Vision is our mission

CRANES
VISION SOLUTIONS

Orlaco Inc - North America
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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.

On behalf of the entire team,
Hennie van Beusekom
Executive Director Orlaco
A crane camera not only enables its operator to work more efficiently, it could also largely contribute to job site safety. With an Orlaco vision system, a crane operator is more independent and not solely reliant on instructions from the signalman. The Orlaco vision system allows crane operators to verify the instructions received from the signalmen, virtually eliminating the age-old misunderstanding of “your left, or mine?” In fact, a recent study, done by an end-user, shows that tower cranes performing “blind” lifting operations work 21% faster and more efficiently while using an Orlaco vision system than cranes operating without the system. Orlaco solutions help to increase the all-round safety and efficiency of the crane and its operator – both on and off the job site.

Modern cranes have become more comfortable. Their cabins are now air-conditioned and have air suspension seats. Even with these extra comforts, crane operators are often left unnaturally twisting and turning to keep track of the job site. This can lead to back and neck injuries, or even force an operator to stop working indefinitely. An Orlaco vision solution could help crane operators to maintain correct posture, to work in more comfort. And because Orlaco systems allow a crane operator to immediately see all around the crane without twisting and turning, damage to objects, people or even the crane itself could be greatly minimized. Prevention, ergonomics and comfort – a triple benefit!

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.
Load moving sight solutions

**Loadview**

LV7010 / LV7015 / LV7020 / LV7025 - PAGE 22/23

The operator in the cabin does not always have optimal visibility of the crane’s hook and the load. Especially in situations where he must lift the load over large buildings, machines or installations. Fortunately, Orlaco is offering a solution and some relief to the operator with their eyes in the sky. The Loadcam fitted to the tip of the telescopic boom is looking straight downwards on top of the hook and the load. On the color monitor in the crane cab, the operator receives at all times, a crystal clear image of the position of the hook. When necessary he can zoom in on the hook for a more detailed image. Everything is possible!

The Zoom Camera can also be moved to the end of a jib. Required is an additional mounting pipe and 7 pin cables in the correct length. For longer jibs (+30m) we recommend using a reel.

**Winchview**

WV7200 - PAGE 29

On the larger types of mobile telescopic cranes with super lift counter weights or double hooks, direct vision from the cabin on all the winches is very limited. The monitor used for load view purposes can therefore simultaneously be used for observing the Winchview. The operator is able to switch easily from camera to camera by pressing a button on the monitor.

**Rearview**

RV7520 / HD - PAGE 30

A Rearcam is positioned on the rear end of the upper carriage (wireless or any free slip rings) or alternatively on the under carriage, which enables the operator to see accurately who or what is behind the crane. Available in analog and digital version.

Recommendation: Add RadarEye to increase safety & efficiency. (see page 50-51)

**CornerEye**

PAGE 34

CornerEye offers a complete and detailed view of 270° of the area around the cabin. The system delivers HD digital image quality in real time.
The crane operator can see immediately on his monitor when a lifting operation could possibly become dangerous. The operator is no longer dependent on information from other persons by means of a portable radios. He can make the right decisions without delay and preventing accidents on site. There is also a far lesser chance of any misunderstandings occurring as the Loadcam system makes it possible for the operator to verify the instructions from the signalman.

Visibility on the rear boom is becoming increasingly necessary on large building sites that have various types of cranes working together. The load view monitor can be used simultaneously with a Rearcam. With just one button, the operator is able to switch between both cameras.
A Loadcam provides images of the working area and is fitted on the boom. It is positioned in such a way that it looks vertically downwards onto the top of the hook and load. The monitor in the cabin ensures that the operator has continuous visibility while hoisting, regardless of the position of the hook and load.
The crane operator in the cabin does not always have optimal visibility on the crane’s hook and load. Especially when he must lift over machinery into rail cars and behind stacks of plate/coil steel in warehouses. The Orlaco loadview system is offering a solution with a camera fitted to the hoist looking straight down on the hook and load. The operator receives real-time (analog) images on the monitor.

Not only safe reversing, but also knowing what is happening behind the crane. The chance of an accident is greatly reduced by a Rearcam. Available in analog and digital version.
The crane operator in the cabin does not always have optimal visibility on the crane's hook and the load. Especially in situations where he must lift the load over large buildings, machines or installations. Fortunately, Orlaco is offering a solution and some relief to the operator with their eyes in the sky. The Loadcam fitted to the tip of the telescopic boom, is looking straight downwards on top of the hook and the load. On the waterproof color monitor in the crane cab, the operator receives at all times, a crystal clear image of the position of the hook. When necessary he can zoom in on the load for a more detailed image with a Zoom Camera. Everything is possible!

Not only safe reversing, but also know what is happening behind the crane. The chance of an accident is greatly reduced by a Rearcam. Available in analog and digital version.

If you are continually turning backwards and forwards, you cannot always see what is happening next to or behind the crane. A Sidecam is then the solution, certainly when the turning space is limited. It can also be used in combination with a Rearcam.
It is possible to connect a Winchcam to the monitor. The crane operator is able to switch between the cameras by pressing a single button. On the larger types of lattice harbour cranes, it is possible to extend the winch view system with additional cameras.

A Loadcam provides images of the working area and is fitted on the boom tip. It is positioned in such a way that it looks vertically downwards onto the top of the hook. The monitor in the cabin ensures that the operator always has visibility while hoisting, regardless of the position of the hook and load. The camera gives the operator a complete overview of the ships hull and dock area.

