Advantech-DLoG

/ DLT-V72 Series

ADVANTECH DLOG

*Digital Logistics & Fleet Management*

# Catalog

## Accessories
## DLT-V72 Series

- Antennas
- Keyboards
- Scanners
- Stylus
- Terminal mounting brackets

Catalog V1.00

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# 1. ANTENNAS

## 1.1. Integrated and remote solutions

The antenna is a critical technical component for ensuring a stable radio link. Especially in challenging industrial environments such as warehouses and production facilities, there are no easy solutions with regard to wave propagation. No off-the-rack solution will work here and this is why Advantech-DLoG offers custom solutions.

Our integrated antennas are matched as perfectly as possible to the respective vehicle terminal and achieve an optimal circular radiation characteristic. The protective cap ensures high mechanical stability and protects the antenna from damage.

Solid driver cabs can significantly interfere with the radio link. For this application, we recommend so-called remote antennas, which are not attached directly to the vehicle terminal but rather on the vehicle roof, for example. They have better reception at this location.

To facilitate these types of configurations, Advantech-DLoG offers remote antennas from selected manufacturers.
When selecting the remote antennas, we take a range of factors into account to ensure that they are optimally matched to our terminals and to the respective customer application. This includes technical data such as radiation characteristics and efficiency.

## 1.2. Integrated Low Profile Wi-Fi antenna with diversity

| Technical data / Order number | |
|---|---|
| Application | Dual Band Diversity antenna for Wi-Fi frequency bands<br>IEEE 802.11 a/b/g/n |
| Number of antennas | 2 |
| Type | Omnidirectional antenna |
| Directionality | Optimized for the DLT-V72 housing |
| Frequency range | Band 1: 2400 to 2485 MHz<br>Band 2: 5150 to 5875 MHz |
| Antenna gain | Max. 5 dBi (without loss through the cable) |
| Impedance | 50 Ω |
| Polarization | Vertical / Horizontal |
| Order number antenna red | DL-WFAK79377500 |
| Order number antenna grey | DL-WFAK79377600 |

## 1.3. External Wi-Fi antenna kit, remote

| Technical data / Order number | |
|---|---|
| Application | Dual Band antenna for Wi-Fi frequency bands<br>IEEE 802.11 a/b/g/n |
| Mounting location | For remote installation, e.g. on the roof of the forklift |
| Number of antennas | 1 |
| Type | Omnidirectional antenna |
| Frequency range | Band 1: 2400 to 4900 MHz<br>Band 2: 4900 to 6000 MHz |
| Antenna gain | Band 1: Max. 4 dBi ((without loss through the cable)<br>Band 2: Max. 6,5 dBi ((without loss through the cable) |
| Impedance | 50 Ω |
| Polarization | Vertical / Horizontal |
| Dimensions | Ø 86 x 43 mm (Ø 3,39” x 1,69”) |
| Weight | 0,3 kg (0,66 lbs) |
| Delivery contents | 3 m antenna cable and mounting set |
| Connector labeling | N-Type or TNC<br>N,Jack, female, bottom<br>RSMA plug for RSMA socket on the terminal |
| Order number | DL-AGIK79378700 |

## 1.4. External GPS receiver

| Technical data / Order number | |
|---|---|
| Application | GPS<br>GALILEO<br>DGPS (WAAS Europe, EGNOS USA) |
| Technology | u-Blox 5<br>Supports NMEA 0183 protocols: GGA, GSA, GSV, RMC, VTG<br>USB specification 1.1<br>Auto Baud Rate up to 115200<br>UP-DATE Rate: up to 4 Hz<br>LED display for GPS atatus |
| Type | RHCP |
| Frequency range GPS | L1 frequency 1575.42 MHz |
| Delivery contents | USB cable, cable length: 1.50 m |
| Order number | 17DLWFAN66333000 |

