Quick Start and Installation Guide (EN)

DLT-V6210FL

ADVANTECH DLOG

Digital Logistics & Fleet Management

1 Introduction – For Your Safety

- Read and observe this document and the accompanying “DLT-V6210 Safety Instructions” carefully.
- Keep all documents for future reference.
- Go to www.advantech.com for detailed manuals, e.g. “DLT-V6210 Manual” and “MDevice Configuration Manual”.

DANGER

Observe the intended use.

Observe the intended use of the DLT-V6210, e.g.: No use in potentially explosive zones and on ships, on railed vehicles, no use in life-supporting systems or security-critical facilities.

Observe the required qualification.

This document is intended for qualified skilled personnel. Only skilled personnel may put the DLT-V6210 into operation.

- Do not put the DLT-V6210 into operation if it is damaged.
- Do not open or modify the DLT-V6210.
- Only connect or disconnect electrical connections when the device is in a de-energized state (electrically dead).

Design method in this document

Hazards that pose a risk to life and limb – Personal injury:

DANGER / WARNING / CAUTION

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

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

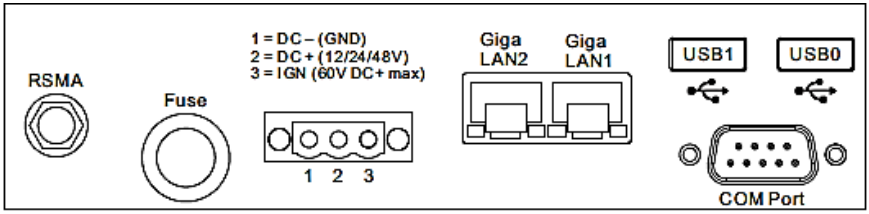
CAUTION: Danger that can lead to slight injuries.

2 Technical data of DLT-V6210

DLT-V6210	
Weight	3.2 kg
Dimensions	Width x height x depth in mm: 285 x 256 x 70 (height including antenna cap)
Operating temp.	-30 to +50 °C
Storage temp.	-30 to +60 °C
Relative humidity	10~95% non-condensing Ambient temperature +25 °C
IP protection class	IP65
Shock/Vibration	Class 5M3 according to EN 60721-3-5 US Highway Truck as MIL-STD 810F

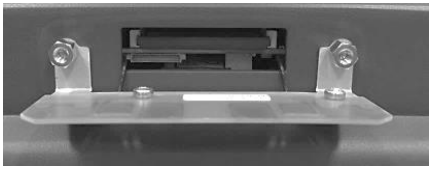
3 External connectors of DLT-V6210

Connectors under the cable cover



RSMA	External Wi-Fi antenna interface
Power	Power supply 12/24/48 nominal
Network adapter	2 x network adapter (RJ45 connection jack) with 10/100/1000 Mbit per second
USB	2 x USB 2.0 Hi-Speed HOST A type, 5 VDC 500 mA Fused at 0.5 A per channel
Serial COM	Max. 115,200 Baud (16550A compatible, 16 byte FIFO) Supports EIA-232-E on external 9-pin D-Sub connection 5V at Pin 9

CFast slot under the antenna cap



- Exercise special care when removing and re-inserting the CFast card.
- Only use CFast cards that have been approved by Advantech.

Opening the antenna cap:

- Loosen the two screws of the antenna cap using a Torx screwdriver.
- Carefully lift up the antenna cap.

Closing the antenna cap:

- Place the antenna cap back onto DLT-V6210. The antenna cap seal must not be damaged; it must be seated correctly in the groove.
- Tighten the two screws of the antenna cap again (1 Nm torque).

4 Overview of operation elements

NOTE: Users of the DLT-V6210 must be trained by skilled personnel and instructed about the operation of the device.

Operate the touchscreen with:

- Clean, dry fingers
- Clean, dry, thin gloves
- Suitable touch stylus

Function of the front keys (left side):

- Power on/off
- LCD Brightness up
- LCD Brightness down

LED indication:

System Status	LED Status
System power on	Static on
System power off	Off
System over/under temperature	Blinking 0.2 sec. on / 0.8 sec. off
System thermal sensor faulty	Blinking 0.5 sec. on / 0.5 sec. off

5 Software configuration (e.g. Wireless)

Basic software settings for DLT-V6210 are defined at the factory, for example with regard to Wi-Fi settings, network settings, etc. To adapt this, use the configuration tool for the respective operating system:

WES7, WE8S, Win 10 IoT Ent., etc.	MDevice tool, etc.
WEC7	WEC7 WLAN Client manager, etc.
Linux	ADLoG Standard Linux Image configuration. Remark: DLT-V6210 with ADLoG Linux contains software that is GPL licensed, e.g. the Linux kernel. You can, within 3 years, get the source code for those GPL programs from Advantech. Contact aeu.helpdesk@advantech.com.

Find details in the configuration manuals at www.advantech.com.

WARNING

Safety information about radiation emission.