If you are continually turning backwards and forwards, you cannot always see what is happening next to or behind the crane. A Sidecam is the solution, certainly when the turning space is limited. Available in analog version and digital version. Digital version cannot be combined with rearview.

Not only safe reversing, but also better vision when turning the crane. The chance of an accident is greatly reduced by a Rearcam. It can also used in combination with a Sidecam. Available in analog version and digital version. Digital version cannot be combined with sideview.

The camera that is fitted onto the grasping arm ensures optimum visibility of the grasper at all times. A Loadcam provides improved accuracy for the crane operator as well as increases safety in the workplace. The operator can always see if there are persons or a wheel loader in the hold while unloading ships.

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A Loadcam provides images of the working area and is fitted on the boom tip. It is positioned in such a way that it looks vertically downwards onto the top of the hook. The monitor in the cabin ensures that the operator always has visibility while hoisting, regardless of the position of the hook and load. The camera gives the operator a complete overview of the ships hull and dock area.
**HD-IP SMARTVIEW SOLUTIONS**

Orlaco also offers HD-IP cameras that support the TCP/IP protocol. This enables streaming of high resolution video images via digital networks. With this technology 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. Together with the Orlaco Smartview software, you have a complete view on operations. The cameras are compatible with other IP devices that also hold an Onvif protocol, for example Network Video Recorders.

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**Side-Rearview**

Not only safe reversing, but also knowing what is happening behind and near the crane. The chance of an accident is greatly reduced by a Sidecam. Another possible application is a camera for the positioning of containers. Time loss is thus reduced to the minimum.

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**Loadview**

Good visibility when moving the containers. You have a good view of the operations behind and under the crane. How and where the Loadcam is placed depends on your needs.

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**Driven-Direction-View**

Positioning compact cameras on the crane legs ensures that the crane operator always has a good view while moving to the left or right. The four cameras can be switched to a quad view when the vehicle is stationary and the views from the two required cameras can be shown in a split screen when moving to the left or the right. This considerably reduces the chances of an accident. Ask your dealer for further information.
**HD Latchview**

The boom is raised when the crane is not operational. A Latchcam is fitted at the top near the locking point, allowing the operator to monitor the locking function at all times.

**HD Loadview**

Good visibility during unloading of the containers. You have a good view of the operations behind and under the crane. How and where the Loadcam is placed depends on your needs.

**HD Driven-Direction-View**

**HD Rearview**

The Rearcam ensures that the operator can see behind the STS on the working space at all times. A quick look at the monitor gives the operator an instant view of the area in which the container should be positioned.

**HD Backreachview**

The backreach cam is a camera that is mounted on the backreach platform. This camera cannot be accessed by the operator; it is used by the logistics and operations teams via a network application to view the work area under the crane. A remote-controlled pan & tilt camera provides them with a view of the entire working space.

**ETHERNET VISION SOLUTIONS**

Our compact Ethernet camera EMOS gives you the best HD quality video images and withstand the toughest working conditions. Thanks to the Ethernet technology, this camera is ideal for integration into onboard computer systems. The camera is able to stream practically real-time in MJPEG or H.264 to any type of monitor.
### Set Loadview Telescopic crane / RT-Crane (7” RLED - wireless) LV7010

1. AF-Zoom Camera Serial 0103561 - page 37
2. Monitor 7” RLED Serial, including bracket 0208632 - page 41
3. Spectrum Scanner LineMax 300 0004091 - page 49
4. Oil damped camera bracket 0701200 - page 53
5. Quick release set Weld 0910240 - page 54
6. Multi cable p7M-m7F 3.3ft 0305040 - page 40
7. Multi cable m7M - p7F 3.3ft 0305050 - page 40
8. Zoom Control box 0702100 - page 48

Optional: Extra weight 0910280 - page 54
Optional: Foot switch 0502630 - page 48
Optional: Multi cable 7p 16m 0304620 - page 39

### Set Loadview Telescopic crane (12” RLED - wireless) LV7015

1. AF-Zoom Camera Serial 0103561 - page 37
2. Monitor 12” RLED Serial, including bracket 0411130 - page 41
3. Spectrum Scanner LineMax 300 0004091 - page 49
4. Oil damped camera bracket 0701200 - page 53
5. Quick release set Weld 0910240 - page 54
6. Multi cable p7M-m7F 3.3ft 0305040 - page 40
7. Multi cable m7M - p7F 3.3ft 0305050 - page 40
8. Zoom Control box 0702100 - page 48

Optional: Extra weight 0910280 - page 54
Optional: Foot switch 0502630 - page 48
Optional: Multi cable 7p 16m 0304620 - page 39

### Set Loadview Telescopic crane LV7020

1. AF-Zoom Camera Serial 0103561 - page 37
2. Monitor 7” RLED Serial, including bracket 0208632 - page 41
3. Spring driven cable reel 164ft 0710270 - page 42
4. Oil damped camera bracket 0701200 - page 53
5. Quick release set Weld 0910240 - page 54
6. Multi cable p7M-m7F 3.3ft 0305040 - page 40
7. Multi cable m7M - p7F 3.3ft 0305050 - page 40
8. Zoom Control box 0702100 - page 48

