Monitor Horizontal
ABS Sunmask specially designed for the 12" RLED Monitor.

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 or resistive touchscreen (RS232 & USB), Optical bonding, Transflective, 9-34V/DC

Panelmount TFT Monitor

0200008   Monitor 10.4" Picture diagonal
0200009   Monitor 15.0" Picture diagonal
0200010   Monitor 17.0" Picture diagonal
0200011   Monitor 19.0" Picture diagonal
0200012   Monitor 24.0" Picture diagonal

Desktop TFT Monitor

0200007   Monitor 10.4" Picture diagonal
0200003   Monitor 15.0" Picture diagonal
0200004   Monitor 17.0" Picture diagonal
0200005   Monitor 19.0" Picture diagonal
0200006   Monitor 24.0" Picture diagonal

1000864   Desktop Stand
- for 10.4" to 19" monitors

1000865   Heavy Duty Desktop Monitor Stand
- for 15" to 24" monitors

1000868   RAM Bracket Vesa mount
- for DT series

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

Multiview split
• Stainless steel housing
• Serial Orlaco Monitor needed

0405100   MultiView box II
• 4 camera inputs (4x Compact Camera)
• MV1300 system

0405110   MultiView box II
• 4 camera inputs (3x Compact Camera 1x AF-Zoom Camera)
• MV1440 system

0405200   MultiView box II dual mode
• Pre-programmed splitscreen
• Including adapter plug 4p male - 7p female (0357500)

Preset view options for channel 1-4:

NOR	ALL	DUA	TRI	REA	D+R	SUR 1	SUR 2

Default channel 5: QUAD

Quadbox
QB1404   Quadbox
• 1 video - display output (BNC)
• Control connection
• Stainless Steel IP66 housing
• Central power supply 110-230 V/AC
• 4 camera inputs
• MV1400 system

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

SB1808   Switchbox
• 8 compact camera inputs

SB1812   Switchbox
• 12 compact camera inputs

SB1816   Switchbox
• 16 Compact camera inputs

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

2231630   Control panel mount
• Control of max 16 cameras
• SB1801 / SB1812 / SB1816 system

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

2230680   Control panel mount
• Control of max 4 cameras.
• MV1400 system

USB Keyboard
Built-in keyboard for activating of max 10 cameras controlled by SmartView.

2231510   USB Keyboard SmartView
• Dimensions: 170x53mm, mounting depth 35mm
• Smartview system

Control Serial
For activating of the Pan & Tilt / AF-Zoom / TIC camera.

0502610   Handheld control AF (serial)
• Zoom function
• Including 5m power supply cable

0502620   Control panel mount
Built-in keyboard for activating of the Pan & Tilt / AF-Zoom / TIC camera.
• Joystick (0506500) is not included
• Dimensions: 140x116x80mm
• OS1200 / AV1600 system

0506500   Joystick
• Built-in
• Operating temperature between -30°C to +75°C
• IP40
• Telemanique

Spectrum Scanner wireless video transmitter & receiver

- Including powercable and two adjustable brackets for transmitter and receiver
- 8 video channels
- Full On Screen Display (OSD) functionality for system settings
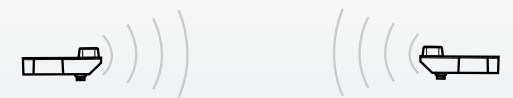- Please contact your dealer for further advice

0004061   RoundMax 150

- Omnidirectional antenna with horizontal orientation
- Maximum range 150m (dependent on surroundings)

0004091   LineMax 300

- Directional antenna with vertical orientation
- Maximum range 300m (dependent on surroundings)

Pan & Tilt units

- IP 68 watertight

0507061   Pan & Tilt unit 6kg 24V

- Left/right reach 360° speed: 30° sec.
- Reach up 30° down 90° speed: 10° sec.

