

Safety Instructions

DLT-V4108 Industrial PC

- Carefully read and comply with the safety instructions.
- Carefully read the accompanying “DLT-V4108 Quick Start Guide”
- Keep all documents for future reference.
- You can find additional information in the “DLT-V4108 Manual” at www.advantech-dlog.com, Downloads -> Products.

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Design elements in this safety instructions

This symbol and the keywords indicate hazards that pose a risk to life and limb:



DANGER / WARNING / CAUTION

Personal injury.

DANGER: danger that immediately leads to death or severe injury.

WARNING: danger that can lead to death or severe injury.

CAUTION: danger that can lead to slight injuries.

These tips warn you of possible property damage:

NOTICE: Physical damage

Information about possible physical damage

1 Intended use

DLT-V4108 Industrial PC is a data communication terminal for using in commercial environments (e.g. logistics, warehouse, manufacture site). Any other or additional usage beyond this shall be deemed as improper usage. The user/operator of DLT-V4108 is solely responsible for any resulting damage. This also applies to any unauthorized modifications made to this device.

DLT-V4108 is intended to be used either with the original Advantech-DLoG power cable or an Advantech-DLoG certified external DC power supply with 9 to 60 VDC and 5 A.

The maximum system operation temperature is +50 °C. If need further assistance, please contact Advantech-DLoG for further information. Intended use includes the compliance with all safety instructions and the compliance with the approved environmental conditions and specifications for this device.

DLT- V4108 Industrial PC:

- is not approved to be used in any EX zone (potential explosion hazard), on ships and railed vehicles.
- is not approved to be used in any life-support system or critical safety system where system malfunction can lead to direct or indirect endangerment of human life.

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Only use accessories that have been tested and approved by Advantech-DLoG for the respective DLT-V4108. Otherwise, any DLoG GmbH warranty for this device will be void.



CAUTION

Replaceable Battery.

The DLT-V4108 has an integrated uninterrupted power supply (UPS). The battery pack (lithium-ion technology) of the UPS is located inside of back cover and couldn't be changed by user.

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

2

Required qualification



WARNING

Only qualified and skilled personnel may commission (e.g. electrical installation and mechanical mounting) and maintain DLT-V4108. Because of the integrated UPS, knowledge is required of lithium-ion batteries and the precautions/safety regulations that have to be taken with them.

Qualified and skilled personnel referred in these safety instructions are persons who are familiar with these processes and have the corresponding qualifications for their activities, such as:

- Training or instruction in how to switch on and off, ground, and label power circuits and devices or systems in accordance with the current standards for safety equipment, as well as the required authorization..

- Training or instruction in how to maintain and use appropriate safety equipment in accordance with the current standards for safety equipment.
- Training in first aid.

Users of DLT-V4108 industrial PC must be trained by skilled personnel and instructed about the operation of the device.

3

Transport / Storage



WARNING

Risk of injury due to weight and sharp-edged parts.

DLT-V4108 can fall down and cause injuries due to its weight. The strain relief rail can have sharp edges and cause cutting injuries

- Always hold DLT-V4108 by its housing with both hands.
- Never use the antenna cap as a handle. It can break due to the weight involved.
- Do not hold DLT-V4108 by the strain relief rail.
- Use the assistance of a second person for installation work.

NOTICE: Physical damage

Protecting touchscreens from damage.

- Protect touchscreens from sharp edges, impacts, and heavy objects.
- If stacking, do not stack higher than four devices.
- Place devices front-to-front in this case. The VESA mounting point on the rear side of the device can damage the touchscreen of another device.

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- Use protective material (non-flammable!) between the devices as a precaution.

UPS battery pack safety notes



WARNING

Personal injury due to short-circuit, fire, chemical burns, toxic substances.

The DLT-V4108 has an integrated uninterrupted power supply (UPS). The battery pack (lithium-ion technology) of the UPS is located inside of back cover and couldn't be changed by user.

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

The integrated UPS lithium-ion battery packs can ignite if the DLT-V4108 is handled or stored improperly (risk of fire), cause chemical burns or release toxic substances.