Optional: Extra weight 0910280 - page 54
Optional: Foot switch 0502630 - page 48

### Set Loadview Crane truck / RT-Crane (wireless) LV7025

1. Camera FAMOS 80° 0171130 - page 35
2. Monitor 7” RLED, including bracket 0208672 - page 41
3. Spectrum Scanner LineMax 300 0004091 - page 49
4. Oil damped camera bracket 0701200 - page 53
5. Quick release set Weld 0910240 - page 54
6. Adapter cable 7pF - 4pM 0304220 - page 45
7. Adapter cable 4pF - 7pM 0304210 - page 40
8. Protection cover 0402320 - page 53

Note: Accu pack and charger are not included.
**Set Loadview Tower crane (7” RLED) LV7030**

1. AF-Zoom Camera Serial 0103561 - page 37
2. Monitor 7” RLED Serial, including bracket 0208622 - page 41
3. Spectrum Scanner LineMax 300 0004091 - page 49
4. Quick-fit set 0402801 - page 52
5. Battery pack set 0049040 - page 43
6. Foot switch 0502630 - page 48
7. Power supply 0503830 - page 46
8. Spider cable crane 0403880 - page 43
9. Multicable 36ft 0304610 - page 39

Optional: Autocontact 0405951 - page 43
Optional: Solar panel 0049500 - page 43

**Set Loadview Mobile tower crane (wireless) LV7040 (0402940)**

1. AF Camera 0103611 - page 37
2. Monitor 7” RLED Serial, including bracket 0208832 - page 41
3. Spectrum Scanner LineMax 300 0004091 - page 49
4. Battery pack set (side connection) 0049610 - page 43
5. Quick release set Weld 0910240 - page 54
6. Foot switch 0502830 - page 48
7. Spiral cable for battery 0303670 - page 43
8. Multicable 19.7ft 0304410 - page 39

Including vacuum mounting set.

**Note:** Can only be ordered by/through OEM.

**Set Loadview Tower crane (12” RLED) LV7035**

1. AF-Zoom Camera Serial 0103561 - page 37
2. Monitor 12” RLED Serial, including bracket 0411160 - page 34
3. Spectrum Scanner LineMax 300 0004091 - page 49
4. Quick-fit set 0402801 - page 52
5. Battery pack set 0049610 - page 43
6. Quick release set Weld 0910240 - page 54
7. Power supply by connection 0503830 - page 46
8. Spider cable crane 0403880 - page 43
9. Multicable 36ft 0304610 - page 39

Optional: Autocontact 0405951 - page 43
Optional: Solar panel 0049500 - page 43

**Set Loadview Crawler crane (7” RLED) LV7050**

1. AF-Zoom Camera Serial 0103561 - page 37
2. Monitor 7” RLED Serial, including bracket 0208622 - page 41
3. Oil damped camera bracket 0701200 - page 53
4. Quick release set Bolt 0910250 - page 54
5. Cable reel with 492ft + 49.2ft cable 0712040 - page 42
6. Zoom control box 0702100 - page 48
7. Protection caps (F/M) 1350200 & 1350300

Optional: Extra weight 0910280 - page 54
Optional: Foot switch 0502830 - page 48
Set Loadview Crawler crane (12" RLED) LV7055

1. AF-Zoom Camera Serial
   0103561 - page 37
2. Monitor 12" RLED Serial, including bracket
   0411130 - page 41
3. Oil damped camera bracket
   0701200 - page 53
4. Quick release set Bolt
   0910250 - page 54
5. Cable reel with 492ft + 49.2ft cable
   0712040 - page 42
6. Zoom control box
   0702100 - page 48
7. Protection caps (F/M)
   1350200 & 1350300

Optional: Extra weight
0910280 - page 54
Optional: Foot switch
0502630 - page 48

Set Loadview Lattice harbour crane (12" RLED) LV7065

1. AF-Zoom Camera Serial
   0103561 - page 37
2. Monitor 12" RLED Serial, including bracket
   0411130 - page 41
3. Oil damped camera bracket
   0701200 - page 53
4. Quick release set Bolt
   0910250 - page 54
5. Zoom Control box
   0702100 - page 48
6. Multicable 278.9ft
   0304400 - page 39

Optional: Extra weight
0910280 - page 54
Optional: Foot switch
0502630 - page 48

Set Loadview Lattice harbour crane (7" RLED) LV7060

1. AF-Zoom Camera Serial
   0103561 - page 37
2. Monitor 7" RLED Serial, including bracket
   0208632 - page 41
3. Oil damped camera bracket
   0701200 - page 53
4. Quick release set Bolt
   0910250 - page 54
5. Zoom Control box
   0702100 - page 48
6. Multicable 278.9ft
   0304400 - page 39

Optional: Extra weight
0910280 - page 54
Optional: Foot switch
0502630 - page 48

Set Loadview Hydraulic port crane / Overhead crane LV7070

1. Camera FAMOS 80°
   0171130 - page 35
2. Monitor 7" RLED, including bracket
   0208672 - page 41
Cables 4p
To be ordered separately, see page 39.