# 2. KEYBOARDS WITH MOUNTINGS

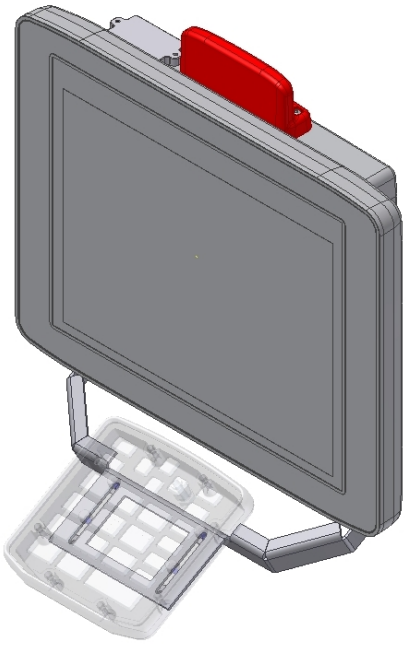
## 2.1. 24-key keyboard

### 2.1.1. Technical data keyboard

| Technical data / Order number | |
|---|---|
| Application | For raw industrial environment and vehicles.<br>Suitable for operation with gloves.<br>Outstanding haptics and tactility. |
| Housing material | Coated aluminum |
| Dimensions | Height 132 mm, Width 132 mm, Depth 24 mm |
| Weight | 0.5 kg |
| Cable length | 50 cm |
| Number of keys | 24 |
| Keys service life | 1 million switching cycles min. |
| Key switching force | 2 N |
| Key switching distance | 1.5 mm |
| Key press technology | Sealed direct press |
| Connection | USB |
| Supply voltage | 5 V |
| IP protection | IP65 |
| Operating temperature | -10 to +60 °C |
| Storage temperature | -35 to +80 °C |
| Delivery contents | USB connection cable included |
| Order number | DL-KBXX65409200 |

### 2.1.2. Front mounting

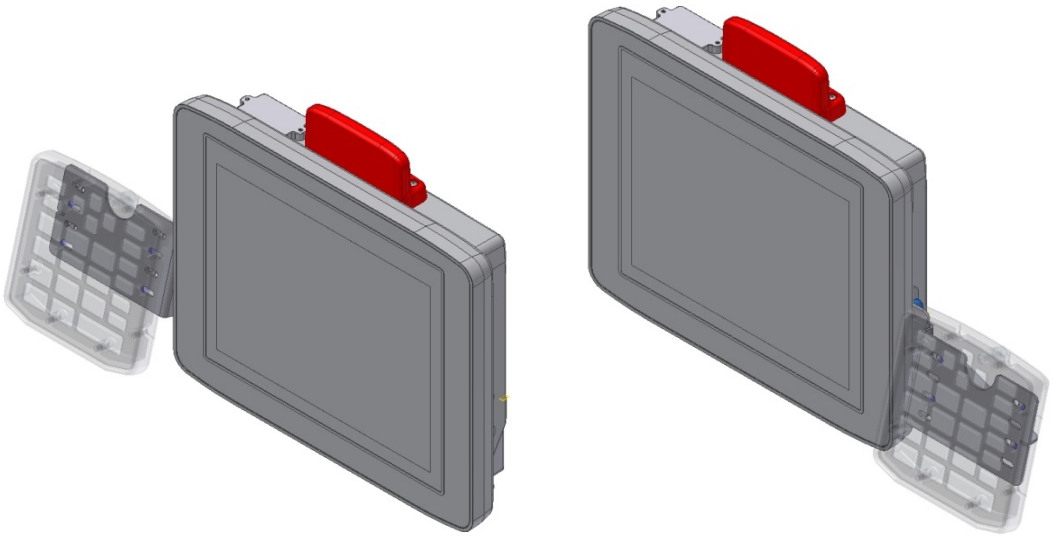
Example: DLT-V7212



| Technical data / Order number | |
|---|---|
| Application | For raw industrial environment and vehicles |
| Vibration/shock resistance | 5M3 |
| Material | Steel St 37-2 powder coated |
| Delivery contents | Mounting<br>Screws for attachment to the terminal |
| Order number (DLT-V7210 and DLT-V7212) | DL-MEMS79375100 |

