kontron

Clinic BPC B-101

Short Manual; Version 1.0 / 29.08.2013

Kontron Europe GmbH

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1. Introduction

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1.1. Symbols used in this Manual

Symbol	Meaning
	This symbol indicates the danger of injury to the user or the risk of damage to the product if the corresponding warning notices are not observed.
	This symbol indicates that the product or parts thereof may be damaged if the corresponding warning notices are not observed.
	This symbol indicates detail information about the specific product configuration.
	This symbol indicates ESD Handling information.

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2. Important Instructions

This chapter contains instructions which must be observed when using your Clinic-BPC B-101 system.

The manufacturer’s instructions provide useful information on your device.

Changes or modifications not expressly approved by the manufacturer could void the user’s authority to operate the equipment

2.1. Note on the Warranty

Due to their limited service life, parts which by their nature are subject to a particularly high degree of wear (wearing parts) are excluded from the warranty beyond that provided by law. This applies to batteries for example.

2.2. Exclusion of Accident Liability Obligation

Kontron Europe shall be exempted from the statutory accident liability obligation if the user fails to observe the safety instructions.

2.3. Liability Limitation / Exemption from the Warranty Obligation

In the event of damage to the device caused by failure to observe the hints in this manual and on the device (especially the safety instructions), Kontron Europe shall not be required to honor the warranty even during the warranty period and shall be exempted from the statutory accident liability obligation.

3. Safety Instructions

Please read this section carefully and observe the instructions for your own safety and correct use of the device. The chapter also contains information on approval and interference suppression of your device. Observe the warnings and instructions on the device and in the manual.

The Clini BPC-101 system has been built and tested by Kontron Europe and left the company in a perfectly safe condition.

In order to maintain this condition and ensure safe operation, the user must observe the instructions and warnings contained in this manual.

- ❏ The device must be used in accordance with the instructions for use.
- ❏ The electrical installations in the room must correspond to the requirements of the local (country-specific) regulations.
- ❏ Take care that there are no cables, particularly power cables, in areas where persons can trip over them.
- ❏ Do not use a power cable in sockets shared by a number of other power consumers. Do not use an extension cable.
- ❏ Only devices and components which fulfill the requirements of an SELV circuit (safety extra low voltage) in accordance with EN60950 may be connected to the interfaces of the system.
- ❏ The device generates heat during operation. Do not cover the air intake and exhaust openings of the device.
- ❏ Repairs may only be carried out by qualified specialist personnel authorized by Kontron Europe.
- ❏ Maintenance or repair on the open device may only be carried out by qualified personnel authorized by Kontron Europe which is aware of with the associated dangers.
- ❏ When accessing internal components the device must be switched off and disconnected from the power source.
- ❏ Only approved original accessories (optional parts) approved by Kontron Europe may be used.
- ❏ The chassis of the BPC-101 system must be protective earthed by establishing a **large-area contact** between the earth screw (at the rear bottom side) and an appropriate grounding connection point.

3.1. Electrostatic Discharge (ESD)

A sudden discharge of electrostatic electricity can destroy static-sensitive devices or micro-circuitry. Proper packaging and grounding techniques are necessary prerequisites for avoiding damage. Always take the following precautions:

Transport printed circuit boards in static-safe containers such as boxes or bags.

Keep electrostatic sensitive parts in their containers until they arrive at a static-free station.

Always be properly grounded when touching a sensitive PCB, component, or assembly.

Store electrostatic-sensitive PCB’s in protective packaging or on conductive foam.

3.2. Grounding Methods

Guard against electrostatic damage of the device by taking the following preventative steps:

Cover workstations with approved anti-static material. Provide a wrist strap connected to a work surface and properly grounded tools and equipment.

Use anti-static mats, heel straps, or air ionizers for added protection.

Handle electrostatic-sensitive components, PCB’s, and assemblies by the case or the edge of the board.

Avoid contact with pins, leads, or circuitry.

Turn off power and input signals before inserting and removing connectors or test equipment.

Keep the work area free of non-conductive materials such as ordinary plastic assembly aids and Styrofoam.

Use field service tools, such as cutters, screwdrivers, and vacuum cleaners that are conductive.

4. Product Description

Before you begin using your BPC-101 system, you should take a few minutes to learn about the various ports, bays, connectors and indicators that are part of your system, as well as the components that make up the system.

The BPC-101 system is a Box PC system.

The rugged design with an excellent mechanical stability marks the superior qualities of a computer suitable for the operation in harsh industrial environment.