Optional: Protection cover
0402320 - page 53
CONFIGURATIONS

Set Loadview Top crane (7” RLED) LV7080
1. AF-Zoom Camera Serial
   0103561 - page 37
2. Monitor 7” RLED Serial, including bracket
   0208622 - page 41
3. Oil damped camera bracket
   0701200 - page 53
4. Quick release set Weld
   0910240 - page 54
5. Power supply
   0503830 - page 46
6. Foot switch
   0502630 - page 48
7. Multicable 278.9ft
   0304400 - page 39

Optional: Suction cup mounting bracket
0401310 - page 52
Optional: Compact Joystick
0702000 - page 48
Optional: Zoom Control box
0702100 - page 48

Set Loadview (12” RLED) LV7085
1. AF-Zoom Camera Serial
   0103561 - page 37
2. Monitor 7” RLED Serial, including bracket
   0208622 - page 41
3. Oil damped camera bracket
   0701200 - page 53
4. Quick release set Weld
   0910240 - page 54
5. Power supply
   0503830 - page 46
6. Foot switch
   0502630 - page 48
7. Multicable 278.9ft
   0304400 - page 39

Optional: Suction cup mounting bracket
0401310 - page 52
Optional: Compact Joystick
0702000 - page 48
Optional: Zoom Control box
0702100 - page 48

Set Loadview LV7090
1. Camera FAMOS 20°
   0171160 - page 35
2. Monitor 7” RLED, including bracket
   0208603 - page 41
Cables 4p
To be ordered separately, see page 39.

Set Winchview WV7200
1. Camera FAMOS 60°
   0171140 - page 35
2. Monitor 7” RLED, including bracket
   0208603 - page 41
Cables 4p
To be ordered separately, see page 39.

Optional: MultiView box II
0405100 - page 46
Optional: Camera FAMOS 80° IR LED
0171630 - page 36
Remark: Also available in Digital version, see page 30 Rearview HD
Set Rearview RV7520
1. Camera FAMOS 118°  
0171110 - page 35
2. Monitor 7" RLED, including bracket  
0208672 - page 41
Cables 4p  
To be ordered separately, see page 39.

Set Sideview SV7510
1. Camera FAMOS 118°  
0171110 - page 35
2. Monitor 7" RLED, including bracket  
0208672 - page 41
Cables 4p  
To be ordered separately, see page 39.

Set HD Rearview
1. Camera HMOS 120° incl. bracket  
0185010 - page 36
2. Monitor HLED 10" MR1  
0224000 - page 41
3. Digicoax cable  
Make your choice - page 40

Set HD Sideview
1. Camera HMOS 120° incl. bracket  
0185010 - page 36
2. Monitor HLED 10" MR1  
0224000 - page 41
3. Digicoax cable  
Make your choice - page 40
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. The cameras are compatible with other IP devices that also hold an Onvif protocol.

Set EMOS
The EMOS compact camera gives you the best HD quality video images and can withstand the toughest working conditions. This camera is ideal for integration into onboard computer systems. The camera streams in MJPEG or H.264 to any type of monitor.
DIGITAL CONFIGURATIONS

Set CornerEye
1. Set HMOS camera with CornerEye bracket
   a. Camera HMOS 180°
   b. CornerEye Bracket
2. Monitor HLEd 10” MR1
   0224000 - page 41
3. Monitor Bracket A pillar
   0402610
3. Digicoax cable
   Make your choice - page 40

CornerEye delivers a real-time field of vision of 270°

- HD camera and 10” HD monitor
- 270° field of vision
- Real time: zero latency
- Shock and vibration proof
- Ruggedized design
- Designed to comply with automotive requirements
- Camera IP69K watertight
- Short mounting time
- Custom made bracket per brand on request

Get excellent view on blind spots around crane vehicles with the revolutionary CornerEye camera monitor system. Ultimate digital technology and an effective application deliver a unique vision solution. The system has a wide angle lens that, combined with the latest technology, delivers a field of vision of 270°. An ideal solution for rear or side view on a crane vehicle.

0185610 Set HMOSs with bracket
   - Including camera HMOS 180°

Or design your system yourself

Step 1: Select your camera
Step 2: Select your desired cable
Step 3: Select your monitor
Step 4: Select the required options
It is also possible to configure your system online on our website: www.orlaco.com

Whatever you select, the system can be easily installed and is plug-and-play.

Note: For two or more cameras a switcher, 4Cam RLED Monitor or MultiView Box and additional cables are required. Contact us for support.

The qualifications of our FAMOS Compact Cameras

- Next generation CMOS sensor
- Light sensitivity 0.05 lux
- Integrated Safety tracker to show that camera is running and active
- Optimized impact- and vibration-resistance
- Scratch-resistance by chemically hardened lens
- Automotive molding-filled housing, watertight IP69K according to DIN 40050-9
- Improved EMC-standards
- Operating temperature between -40° 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 connector male

Cameras FAMOS

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**The qualifications of our zoom cameras**
- Operating temperature between -40°F to 185°F
- Built-in brightness function to ensure better visibility on dark areas
- 480x 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

**AF-Zoom Cameras**
- 0103561 AF-Zoom Camera Serial
- Including 19.7ft multicable fitted with 7p connector (female)
- Power supply 12V - 24V/DC when cable is <164ft
- Power supply 18V - 24V/DC when cable is >164ft
- 2.6kg

- 0103611 AFI Auto Focus Insulated
- Designed for usage on cranes to have a camera pointed downwards perpendicular.
- Power supply 12V - 24V/DC when cable is <164ft
- Power supply 18V - 24V/DC when cable is >164ft
- Damper absorbs sudden movements and procure stability
- Stainless steel mounting hardware
- Including 19.7ft multicable fitted with 7p connector (female)

- 0103621 AFI Auto Focus Insulated Arctic
- Operating temperature -58° to +185°F

**The additional qualifications of our High Definition Digital Cameras**
- High resolution CMOS rolling shutter
- Excellent impact- and vibration-resistance
- Light sensitivity 0.1 lux
- Excellent EMC performance 100 V/m

**Cameras HMOS**
- Compact, industrial high definition camera.

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- With 0.5m cable including a digicoax waterproof molded 4p male connector
- Including camera bracket