### 2.1.3. Side mounting

Examples: DLT-V7210



| Technical data | |
|---|---|
| Application | For raw industrial environment and vehicles |
| Vibration/shock resistance | 5M3 |
| Material | Steel St 37-2 powder coated |
| Delivery contents | Mounting<br>Screws for attachment to the terminal |

| Order numbers | |
|---|---|
| Side mounting for DLT-V7210, right | DL-MEMS79375200 |
| Side mounting for DLT-V7210, left | DL-MEMS79375300 |
| Side mounting for DLT-V7212, right | DL-MEMS79372000 |
| Side mounting for DLT-V7212, left | DL-MEMS79372100 |

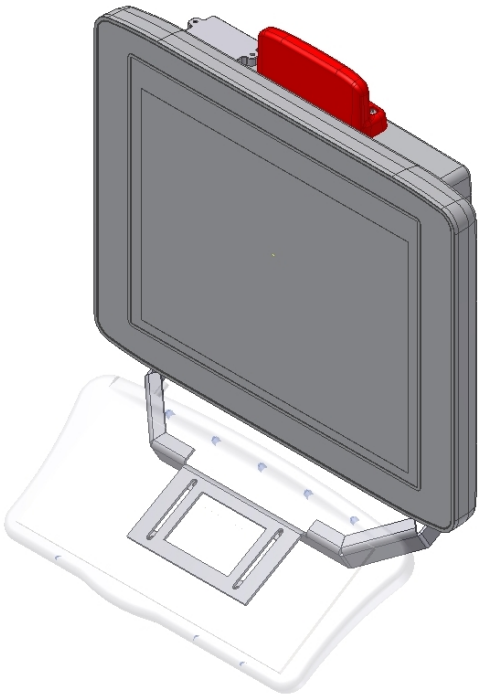
## 2.2. SMALL keyboard

### 2.2.1. Technical data SMALL keyboard

| Technical data / Order number | |
|---|---|
| Application | For raw industrial environment and vehicles.<br>Suitable for operation with gloves.<br>Outstanding haptics and tactility. |
| Housing material | Plastic |
| Dimensions | Height 298 mm, width 142 mm, depth 22 mm |
| Cable length, table version | 180 cm |
| Cable length, mounted version | 60 cm |
| Number of keys | 86, integrated mouse function |
| Keys service life | At least 1 million switching cycles |
| Key switching force | 0.6 N |
| Key switching distance | 1.5 mm |
| Connection | USB |
| Operating voltage | 5 V |
| Current consumption | 10 mA |
| IP protection class/category | IP65 |
| Operating temperature | -10 to +60 °C |
| Storage temperature | -40 to +80 °C |
| Delivery contents | Including USB connection cable |
| Order numbers | German (QWERTZ): DL-CKBSM65409700<br>English (QWERTY): DL-CKBSM65409800<br>French (AZERTY): DL-CKBSM65409300 |

### 2.2.2. Front mounting

Example: DLT-V7212



| Technical data / Order number | |
|---|---|
| Application | For raw industrial environment and vehicles |
| Vibration/shock resistance | 5M3 |
| Material | Steel St 37-2 powder coated |
| Delivery contents | Including screws for attachment to the terminal |
| Order number (DLT-V7210 and DLT-V7212) | DL-MEMS79375100 |