This device emits high-frequency energy (abbreviation: HF). To protect people from HF radiation and to comply with country-specific regulations:

- Install the DLT-V6210 so that persons maintain a minimum distance of 20 to 50 cm to the antenna.
- Observe the applicable regulations for your deployment location/country with regard to channels, frequencies and the maximum permissible transmitting power. Responsibility for this lies with the company operating the DLT-V6210. The regulatory authorities in the relevant country can provide information on this.

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.

6 Important notes before installation

General:

The DLT-V6210 installation environment must not result in a closed system. The cooling system of the device requires a supply of fresh air. Otherwise, there is a danger of overheating and damage to the device.

Overview: Recommended installation steps

1. Find a suitable installation position for the DLT-V6210.
2. Please ensure an ergonomic operability of the DLT-V6210. Additionally, on vehicles, the driver's field of vision must remain free.
3. Secure the device mounting (mounting bracket, RAM mount) to the targeted subject/vehicle.
4. Connect external accessories to the DLT-V6210.
5. Install an easily accessible disconnecting device such as a switch close to the device.
6. Connect all cables (power supply, etc.).
7. Seal cable passages with cable grommets and dummy grommets.
8. Close the DLT-V6210 with the cable cover.
9. Install the DLT-V6210 on the device mounting (follow the mounting instructions).

In case of installing the DLT-V6210 on vehicles: Observe the vehicle manufacturer's instructions

- Observe the vehicle manufacturer's instructions about the installation of peripheral devices. This is particularly important when welding or drilling load bearing parts.
- Observe the instructions for connecting additional loads, for instance, in conjunction with an emergency shut-off switch.
- The vehicles must be properly prepared (e.g. connection to the ignition, correct voltage, etc.)

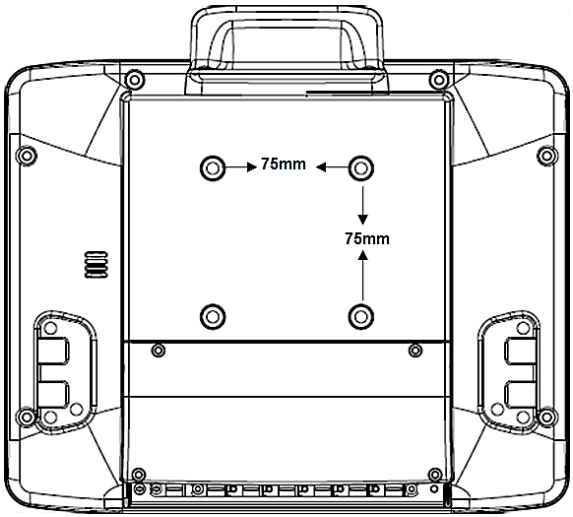
Notes about the attachment of device mounts and accessory mounts

Mechanical expert knowledge is required for correct attachment of device mounts (e.g. mounting bracket, RAM mount) and accessory mounts (e.g. for scanner, keyboard) on the DLT-V6210.

- Use suitable mounting material (screws and washers).
- Observe the maximum screw-in depth of the holes of the DLT-V6210: The recommended screw-in depth of D x 1 always applies (screw diameter x 1).

  ATTENTION: Screws that are too long, e.g. in the VESA mounting hole pattern, can pierce the rear side of the DLT-V6210 and cause irreparable damage to the device.

VESA mounting hole pattern 75 x 75 mm:



7 Connect cables and cable cover

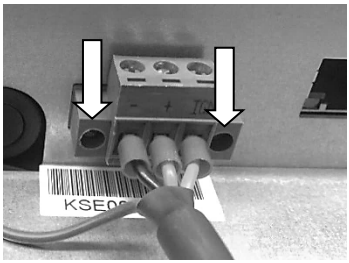
Parts required

NOTICE: Some screws and grommets delivered are spare parts.

Part	Name / Purpose
	Phillips screw, flat screw head, M3x5L F/S D=5.0 H=0.8 (1+)SUS BZn NK: – For fixing the cable cover to the terminal – For securing thinner cables to the terminal's strain relief rail
	Phillips screw, middle round screw head, M3x10L R/S D=5.5 H=2.0 (2+)SUS BZn NK: – For securing regular cables to the terminal's strain relief rail
	Hexagon screw M3x12L H/S D=5.5 H=3 SUS/H Nylok: – For securing thicker cables to the terminal's strain relief rail
	Cable clip for securing the cables to the strain relief rail
	Cable grommets which openings have different sizes; must be attached to all cables before the cables are inserted into the cable passages
	Dummy grommets for sealing up unused cable passages
	Tooth washer D=8.5 d=4.2 t=0.5 ST Ni – For grounding the power supply cable
	Nut (W) B=6 M4*0.7 H=2.5 ST Zn – For grounding the power supply cable

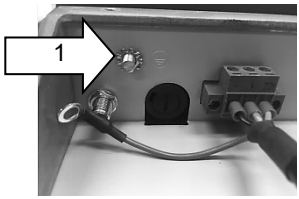
Power supply cable	Cable cover
	

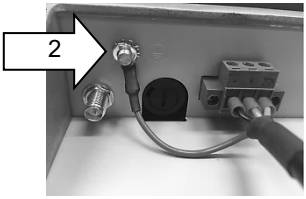
STEP 1: Plugging in and screwing on the power supply cable

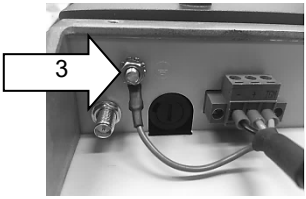


- Plug the power supply cable into the power supply plug-in location.
- Tighten both mounting screws hand-tight. The screws required for this are already fixed in the delivered cable plug.