**Cameras EMOS**
- Low latency, high definition ethernet camera specifically designed for onboard computer systems.

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- Image streaming in MJPEG or H.264
- Total system latency less than 100ms
- Communication according to ISO 17215 protocol
**CAMERAS**

**Washer Wiper**
- Reservoir 8L with 19.7ft rubber hose
- Wall mount reservoir housing 12.1ft x w1.4ft x d0.8ft
- 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)

**Infrared illuminator**
0507300 IR-CIV870 Lamp
- 870nm IR light
- Max. 15W
- IP67
- Maximum range 262.5ft

**The advantages of Orlaco cables**
- All cables are specially developed by Orlaco
- Special cables are available for various circumstances such as severe conditions

**Armored cable especially for severe off-road conditions**
This cable offers good protection against severe conditions. This is due to the additional internal galvanised braided steel wire armor. Attention: if cable is constantly moving as on a boom or hinged construction, please use the dynamic cable.
- For EMC 100V/m

**Including 4p molded connectors:**
- 0303342 4.9ft 0303352 9.8ft
- 0303472 16.4ft 0303362 24.6ft
- 0303372 29.5ft 0303482 36ft
- 0303492 52.5ft 0305011 91.9ft

**Dynamic cable**
Designed for dynamic use.
- Soft cover with small bend radius

**Including 4p molded connectors:**
- 0304371 1.6ft 0304281 3.3ft
- 0304341 11.5ft 0304391 16.4ft
- 0304431 19.7ft 0304570 26ft
- 0304580 29.5ft 0304590 32.8ft
- 0304620 52.5ft 0305030 69ft
- 0304400 278.9ft

**Multi cable standard**
This standard cable can be used if no special requirements like mechanical protection or dynamic movement of the cable is needed.

**Including 4p molded connectors:**
- 0301960 3.3ft 0301870 6.6ft
- 0301890 9.8ft 0301880 16.4ft
- 0301910 24.6ft 0301900 29.5ft
- 0301920 52.5ft 0301940 69ft
- 0301990 131.2ft

**Including 7p connectors (1311250 & 1322450):**
- 0304420 1.6ft 0304260 6.6ft
- 0304410 19.7ft 0304610 36ft
- 0304620 52.5ft 0304450 69ft
- 0304400 278.9ft

**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
- Conform ONVIF-protocol
- Operating temperature between -40°F and +140°F
- Input Voltage 18...30V/DC

**AF Zoom HD-IP Cameras**
- Including 16.5ft ethernet cable, open wired
- Watertight IP66 and IP69K

0103810  AF-Zoom HD-IP Camera Aluminium
0103820  AF-Zoom HD-IP Camera SSSt

**Pan & Tilt Zoom HD-IP Cameras**
- Including 16.5ft ethernet cable, open wired
- Pan angle 340° (170° to left, 170° to the right)
- tilt angle 180° (90° up, 90° down)
- 32 presets for camera positions
- Watertight IP69K

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

**CABLES**

**Step 2**
- HD Image CMOS Sensor
- Chemically hardened lens
- 30x zoom
- Resolution: 1920 x 720 at 60 fps
- Video streaming over TCIP/IP
- Conform ONVIF-protocol
- Operating temperature between -40°F and +140°F
- Input Voltage 18...30V/DC

**AF Zoom HD-IP Cameras**
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- 32 presets for camera positions
- Watertight IP69K

0506810  PTZ HD-IP Camera Aluminium
0506820  PTZ HD-IP Camera SSSt
The possibilities offered by Orlaco LED monitors

- Automotive TFT liquid crystal display module, LED backlight
- Operating temperature -40°F to 185°F
- Impact and vibration resistance meet the stringent requirements
- Power protected against:
  - Induction voltages
  - Load dumps
  - Over- and undervoltage
- Mirror image setting
- Brightness automatically adjusts to the ambient light
- Full On-Screen-Display (OSD) in 8-15 languages
- Watertight molded connectors

Monitor 7” RLED (Incl. 5.2” bracket)
- Monitor 12” RLED (Incl. 7.5” bracket)
- Monitor 10” HLED

Monitors RLED
- High resolution pixel WVGA 800xRGBx480
- Option of a marker line per camera on the screen for the optimum determination of distance
- IP67 according to IEC 60529
- Integrated sun visor

Type | Video cable / connector | Power cable | Input Voltage | Art. no. \\
--- | --- | --- | --- | --- \\
7” | 6.6ft / 4p female | 6.6ft open wired | 12-60V/DC | 0208603 \\
7” 4Cam | 6.6ft Y-split / 4p female | 6.6ft open wired | 12-60V/DC | 0208612 \\
7” Serial | 19.7ft / 7p female | 19.7ft / 8p male | 18-30V/DC | 0208622 \\
7” Serial | 19.7ft / 7p female | 19.7ft open wired | 18-30V/DC | 0208632 \\
7” | 13.1ft / 4p female | 13.1ft open wired | 12-60V/DC | 0208672 \\
7” CAN SRD | 19.7ft / 7p female | 19.7ft open wired | 18-30V/DC | 0208871 \\
12” | 13.1ft / 4p female | 13.1ft open wired | 12-30V/DC | 0411000 \\
12” 4Cam | 6.6ft Y-split / 4p female | 6.6ft open wired | 12-30V/DC | 0411040 \\
12” 4Cam Serial | 6.6ft Y-split / 4p female | 6.6ft open wired | 18-30V/DC | 0411170 \\
12” Serial | 19.7ft / 7p female | 19.7ft / 8p female | 18-30V/DC | 0411130 \\
12” Serial | 19.7ft / 7p female | 19.7ft / 8p male | 18-30V/DC | 0411160 \\
12” CAN SRD | 19.7ft / 7p female | 19.7ft open wired | 18-30V/DC | 0411300 \\

4Cam
- Cable can be used to easily extend your system to display two cameras on one monitor or up to four cameras per monitor in combination with a Switcher.