0507050   Pan & Tilt unit 12kg 240V

- Left/right reach 350° speed: 6° sec.
- Reach up 25° down 90° speed: 3° sec.

0507040   Pan & Tilt unit 12kg 24V

- Left/right reach 360° speed: 32° sec.
- Reach up 25° down 90° speed: 12° sec.

0507100   Fastening plate

For quick mounting of camera on Pan & Tilt unit.

Mounting parts

Cover specially designed for the Compact Camera.

0402320   Protective cover

- Stainless steel housing

Specially designed for the Compact Camera. The nozzle allows high pressure cleaning of the camera lens.

0402310   Aerodynamic cover + nozzle

- Hose and water tank are not included
- Stainless steel

Ceiling mount for Compact Camera.

0402450   Camera Housing Dome

- Aluminium housing
- Including mounting hardware
- Compact Camera is not included

Switchers

Input and power supply for three cameras and in combination with a Y-split cable: four cameras.

- Cameras can be switched over automatically or manually

0404040   Switcher UNI

- Waterproof IP54 according to IEC 60529
- 4p output for monitor

0404061   Switcher Serial

- Waterproof IP67 according to IEC 60529
- 7p output for monitor
- Only in combination with a Serial monitor
- Possibility to connect 1 serial Orlaco camera (AF Zoom)

Power supply

Power supply for the Compact Camera.

0504031   AC/DC unit

- Power input 110-230V/AC
- Power output 12V/DC
- Dimensions 94mm(d) x 130mm(w) x 57mm(h)

Interface Control panel

To control a serial zoom camera.

0502920   Interface Controlpanel Serial 2x7p

- Including 4m power supply cable
- Can control each type of monitor

The qualifications of our Ex Compact Cameras

- CCD sensor
- Nitrogen-filled camera housing, 100% watertight (IP 69K)
- Shock and vibration resistant for usage on offshore platform
- Chemically hardened glass
- There is an aperture angle for every vision solution

Cameras CCC Ex

- Light sensitivity 1.5 lux
- T4: -40°C to 75°c, T5: -40°C to 50°C, T6: -40°C to 35°C
- Including a 5m multi cable

Type	Art. no. PAL	Art. no. NTSC
12° Zone 1	0193060	0193130
23° Zone 1	0193050	0193120
33° Zone 1	0193040	0193110
44° Zone 1	0193030	0193100
52° Zone 1	0193020	0193090
70° Zone 1	0193010	0193080
81° Zone 1	0193000	0193070

- CE0344
- EX II 2 G Ex mb IIC T6/T5/T4 Gb
- EX II 2 D Ex mb IIIC T85/100/125˚C Db

Type	Art. no. PAL	Art. no. NTSC
12° Zone 2	0194060	0194130
23° Zone 2	0194050	0194120
33° Zone 2	0194040	0194110
44° Zone 2	0194030	0194100
52° Zone 2	0194020	0194090
70° Zone 2	0194010	0194080
81° Zone 2	0194000	0194070

- EX II 3 G Ex mc IIC T6/T5/T4 Gc
- EX II 3 D Ex mb IIIC T85/100/125˚C Dc

The qualifications of our Ex Zoom Cameras

- Operating temperature between -20°C to +75°C
- Monitoring by 2 absolute pressure sensors
- Nitrogen-filled camera housing, 100% watertight (IP 69K)
- CE0344
- EX II 2 G Ex ib mb px IIC T4 Gb
- EX II 2 D Ex mb tb IIIC T102˚C Db

AF-Zoom Cameras Ex

- Including 10m multi cable Ex
- 36x optical zoom, 1,7° to 48° horizontal opening angle
- Built-in night vision function (0 lux mode)

0192031   AFZ Camera Ex Aluminium
0192121   AFZ Camera Ex Aluminium RS 485

0192041   AFZ Camera Ex SST
0192131   AFZ Camera Ex SST RS 485

Thermal Imaging Camera Ex

- Including 5m multi cable Ex
- Thermal Imager Uncooled VOx microbolometer
- 2x and 4x zoom

0192001   TIC Ex Aluminium

- Aluminium housing

0192011   TIC Ex SST

- Stainless steel housing

The qualifications of our Ex Pan & Tilt Zoom Cameras

- Operating temperature between -20°C to +75°C
- Monitoring by 2 absolute pressure sensors
- Nitrogen-filled camera housing, 100% watertight (IP 69K)
- Pan angle 360° (180° to left, 180° to the right) tilt angle 180° (90° up, 90° down)
- Built-in brightness function to ensure better visibility in dark areas
- CE0344
- EX II 2 G Ex ib mb px IIC T4 Gb
- EX II 2 D Ex tb mb IIIC T95˚C Db

Pan & Tilt Zoom Cameras EX (PTZ EX)

0192060   PTZ Camera Ex Aluminium
0192150   PTZ Camera Ex Aluminium RS 485

- Aluminium housing

0192050   PTZ Camera Ex SSt
0192140   PTZ Camera Ex SSt RS 485

- Stainless steel housing

Pan & Tilt Thermal Image Camera Ex (PTTIC Ex)

0192071   PTTIC Aluminium Ex

- Aluminium housing

0192081   PTTIC Ex SSt

- Stainless steel housing

0404960   Ex Board Plate

To monitor the gas-pressurised camera via an intrinsic safe circuit.
- CE0344
- EX II 2 G Ex ib im px Gb IIC

Junction box Ex

- II 2GD Ex e ai II CT6tDA21
- IP 65 T80˚C

0504780   Junction box Ex 8p

- For use with compact camera Ex
- For use with 1220110 multi cable
- 8 pins
- 8 pins

0504791   Junction box Ex 14p

- For use with 1221300 multi cable Ex
- For use with zoom ex
- 14 pins

Control box

0504812   Control box

- To connect two AF-zoom Ex camera's and 2 compact Ex camera's

Ex Cable per metre (without connectors)

1221300   Multi cable Ex
- 1 x video coax + 11 x wires
- Halogen free

1220110   Multi cable
- 1 x video coax + 3 x wires

Certifications

All Orlaco products are manufactured according to the latest Quality Management System Standards:

IATF 16949 : 2016
ISO 9001 : 2015

Additionally, all Orlaco products are manufactured according to the latest *Environmental Management System Standard*:

ISO 14001 : 2004

CERTIFIED IATF 16949	CERTIFIED ISO 9001	CERTIFIED ISO 14001

Type-Approval Certifications

Regulations 10 and 46 are used to determine the Type-Approval for **EMC** and **Indirect Vision** (Mirror Directive). **R46** describes mirror specifications for truck compliancy. Orlaco Frontview systems meet all these requirements. **R10** describes the **EMC** behaviour of the Orlaco Camera and Monitor systems.

The Orlaco camera and monitors for vessels are **RMRS** (Russian Maritime Register of Shipping) accredited.

**Ship Security Surveillance TV System
type "ORLACO CCTV System" 04410000**

Compliance

Our Camera and Monitor systems are produced entirely in line with the **CE-marking** and the most recent applicable directives and product standards (e.g. **EMC**, **FCC**, **Machinery**, **R&TTE**). Orlaco products are compliant with **RoHS** and **REACH**.

All Orlaco materials are compliant to **Green Passport** requirements according IMO resolution MEPC.197(62) as adopted on July 15th 2011 (Maritime sector: International Maritime Organization concerning the functions of the Marine Environment Protection Committee).

Dekra Certificate Ex

European examination for Explosion proof equipment. All Orlaco Ex products comply with the Essential Health and Safety Requirements for use in potentially explosive atmospheres, according to directive 2014/34/EU.

EN 60079-0 : 2009
EN 60079-18 : 2009
EN 60079-2 : 2007
EN 60079-31 : 2009
EN 60079-11 : 2007