STEP 2: Secure the ring tongue of the power supply cable to the ground bolt (important for correct grounding!)







NOTICE: To make sure the device is grounding correctly, it is important to follow the correct order to put the components on the ground bolt as below (from inside to outside):

1. Place **toothed washer** first:

2. Then put the **ring tongue** of the power supply cable (flat side faces the DLT-V6210 connector panel):

3. Place the **nut** and tighten it hand-tight:

STEP 3: Securing the power supply cable to the strain relief rail

– Attach the matching **cable grommet** to the power supply cable.
NOTICE: The cable grommet must completely surround the cable. The opening of the cable grommet must be slightly smaller than the cable diameter. If the opening is too large or too small, the sealing of the device will not be ensured.

As a delivery standard, screws and cable clips are fixed on the DLT-V6210 strain relief rail.

– Unscrew and remove the screws and the cable clip fixed on the cable passage you want to use for the power supply cable.
– Insert the power supply cable and the cable grommet in the cable passage of the strain relief rail.
– Place the cable clip on the power supply cable.
– Secure the cable clip to the strain relief rail using 2 pcs of Phillips screws (middle round screw head) M3x10L: 
– Tighten the mounting screws alternatingly.

NOTICE: Tighten the mounting screws sufficiently but on no account pinch or crush the cable. If you do, the cables may break or the cable insulation may get damaged.

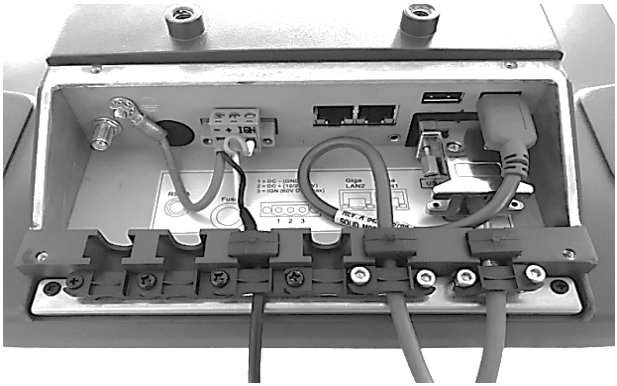
STEP 4: Connecting the USB, Ethernet, COM and antenna cables

Proceed as described with the **power supply cable** above.

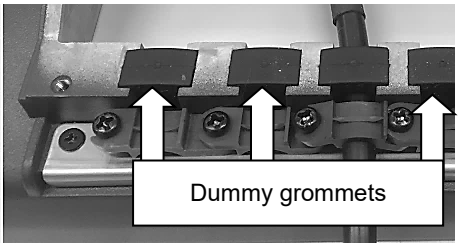
– Attach the matching cable grommet to the cable.
– Insert both components in the cable passage.
– Secure it to the strain relief rail using cable clip and appropriate screws:

	For thinner cables: Phillips screws M3x5L
	For regular cables: Phillips screws M3x10L
	For thicker cables: Hexagon screws M3x12L

Result (example):

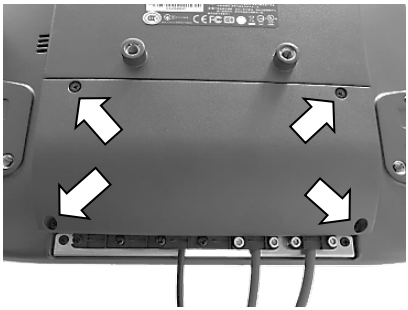


STEP 5: Closing off unused cable passages



- Close off all unused cable passages with dummy grommets so that they are sealed.

STEP 6: Attaching the cable cover



- Place the cable cover on the DLT-V6210 housing slot.
- Use 4 pcs of Phillips Screws M3x5L:

- Lock the screws loosely into the holes of the cable cover.
- Then fully tighten the screws alternatingly with 1 Nm torque.

8 Technical customer support

Advantech-Service & Support

Find out about our worldwide and comprehensive service offering:

https://erma.advantech.com

Manufacturer address

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Web: www.advantech.com

E-Mail: aeu.helpdesk@advantech.com

Warranty

The statutory warranty applies to the DLT-V6210 and accessories. It expires if the operator carries out measures on the device that are reserved exclusively for authorized Advantech-Service-Centers.

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