- Use care when handing the DLT-V4108.
- Do not damage the DLT-V4108; otherwise lithium-ion battery packs could be damaged.
- Do not allow the DLT-V4108 to come into contact with fire.
- Store the DLT-V4108 in a cool and dry location and comply with the specified storage temperature and air humidity.
- Provide for sufficient ventilation of the storage location.
- Do not store the device near source of heat or fire, open flames or heaters.
- Do not allow it to come into contact with fire.

- Have suitable fire extinguishers ready (foam or powder) in accordance with safety regulations.

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Commissioning



WARNING

Hazardous voltage, electrical shock from contact with live parts.

- Do not put DLT-V4108 into operation if it is damaged.
- Do not open or modify DLT-V4108.
- Only connect or disconnect electrical connections when the device is in a de-energized state (electrically dead).
- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and

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on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit
- different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Wireless technology

DLT-V4108 device is intended to transmit RF energy. To protect humans against RF exposure and to comply with country-specific regulations:

- This equipment should operate with minimum distance 20 cm between the radiator & your body
- Make sure that the transmission power and the radio frequency of DLT-V4108 comply with the regulations for the respective country where the device is deployed.
- Depending on the country-specific regulations, the operating company/importing company may be required to ensure the settings of wireless operation are compliant. The regulatory authorities in the relevant country can provide information on this.
- Observe the applicable regulations for your deployment location/country with regard to frequencies and the maximum permissible transmitting power. Responsibility for this lies with the company operating DLT-V4108.

Any changes or modifications which are not expressly approved by the party responsible for the compliance can lead to the withdrawal of the operating license and guarantee for this device.

Electromagnetic radio frequency energy can interfere with technical devices.

- Do not use DLT-V4108 near pacemakers.
- Before using the device please obtain information about the use of DLT-V4108 within certain areas (e.g. airports, hospitals, etc.) and also about the respectively applicable regulations and obtain an approval for the operation of the device, if necessary.

Important information for mechanical mounting



WARNING

Observe the manufacturer's instructions for the respective application site.

- Observe the manufacturer's instructions about the installation of peripheral devices.
- This is particularly important when welding or drilling supporting parts.
- Observe the manufacturer's instructions for connecting additional loads, for instance, in conjunction with an emergency shut-off switch.

Risk of accident due to unstable attachment of DLT-V4108.

- When installing DLT-V4108, please make sure that no one will be injured if

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the bracket breaks (e.g. because of a stress fracture).

- Alternatively please put appropriate safety measures in place (e.g. install a security cable in addition to the mounting bracket).

Important information for electrical installation



WARNING

Electrical shock due to lack of disconnecting device.

DLT-V4108 industrial PCs are not equipped with disconnecting devices that are accessible from the outside; they do not have switches. To enable the device to be quickly disconnected from the power supply in emergency situations:

- Install an easily accessible disconnecting device close to the device.
- Make sure that the disconnecting device disconnects all power supply lines.

Electrical shock due to insufficient EMERGENCY shut-off mechanism

If the application site's EMERGENCY-OFF of does not switch off DLT-V4108, there is a risk of causing electrical shock.

- Install the application site's EMERGENCY-OFF switch and the DLT-V4108 so that DLT-V4108 is switched off as well when the EMERGENCY-OFF switch is operated.

Power supply cable and grounding



WARNING

Electrical shock, fire due to incorrect cable routing or insufficient grounding.

- Use only original Advantech-DLoG power supply cables; these meet the specific requirements for low-temperature flexibility, UV resistance, oil resistance, etc.
- Make sure that the power supply cables are running without kinks and securely protected against crushing and abrading.
- DLT-V4108 may only be connected to a SELV circuit (Safety Extra Low Voltage).
- The DC+ connecting cable must be protected by a fuse (30 AT max.).
- The ignition connecting cable must be protected by a fuse of the following type: 5x20 mm T 125 mA L / 250 V, for example, a Wickmann 195-125 mA / 250 V.
- Observe correct voltage range.
- Ensure that the power supply cables are fused correctly.
- Read the label on the cable and connect the power supply cable with correct polarity.
- Cut the power supply cable to the minimum length. This avoids cables getting tangled and improves the quality of power supply.
- Connect the power supply cable to a suitable place. Ensure that the connecting cable has an adequate cross section and ampacity at the connection point.

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Observe the following instructions when connecting/removing external devices.