CAN SRD
- Specially designed for RadarEye systems. (see page 50-51)

Serial
- For serial connection (Zoom cameras, PTZ-Cameras and MultiView box).

Monitors HLED
- High resolution pixel WXGA 1280xRGBx800
- Input Voltage 12V / 24V/DC
- IP54 according to IEC 60529
- 1m multi cable (power) open wired
- 1m multi cable (video) including 4p molded female coax connector

0224000 Monitor 10” HLED
Cable reels

0712020 Cable reel
- Maximum capacity 492ft cable 1220150
- Including 10p Harting connectors

0712040 Cable reel with 492ft + 49.2ft cable
- Including 492ft multicable with 7p female connector
- Including 49.2ft multicable with 10p female Harting connector
- Including mounting strips and pipe clamps

0710270 Spring driven cable reel
- Including 180.4ft cable 1220250 on reel with 7p female connector and 16.4ft monitor cable with 7p male connector
- Holds the cable tight

0712010 Cable reel
- Capacity up to 328ft cable on reel with 10p male connector
- Holds the cable tight

0710240 Cable reel spring driven
- Holds the cable tight
- 23ft cable (1220150) and 39.4ft cable (1220600)
- Watertight connector straight (1310850 & 1312001)
- Operating temperature 32°F to 167°F

0710280 Cable reel spring driven
- Specification identical to 0710240 except for: operating temperature -40°F to 167°F

Orlaco Battery packs parts
- Suitable for Battery packs 0049040 and 0049601.

Battery packs

0049040 Camera Control Unit + Battery
- Battery, 12V, 18Ah
- Including spiral cable (length 7m) for charging the battery manually (0303670)
- Battery pack is IP 65 watertight
- Can be charged using a solar panel / Auto-contact or charging cable
- Battery charge indicator line can be seen on monitor in the cabin
- Excluding Spider cable crane (0403880)

0049601 Camera Control Unit + Battery pack side connection 868 Mhz
- Battery, 12V, 18Ah
- Battery pack is IP 65 watertight
- Including remote control to operate the camera
- Can be charged using a solar panel / auto-contact
- Battery charge indicator line can be seen on monitor in the cabin
- Suitable for charging - solar panel/car jack
- Excluding cable set for spectrum scanner (0403861)

Charging systems

0405951 Auto-contact (sliding contact)
- Tower crane battery loading system
- Operating temperature between -40°F to 185°F

0049500 Solar Cell Panel
- Monocrystalline silicon cells
- Capacity 4.1A (nominal 3.75A)
- Dimensions 2.5ft x 2.2ft
- Weight 6.7kg
- Including mounting frame

Battery cables

0403880 Spider cable crane
- Specially designed to connect the Battery pack to the Spectrum Scanner.
- 12.5ft multicable including 8p female connector
- Two extra 4.6ft charging cables (7p male)
- 10p Harting male connector

0303670 Spiral cable for Battery pack
- Total length 19.7ft
- Including 10p Harting male and 7p male connector
Connectors

- 1310841 Connector 4p female Gold
  Recommended for multicable (1220170)

- 1312001 Connector 4p male Gold
  Recommended for multicable (1220170)

- 1310850 Connector 4p female PG9 Gold
  Recommended for dynamic cable (1220600)

- 1312050 Connector 4p male PG9 Gold
  Recommended for dynamic cable (1220600)

- 1311201 Connector 7p female Gold
  Recommended for Multi cable (1220170)

- 1322401 Connector 7p male Gold
  Recommended for Multi cable (1220170)

- 1311250 Connector 7p female PG9 Gold
  Recommended for Dynamic cable (1220600)

- 1322450 Connector 7p male PG9 Gold
  Recommended for Dynamic cable (1220600)

- 1312021 Connector 8p male Gold
  Recommended for Dynamic cable (1220600)

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

- 0357051 Bulkhead connector 7p
  • Suitable for lead-through on bodywork

Split cable (6.6ft)

- 0303781 Y-Split cable RLCD/RLED
  • With two 4p female connectors (video) and open wire cable (power)
  • For connections 2 to 4 cameras (with Switcher)

- 0304860 Y-Split cable 12" RLED
  • With 4p and 7p female connectors (video) and open wire cable (power)
  • For connections 2 to 4 cameras (with Switcher)

- 0304840 Y-split cable 12" RLED
  • With two 4p female connectors (video) and open wire cable (power)
  • For connections 2 to 4 cameras (with Switcher)

Cable disconnection sets

- 0351070 7p
  • Watertight
  • With caps

- 0351130 13p
  • Watertight
  • With caps

- 0351100 10p Harting
  • Watertight
  • With caps

Adapter plugs

- 0357500 Adapter plug 4p male - 7p female

- 0357510 Adapter plug 4p female - 7p male

Adapter cables

- 0304000 Adapter cable 4p female - 4p female

- 0304050 Adapter cable 4p male - 4p male

- 0303860 Adapter cable 4p female - BNC

- 0303770 Adapter cable 4p female - Cinch
  (If OEM monitor is used)