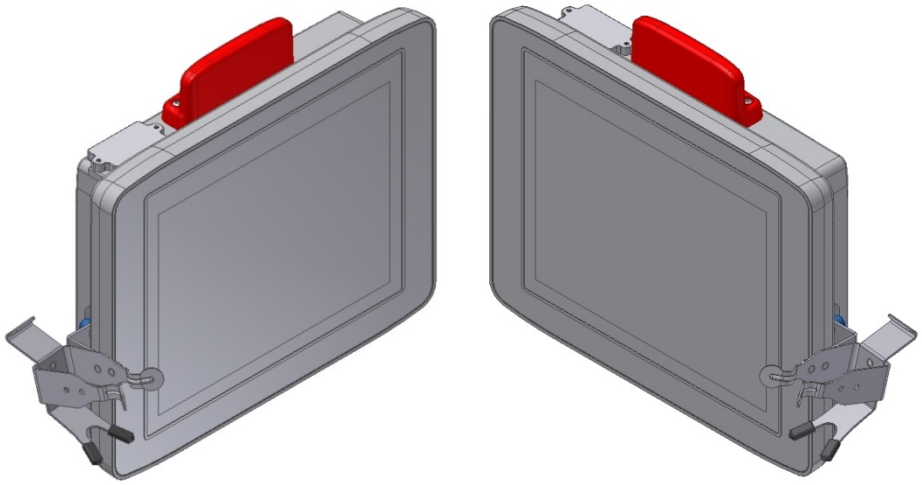
# 3. SCANNERS WITH MOUNTINGS

## 3.1. Scanners

Please contact your Advantech-DLoG sales representative if needed.

## 3.2. Mountings left, right

Examples: DLT-V7210



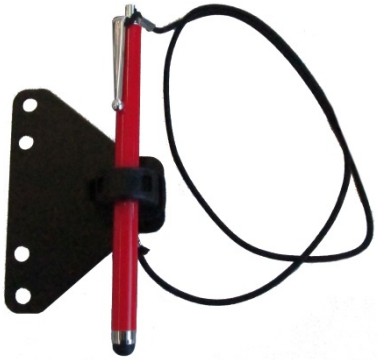
| Technical data | |
|---|---|
| Application | For raw industrial environment and vehicles |
| Vibration/shock resistance | 5M3 |
| Material | Steel St 37-2 powder coated |
| Delivery contents | Mounting<br>Screws for attachment to the terminal |

| Order numbers | |
|---|---|
| Scanner mounting for DLT-V7210, right | DL-MEMS79375400 |
| Scanner mounting for DLT-V7210, left | DL-MEMS79375500 |
| Scanner mounting for DLT-V7212, right | DL-MEMS79372200 |
| Scanner mounting for DLT-V7212, left | DL-MEMS79372300 |

# 4. STYLUS WITH MOUNTINGS

Stylus with mounting
for resistive touchscreen

Stylus with mounting
for PCT touchscreen



| Technical data | |
|---|---|
| Application | For raw industrial environment and vehicles |
| Material (mounting) | Steel St 37-2 powder coated |
| Delivery contents | Stylus<br>Mounting with elastic band (anti-loss)<br>Screws for attachment to the terminal |

| Order numbers | |
|---|---|
| Stylus with mounting<br>for DLT-V7210 with a resistive touchscreen | DL-MEMT79388200 |
| Stylus with mounting<br>for DLT-V7210 with a PCT touchscreen | DL-MEMT79388300 |
| Stylus with mounting<br>for DLT-V7212 with a resistive touchscreen | DL-MEMT79388400 |
| Stylus with mounting<br>for DLT-V7212 with a PCT touchscreen | DL-MEMT79388500 |

# 5. TERMINAL MOUNTINGS

## 5.1. Operation classes 5M3, 5M2 and 5M1

This catalog shows the mounting solutions for the DLT-V72 Industrial PCs.

It specifies whether the listed mounting solutions are suitable for mobile use, restricted mobile use or stationary use.

These uses correspond to the operation classes 5M3, 5M2 and 5M1 for mechanical environmental conditions.

The following standards offer a practical means of reference:

- DIN EN 60721-3-5: 1998 classification of environmental conditions, part 3, section 5: Use on and in ground vehicles.
- Military standard MIL-STD 810F: 2000.

### 5M3: Mobile use

Operational environments with **high** energy vibrations and **high** energy shocks as well as **rough** handling/transport compliant with:

- Operation class **5M3** according to DIN EN 60721-3-5 or equivalent.
- Category **US Highway Truck** according to MIL-STD 810F.
- Examples: Vehicles without shock absorption: Forklifts, unbalanced machines: Combustion engine of a construction machine.

### 5M2: Restricted mobile use

Operational environments with **low** energy vibrations and **high** energy shocks as well as **careful** handling/transport compliant with:

- Operation class **5M2** according to DIN EN 60721-3-5 or equivalent.
- Category **US Highway Truck** according to MIL-STD 810F.
- Examples: Vehicles with shock absorption: Driver's cab in a tractor, standing machines: Machine tools.