- Only use accessories that have been tested and approved by Advantech-DLoG for the respective DLT-V4108
- DLT-V4108 may not be connected to power supply if external devices are being connected/ removed (not applicable for USB devices). Otherwise considerable damage could be caused to both DLT-V4108 and the peripheral devices
- Make sure that peripherals with their own power supply are either switched on at the same time as DLT-V4108 or after the start of DLT-V4108.
- Otherwise, you must ensure that a backflow from the external device to DLT-V4108 system cannot take place.
- Only power up DLT-V4108 when all devices have been connected and DLT-V4108 has been closed correctly (remember the cable cover!). Otherwise, you may damage DLT-V4108.

5 Handling / Operation

NOTICE: Physical damage

Improper operation can cause damage and downtimes to the DLT-V4108 and to the connected complete system.

- Operators of the DLT-V4108 must be trained in the handling of the device.

Different temperature and air humidity.

If DLT-V4108 is alternately used between very different temperature and air humidity condition, condensation may form on or within DLT-V4108.

- To prevent damaging DLT-V4108, you will need to wait sufficient time for the moisture to evaporate before using DLT-V4108.

Cables

- Be sure that nothing rests on power cable and the cable is not located in where it can be tripped over or stepped on.
- When you disconnect any cable, pull on its connector or on its strain relief loop.
- Do not pull on the cable itself. As you pull out the connector, keep it evenly aligned to avoid bending any connector pin.
- Also, before you connect any cable, please make sure that both connectors are correctly oriented and aligned.
- Use available strain relief rails.

6 Maintenance



WARNING

Only the manufacturer and its authorized service centers may:

- Conduct repairs.
- Carry out modifications.
- Replace modules.
- Open the device.

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The legal warranty shall apply. It expires if customer performs measurement on the device which is only permitted to be performed by the manufacturer and it's authorized Service Centers.

Risk of accident due to unstable attachment of DLT-V4108.

If the attachment of DLT-V4108 becomes loose and breaks during operation or movement, this can lead to severe accidents.

- Regularly check whether DLT-V4108 is firmly seated in the associated holder (RAM Mount™) and the mounting screws are not loose.

Hazardous voltage, electrical shock from contact with live parts when cleaning the device.

To prevent electrical shock while cleaning the device:

- Switch off DLT-V4108 before cleaning.
- Disconnect DLT-V4108 from power supply.
- Disconnect all accessories which are in connection with DLT-V4108.

NOTICE: Physical damage

Cleaning the touchscreen and housing

- Use a neutral glass cleaner without ammonia or isopropyl alcohol applied to a lint-free cloth.
- Do not apply cleaning agent to the touchscreen; apply it to the cleaning cloth
- Then wipe off the touchscreen.
- Do not use any abrasive glass cleaner or cloths to clean the touchscreen which could scratch it.

- Never use chemical solvents to clean the touchscreen.
- Do not use acidic or alkaline solutions to clean or apply on DLT-V4108.
- Do not use cleaning agents that contain ammonia or sulfur (tile cleaners, for example, contain ammonia) to clean or apply on DLT-V4108.

7 Regulatory information

Country-specific approvals (EC, US, Canada, China, etc.

Please observe all country-specific markings on the device as well as information in the “DLT-V4108 Manual“ (EC declaration of conformity etc.).

Recycling information



DLT-V4108 devices that are no longer being used may not be disposed of in the regular residential or domestic waste; they must be taken to an official public collection point and handled by a disposal provider. Please contact the responsible authorities in your country/region to find out about the applicable regulations for proper disposal, if necessary.

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Technical customer support

Please contact your distributor, your sales representative or Advantech-DLoG's customer service to receive technical support.

Please have the following information available:

- Product name
- Serial number
- Description of your peripheral attachments
- Description of your software (operating system, version, application software, etc.)
- A complete description of the problem
- The exact wording of any error messages

Advantech-DLoG Service & Support

Worldwide service and comprehensive support:

<https://www.advantech-dlog.com/en/service-and-support/>



E-Mail: helpdesk@advantech-dlog.com

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Manufacturer address

Advantech-DLoG
DLoG GmbH
Industriestraße 15
D-82110 Germering

Warranty

The Advantech-DLoG general terms and conditions of business are applicable to DLT-V4108 and its accessories (Liability for defects -> limitation period for claims in relation to defects). For more details, please refer to www.advantech-dlog.com.

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