The BPC-101 system accommodates a Kontron singleboard. The system is delivered with an internal 2.5" HDD (SATA), and an internal power supply.

The power LED is implemented in the ON/OFF Button in the front.

Interfaces such as 3x LAN (10/100/1000 Mbps) galvanic separated, 4x USB (2.0), 1x DVI-I; 1x DVI-D; 1x Line in; 1x Line out; 1x Mic in and 1x Speaker are provided.

Two updates are possible for the system via ADD cards:

- Additional 2x RS232 via DSUB connectors 9pin
- Additional 3x RS232 (galvanic separated) via RJ45 connectors

4.1. Front Side View

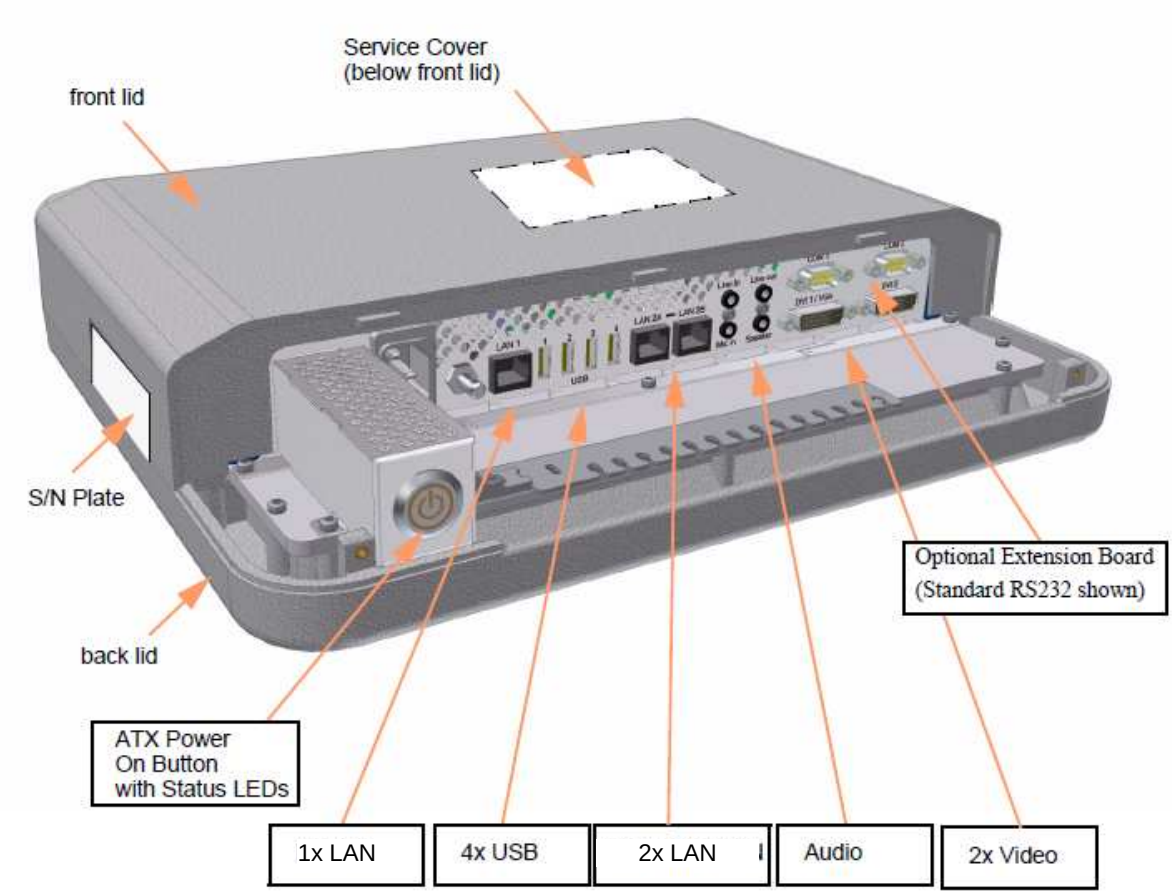

Figure 1: Connector view of the BPC-101

4.2. Rear Side View

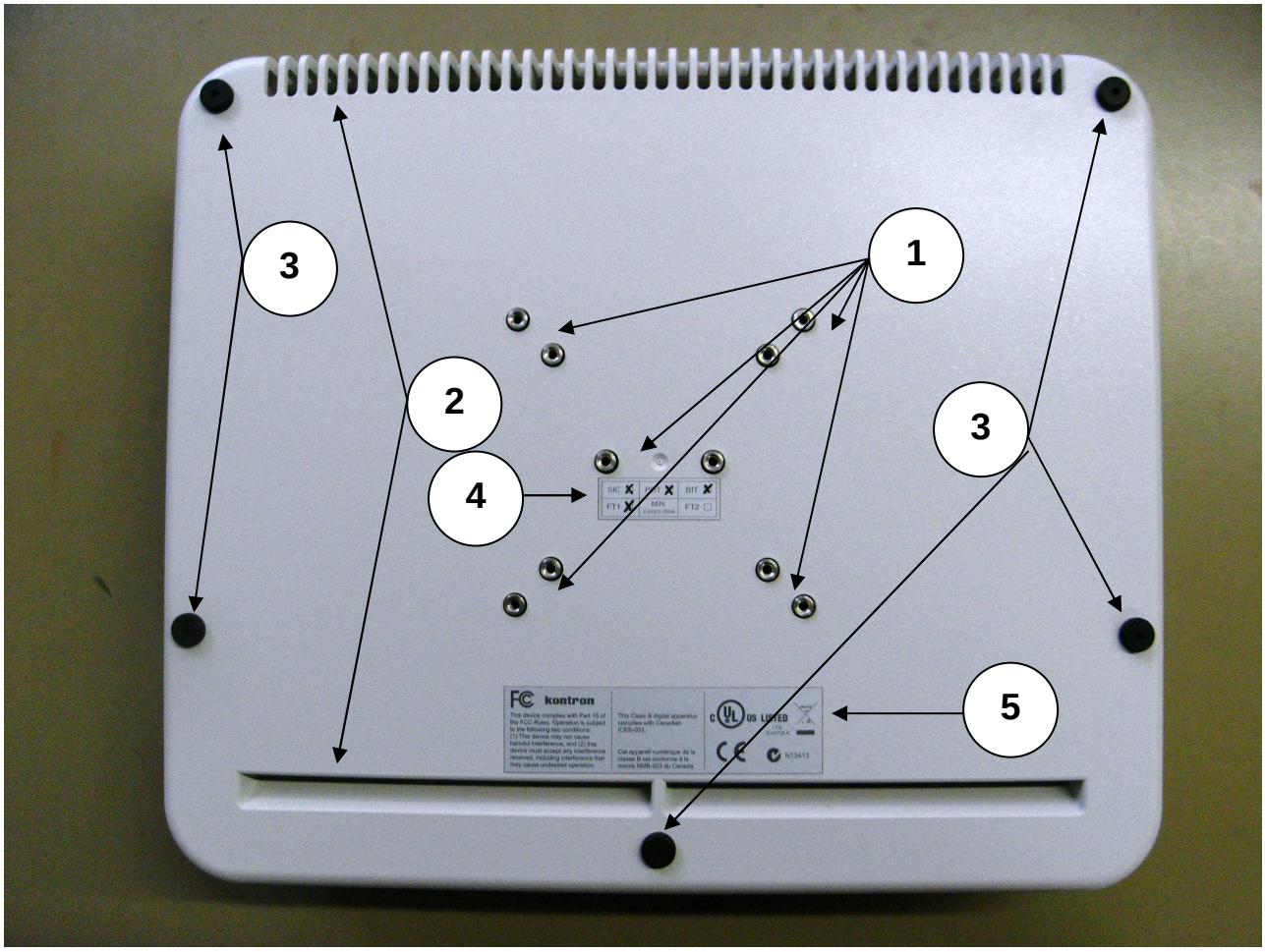

Figure 2: Rear view of the AWS-TX

Legend of figure 2:

1 Mounting Holes (VESA 75/100)
2 Cooling/Airflow
3 rubber feet
4 Testlabel
5 Typlabel

4.3. Mechanical Specifications

Dimensions for BPC-101

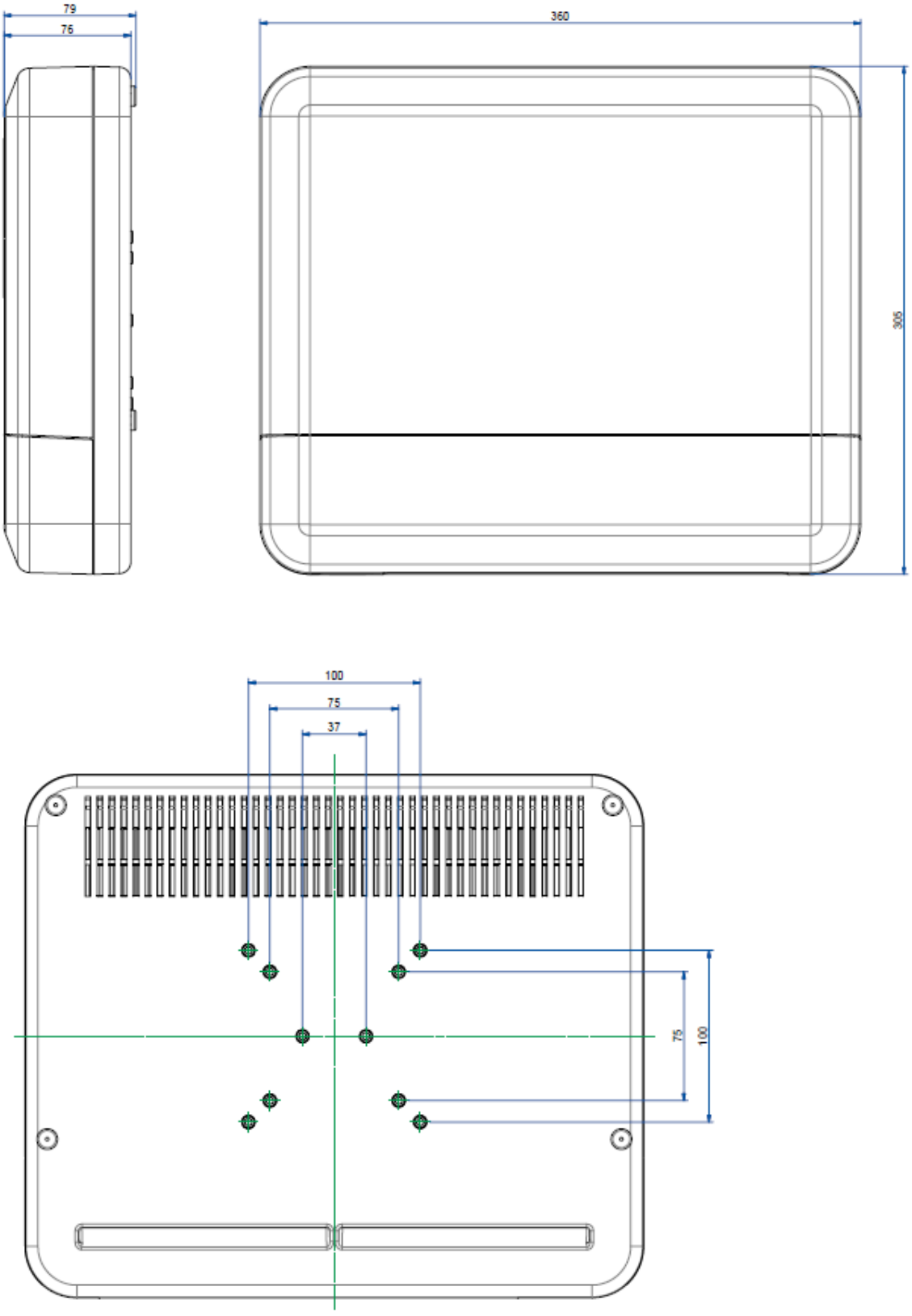

Figure3: Dimensions BPC-101

4.4. Installed Singleboard

Your BPC-101 system is equipped with the Singleboard B716.

More information and technical data can be found in the specification of the installed mainboard. This is available after request.

www.kontron.com

4.5. Installed AC Power Supply Unit

The BPC-101 system has an integrated AC/DC Power Supply Unit.

The BPC-101 system is designed to be powered from an AC power source via an AC power cable (not included).

- ❏ Before using your system, you should first become familiar with the system components and check that everything is connected properly.
- ❏ It is recommended that the last cable attached to the system should be the power cable!

4.6. Accessing Internal Components

This section contains important information that you must read before accessing the internal components. You must follow these procedures properly when handling any board components of the system.

Before removing the cover of the BPC-101 in order to gain access to the internal components, the system must be powered-down and the power cord has to be disconnected from the power source.

These procedures have to be carried-out only by qualified specialist personnel.

It is not allowed to operate the system without installed cover.

Please observe the safety instruction for handling assemblies with static sensitive device. Failure to take heed of this warning instruction can result in damage to the device.

4.7. EMC

Note: 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 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.