### 5M1: Stationary use

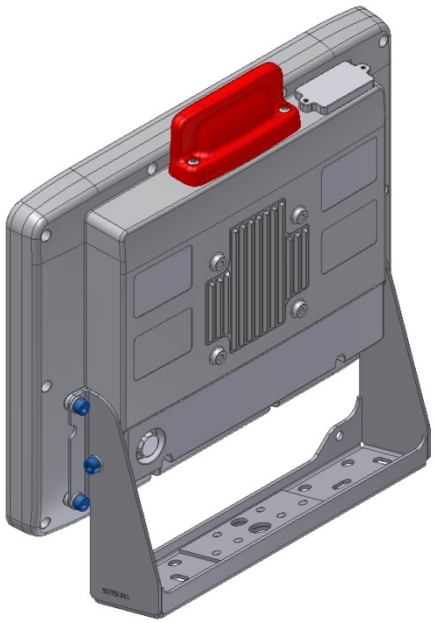
Operational environments with **low** energy vibrations and **medium** energy shocks as well as **very careful** handling/transport compliant with:

- Operation class **5M1** according to DIN EN 60721-3-5.
- Examples: Vehicles with very good shock absorption: Car dashboard, immobile mounting surfaces: Desk or wall.

## 5.2. Mounting brackets / adapters

### 5.2.1. Mobile mounting bracket

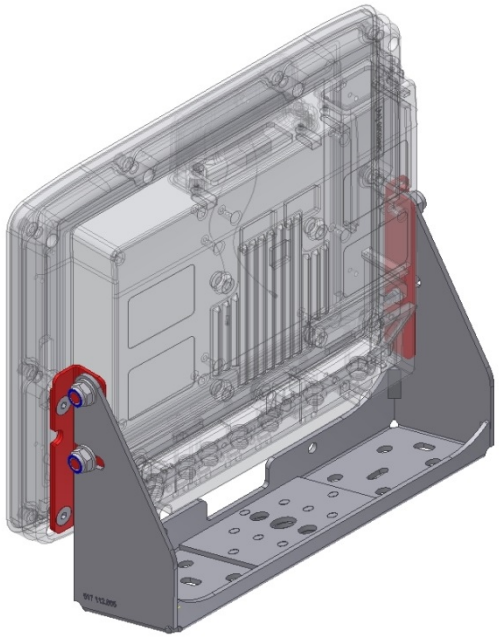
Example: DLT-V7212



| Technical data / Order number | |
|---|---|
| Application | For raw industrial environment and vehicles |
| Vibration/shock resistance | Suitable for mobile use according to class 5M3 |
| Material | Steel St 37-2 powder coated |
| Delivery contents | Mounting<br>Screws for attachment to the terminal |
| Order number (DLT-V7210 and DLT-V7212) | DL-MEMT79375000 |

### 5.2.2. Adapter set for reusing MPC 6 mobile mounting bracket

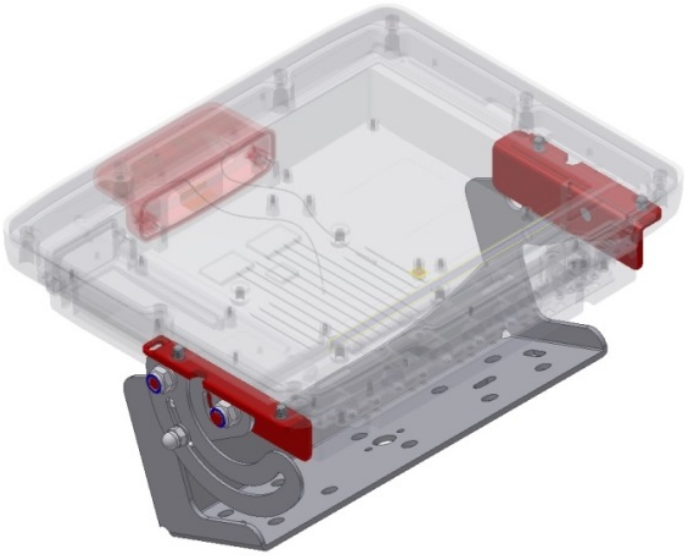
Example: DLT-V7210



| Technical data / Order number | |
|---|---|
| Application | Adapter set for reusing the mobile mounting bracket of the terminal MPC 6/10 or MPC 6/12. |
| Vibration/shock resistance | Suitable for mobile use according to class 5M3 |
| Material | Steel St 37-2 powder coated |
| Delivery contents | Mounting<br>Screws for attachment to the terminal |
| Order number (DLT-V7210 and DLT-V7212) | DL-MEMS79375800 |

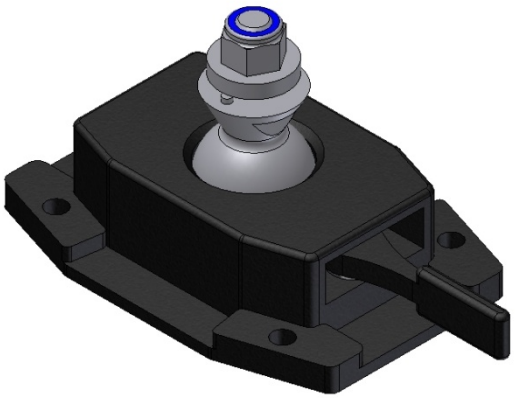
### 5.2.3. Adapter set for reusing MPC 6 stationary mounting bracket

Example: DLT-V7210



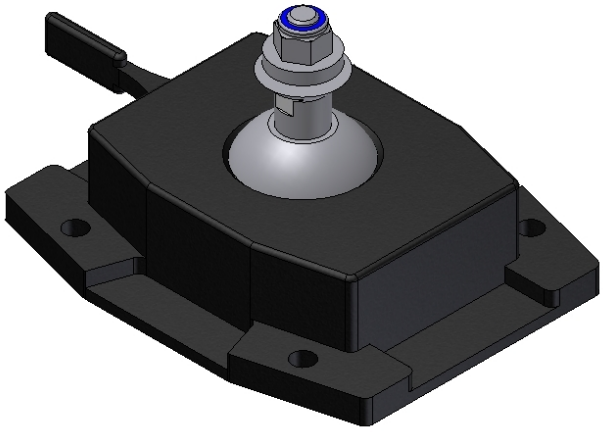
| Technical data / Order number | |
|---|---|
| Application | Adapter set for reusing the stationary mounting bracket of the terminal MPC 6/10 or MPC 6/12. |
| Vibration/shock resistance | Suitable for stationary use according to 5M1 |
| Material | Steel St 37-2 powder coated |
| Delivery contents | Mounting<br>Screws for attachment to the terminal |
| Order number<br>(DLT-V7210 and DLT-V7212) | DL-MEMS79375900 |

### 5.2.4. Clamp mount small



| Technical data / Order number | |
|---|---|
| Application | The clamp mount small is always combined with an Advantech-DLoG mounting bracket.<br>Both together enable you to attach the DLT-V72 terminal freely swiveled and flexible positioned. |
| Vibration/shock resistance | DLT-V7210: Suitable for mobile use according to class 5M3<br>DLT-V7212: Suitable for restricted mobile use according to class 5M2 |
| Delivery contents | Clamp mount small |
| Order number<br>(DLT-V7210 and DLT-V7212) | DL-CMECF51029001 |

### 5.2.5. Clamp mount maxi



| Technical data / Order number | |
|---|---|
| Application | The clamp mount maxi is always combined with an Advantech-DLoG mounting bracket.<br>Both together enable you to attach the DLT-V72 terminal freely swiveled and flexible positioned. |
| Vibration/shock resistance | DLT-V7210: Suitable for mobile use according to class 5M3<br>DLT-V7212: Suitable for restricted mobile use according to class 5M2 |
| Delivery contents | Clamp mount maxi |
| Order number<br>(DLT-V7210 and DLT-V7212) | DL-CMECF51029100 |

### 5.2.6. Clamp mount adapter low

| Technical data / Order number | |
|---|---|
| Application | The clamp mount adapter low is always combined with a clamp mount.<br>Both together enable you to attach the DLT-V72 terminal without mounting bracket. |
| Vibration/shock resistance | DLT-V7210: Suitable for mobile use according to class 5M3<br>DLT-V7212: Suitable for restricted mobile use according to class 5M2 |
| Delivery contents | Clamp mount adapter low<br>Screws for attachment to the terminal (VESA drill holes) |
| Order number<br>(DLT-V7210 and DLT-V7212) | DL-MEMT70123500 |

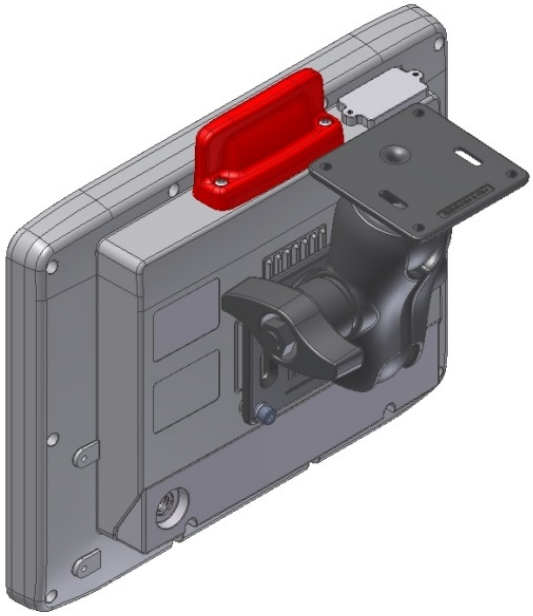
### 5.2.7. Clamp mount adapter high

| Technical data / Order number | |
|---|---|
| Application | The clamp mount adapter high is always combined with a clamp mount.Both together enable you to attach the DLT-V72 terminal without mounting bracket. |
| Vibration/shock resistance | DLT-V7210: Suitable for mobile use according to class 5M3<br>DLT-V7212: Suitable for restricted mobile use according to class 5M2 |
| Delivery contents | Clamp mount adapter high<br>Screws for attachment to the terminal (VESA drill holes) |
| Order number<br>(DLT-V7210 and DLT-V7212) | DL-CMEMT70123400 |

## 5.3. RAM-Mount

### 5.3.1. RAM-Mount set short, ball 2.25"

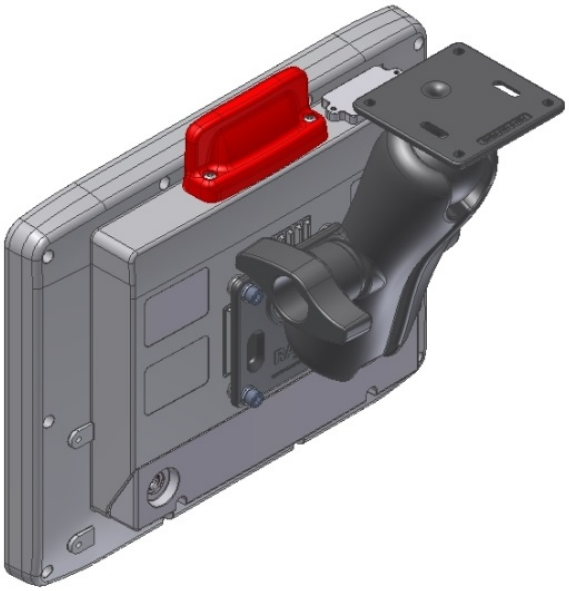
Example: DLT-V7212



| Technical data / Order number | |
|---|---|
| Application | For raw industrial environment and vehicles |
| Vibration/shock resistance | Suitable for mobile use according to class 5M3 |
| Delivery contents | RAM mounting:<br>– Ball 2.25" (with plate)<br>– 1 arm<br>– Arm length 130 mm<br>Screws for attachment to the terminal |
| Order number<br>(DLT-V7210 and DLT-V7212) | DL-CMEMT70129800 |