Switchers

- 0404040 Switcher UNI
  • Waterproof IP67 according to IEC 60529
  • 4p output for monitor

- 0404080 Switcher UNI IP67
  • Waterproof IP67 according to IEC 60529
  • 4p output for monitor

- 0404060 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 supplies

**0504870**  Junction box HD-IP  
Power supply for the HD-IP camera.  
- Including power cable 230V/AC  
- Maximum cable length 656.2ft

**0504880**  Junction box HD-IP  
Power supply for the HD-IP camera.  
- 24V/DC

**0004601**  Power supply 9-36V  
- Including 6.6ft cable  
- Power input 9-36V/DC  
- Power output 12V/DC

**0503830**  Power supply 115-230V/24V  
- 2 outputs: for loading battery and power supply for monitor  
- Built in a IP65 watertight box  
- Including connector 1312021 (8p)

### Interfaces

**0050000**  Glass fibre transmitter / receiver  
- Input voltage 12-16VA and 12-16V/DC  
- Operating temperature between -40°F and 167°F  
- Glass fibre 62.5 μm

### Video distributor

**0407001**  Orlaco video distributor  
For connecting a second and third Orlaco monitor.  
- 7 - 32 V/DC  
- Cables and connectors are not included

### Interface Control panel

**0502920**  Interface Control panel Serial 2x7p  
This interface is designed to connect the Handheld control AF to a Camera AF-Zoom or PTZ.  
- Including 12.6ft power/switch cable  
- Can be connected to each type of third-party monitor

### Video distributor

**0405100**  MultiView box II  
- 4 camera inputs (4x Compact Camera)

**0405110**  MultiView box II Serial  
- 4 camera inputs (3x Compact Camera 1x AF-Zoom Camera)

**0404300**  Switcher 4Cam  
This video switcher for third party monitors has 4 video inputs and 1 video output.  
- Connect up to 4 cameras to a third party monitor  
- Including 12.6ft power/switch cable

### Power supplies

**0502610**  Handheld control AF (serial)  
- Open wired

**0502620**  Control panel mount  
Built-in keyboard for activating of the Pan & Tilt / AF-Zoom / Tic camera.  
- Joystick (0506500) is not included  
- Dimensions: 5.5”x4.7”x3.1”mm

**0502650**  Handheld control AF 7p (serial)  
For activating of the Pan & Tilt / AF-Zoom / Tic camera.  
- Zoom function  
- Including 20.7ft power supply cable

**0404240**  Switcher Digicoax - 4 channel

**0502920**  Interface Control panel Serial 2x7p  
This interface is designed to connect the Handheld control AF to a Camera AF-Zoom or PTZ.  
- Including 12.6ft power/switch cable  
- Can be connected to each type of third-party monitor

**0405100**  MultiView box II  
- 4 camera inputs (4x Compact Camera)

**0405110**  MultiView box II Serial  
- 4 camera inputs (3x Compact Camera 1x AF-Zoom Camera)

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**0502650**  Handheld control AF 7p (serial)  
For activating of the Pan & Tilt / AF-Zoom / Tic camera.  
- Zoom function  
- Including 20.7ft power supply cable

**0404240**  Switcher Digicoax - 4 channel
OPTIONS

0702100  Zoom control box
Operating zoom in and out function of the camera AF-Zoom on a crane.
• Including hardware, t-yrap and locktape
• IP54

8975760  Push button yellow
For manually switching between cameras.

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

0702000  Compact joystick
• Operating temperature between -30°C and +75°C
• To assemble on control column
• IP40
• 12V/24V

0502630  Foot switch 5m
• Zoom in and out

0502660  Foot switch 10m
• Zoom in and out

Digital video recorder
0000250  DVR Multi view
Digital video recorder with four camera inputs and one video output with multiview options.
• Suitable for compact cameras (4p)
• Including 128GB 80 MB/s SDXC-card for max 72 hours of storage

Digital video recorder with one camera input and one video output
0000300  DVR one channel
• Can be used with a compact camera (4p) or serial camera (7p)
• Video loop function
• 9-30VDC
• Automatic timestamp
• Including 32GB SDHC-card for max 72 hours of storage and SD-card reader

Orlaco IP SmartView
0060310  Licence Smartview software
View and control of cameras over TCP/IP or a local computer network.
• Support H.264 digital video codec
• 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
• Motion detection
• Supplied on USB memory stick

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 492ft (dependent on surroundings)

0004091  LineMax 300
• Directional antenna with vertical orientation
• Maximum range 984ft (dependent on surroundings)
RadarEye unites visibility and active detection

Orlaco has developed this radar unit in addition to the camera-monitor systems. By combining the vision solution with an active signaling system, RadarEye offers additional safety and efficiency.

RadarEye is an integrated active view system designed to detect and see objects in zones obscured from the driver’s view. The radar system detects stationary as well as moving objects in a designated coverage area. With this view system the driver is actively warned with audible tones that increase in rate as objects come closer. When an object is detected it can be seen on the monitor and the driver can respond immediately. This prevents damage to the drivers truck and any other equipment he may reverse into. The radar units have a rugged design, are shockproof, waterproof and is not influenced by the environment, such as snow, rain, mud and or temperature changes.