### 5.3.2. RAM-Mount Set Long, Ball 2.25"

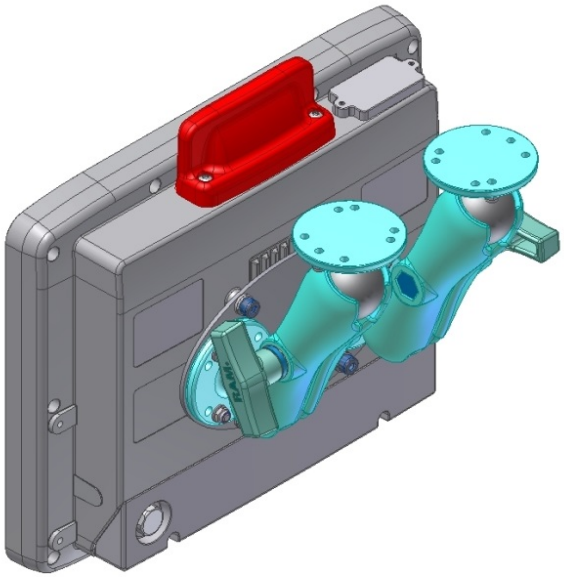
Example: DLT-V7212



| Technical data / Order number | |
|---|---|
| Application | For raw industrial environment and vehicles |
| Vibration/shock resistance | Suitable for mobile use according to class 5M3 |
| Delivery contents | RAM mounting:<br>– Ball 2.25" (with plate)<br>– 1 arm<br>– Arm length 215 mm<br>Screws for attachment to the terminal |
| Order number<br>(DLT-V7210 and DLT-V7212) | DL-CMEMT70129700 |

### 5.3.3. RAM-Mount Set Long, Double Arm, Ball 1.5"

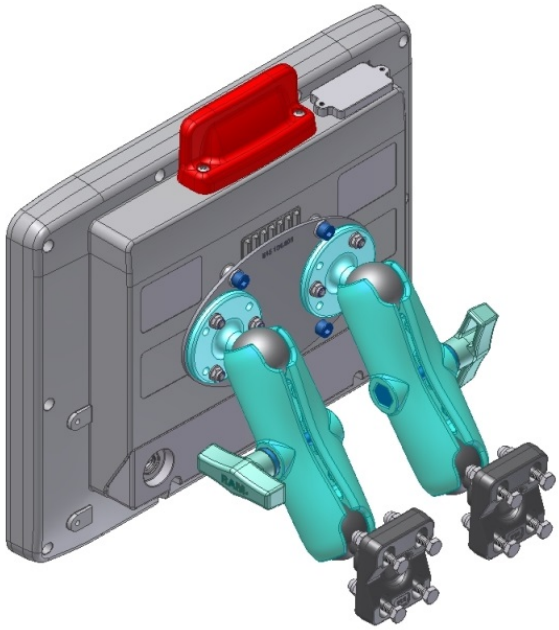
Example: DLT-V7210



| Technical data / Order number | |
|---|---|
| Application | For raw industrial environment and vehicles |
| Vibration/shock resistance | Suitable for mobile use according to class 5M3 |
| Delivery contents | RAM mounting:<br>– Ball 1.5“<br>– 2 arms<br>– Arm length 150 mm<br>Screws for attachment to the terminal |
| Order number<br>(DLT-V7210 and DLT-V7212) | DL-BMEMT70146300 |

### 5.3.4. RAM-Mount Set Long, Double Arm, Ball 1.5", Tube Mounting

Example: DLT-V7212



| Technical data / Order number | |
|---|---|
| Application | For raw industrial environment and vehicles |
| Vibration/shock resistance | Suitable for mobile use according to class 5M3 |
| Delivery contents | RAM mounting:<br>– Ball 1.5"<br>– 2 arms<br>– Arm length 150 mm<br>– For tube mounting<br>Screws for attachment to the terminal |
| Order number<br>(DLT-V7210 and DLT-V7212) | DL-CMEMT70119300 |