RadarEye Interface boxes

0256010 Interface Box CAN/SRD/camera
The Interface Box is designed to connect SRD sensors to camera and CAN SRD monitor.

0504820 Interface Box with Ext. speaker CAN/SRD/camera
The Interface Box is designed to connect SRD sensors to a camera, CAN SRD monitor and external speaker.
• Set consists of: External speaker and Interface Box
• Sound pressure speaker: 85dB (+/−3dB) distance 3.3ft

RadarEye Cables

Cable M12 Green
Connection cable between Interface box and master SRD sensor or connection cable between slave SRD sensor and next SRD sensor.

Cable M12 Master-Slave Red
Connection cable between master SRD sensor and slave SRD sensor.

RadarEye Sets

0403120 Set SRD Corner Rear
Active Rearview system for corner mounting.
• Including SRD sensors, brackets and terminator
• Interface Box CAN/SRD/camera is required (0256010 or 0504820)
• Cables, camera and monitor CAN SRD are not included

0403100 Set SRD Center Rear
Active Rearview system for center mounting.
• Including SRD sensors, bracket, cable master-slave (0301080) and terminator
• Interface Box CAN/SRD/camera is required (0256010 or 0504820)
• Cables, camera and monitor CAN SRD are not included

RadarEye Brackets

0401330 Bracket SRD Sensor Corner Rear
Mounting bracket for SRD Sensor for corner mounting
• Stainless steel
• SRD sensor not included

0401320 Bracket SRD Sensor Center Rear
Mounting bracket for SRD Sensor for center mounting
• Stainless steel
• SRD sensors not included

RadarEye Parts

0004310 SRD sensor CAN Horizontal
Short Range Detection (SRD) sensor for integration in active view system (RadarEye).
• Connectors position: Side

0004320 SRD sensor CAN Vertical
Short Range Detection (SRD) sensor for integration in active view system (RadarEye).
• Connectors position: Top / Bottom

0350111 M12 Terminator 120 Ohm
120 Ohm resistor for terminating CAN bus.

Check our demo RadarEye videos on the Orlaco YouTube channel.
0701200 Oil damped camera bracket
Designed for usage on cranes to have a camera permanently pointed vertically downwards. The damper absorbs sudden movements and procures 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°.

0402320 Protective cover
Cover specially designed for the Compact Camera.

- Stainless steel housing

0402450 Camera Housing Dome
Ceiling mount for Compact Camera.

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

2015700 Adjustable mounting bracket 3/8" UNC
- Length 0.43ft

2015500 Adjustable mounting bracket
- Length 0.43ft

2015600 Adjustable mounting bracket
- Length 0.62ft

0403400 Compact Camera magnet bracket
For quick mounting of Compact Camera on steel profiles.

0402801 Quick-fit set Tower crane
- Including adjustable suction cup for quick mounting of the monitor on the cab window, magnet (with ball joint) for quick mounting of the monitor to the cab and 2x safety chains and mounting materials
- Stainless steel holder
- Operating temperature between -40°F to 185°F

0401310 Suction cup with ball joint
For mounting the Orlaco monitor on the cab window.

0401270 Camera bracket
Compact bracket specially designed for the Compact Camera.

- Cap can be resprayed in the color of the vehicle
- Including mounting kit
- Compact Camera are not included

0403310 Shock-absorbers for Compact Camera
In situations where shock absorption plays a major role, we recommend that the specially developed shock absorbers are used when installing the Compact Camera.

0403000 Compact Camera magnet bracket
For quick mounting of Compact Camera on steel profiles.

0402320 Protective cover
Cover specially designed for the Compact Camera.

- Stainless steel housing

0402450 Camera Housing Dome
Ceiling mount for Compact Camera.

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

2015700 Adjustable mounting bracket 3/8" UNC
- Length 0.43ft

2015500 Adjustable mounting bracket
- Length 0.43ft

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- Length 0.62ft

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- Including adjustable suction cup for quick mounting of the monitor on the cab window, magnet (with ball joint) for quick mounting of the monitor to the cab and 2x safety chains and mounting materials
- Stainless steel holder
- Operating temperature between -40°F to 185°F

0401310 Suction cup with ball joint
For mounting the Orlaco monitor on the cab window.

0401270 Camera bracket
Compact bracket specially designed for the Compact Camera.

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0403400 Compact Camera magnet bracket
For quick mounting of Compact Camera on steel profiles.
**OPTIONS**

- **0910280** Extra Weight for Zoomcam
  - Stainless steel
  - 1.09kg

- **0910270** Suspension Tube Complete
  - Stainless steel
  - Including sketch plate
  - Including lock pin

- **2013280** Adapter Pin for Release Set
  - Stainless steel

- **0910260** Mounting Bracket Set Additional
  - Stainless steel

- **0910240** Quick release set weld version
  - Stainless steel

- **0910250** Quick release set bolt version
  - Stainless steel

- **5200500** Magnet 80x18 M10
  For quick mounting video receiver on steel profiles.
  - Including safety chain

- **5200600** Magnet 100x22 M10

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**ISO Certifications**

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

- ISO/TS 16949 : 2009
- ISO 9001 : 2008

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

- ISO 14001 : 2004

**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 compliance. Orlaco Frontview systems meet all these requirements. R10 describes the EMC behavior of the Orlaco Camera and Monitor systems.

**TÜV Automotive Certifications**

The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) demands additional equipment. Orlaco Camera and Monitor systems and connection cables comply with these regulations.

**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.
It is Orlaco’s viewpoint that optimal vision around every vehicle and vessel should be the norm. It provides safety, less damage, comfort and efficiency. Vision is our mission®. A revealing mission. We develop professional vision solutions for every situation: