**Unicont SPb Ltd**

# Computer Mainframe
# MPC-127

Operating Manual

(127-2-17012012)

**St. Petersburg**
2012

# Table of Contents

This operating manual (OM) is designed for computer mainframe MPC-127.

The OM is designed for study of design, operation principles and operation rules of the device for its intended use and maintenance. The OM may also be a source of information about the device to compile relevant sections of the equipment operational documentation in which the device can be used as an integral part.

**Important!** The company-manufacturer does not assume any responsibility that comes with loss or damage resulting from use of this product or related documentation.

All information in this manual is distributed by the company for information purposes only. They are subject to change without notice of consumers; they may contain errors or inaccuracies. Information specified may not include an obligation on the part of the company Unicont Spb Ltd.

# 1. DEVICE DESCRIPTION

MPC-127 is a computer mainframe used to perform various tasks that conform to its specification (manufacturing process control, electronic mapping, automation systems, etc.)

# 2. DELIVERY SET

| | |
|---|---|
| 1. Computer mainframe | 1 piece |
| 2. Brackets for destop/floor mounting | 2 pieces |
| 3. Operation Manual | 1 piece |
| 4. Feeding cable | 1 piece |

# 3. SPECIFICATIONS

| | |
|---|---|
| Power supply voltage: | 90…264 V, 50/60 Hz |
| Power demand: | max. 250 W |
| Protection class: | IP 22 |

Computer:

| | |
|---|---|
| Processor: | Pentium Dual Core 2.5 GHz |
| RAM: | DDR3 1024 MB 1333 MHz<br>(for Dual Channel mode) |
| Type of hard drive: | HDD, (SSD, CF(8Gb) – Optional) |
| Hard Disc Drive Space: | 120 GB (250 GB – Optional) |
| Video: | Intel GMA 4500, on board |
| DVD-RW Drive: | DVD±RW (slim) |
| Ports: | 4 x SATA II 3.0 GB/s<br>(does not support RAID and HOT Plug)<br>1 x ATA100IDE supports two IDE-devices. |

**Operation:**

| | |
|---|---|
| Dimensions: | 335 x 300 x 160 mm |
| Protection class: | IP 22 |
| Weight: | max. 14 kg |
| Storage temperature: | -25…+70 °C |
| Operating temperature: | -15…+55 °C |

**Output interfaces:**

1 x RS-232 (DB-9M, standard COM-port)
1 x LPT (DB-25F)
4 x USB (Type A, on the rear panel)
2 x USB (Type A, on the front panel)
2 x PS/2 (keyboard and mouse/trackball)
8 x 3.5 mm jack (8-channel audio output)
2 x Ethernet (RJ-45)
1 x VGA (standard D-SUB)

**Expansion slots:**

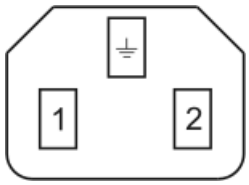
2 x PCI

# 4. DESCRIPTION OF THE DEVICE CONNECTORS

There are following connectors in the rear panel of the device:

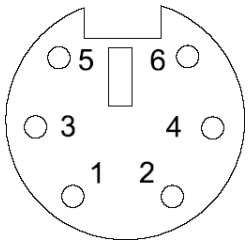
| Name | Type | Designation |
|---|---|---|
| M | PS/2 | To connect “mouse” or “trackball” manipulators |
| K | PS/2 | To connect the keyboard |
| COM | DB-9M | To connect RS-232 serial interface |
| USB1<br>USB2<br>USB3<br>USB4<br>USB5<br>USB6 | USB Type A | To connect external USB-devices |
| LPT | DB-25F | To connect printers |
| VGA | DB-15F | To connect the external display |
| A_IN | 8 x 3.5 mm jack | Audio input line. To connect an external audio source. |
| A_OUT | 8 x 3.5 mm jack | Audio output line. To connect an external audio amplifier. |
| Mic | 8 x 3.5 mm jack | To connect the microphone |
| Power | | To connect the power source |
| LAN1<br>LAN2 | RJ-45 | TO connect Ethernet network equipment (10 Mb/100 Mb). |

**Power Connector**



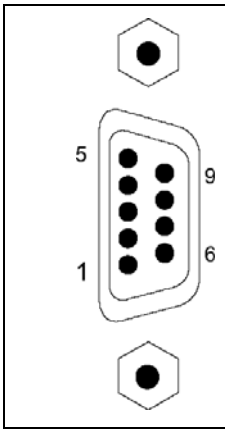

| Pin number | Designation |
|---|---|
| 1 | With source power of 220 VAC – L.<br>With source power of 10…36 VDC – “+” |
| 2 | With source power of 220 VAC – N.<br>With source power of 10...36 VDC – “-” |
| | Earthing terminal |

**Mouse (M) and Keyboard (K) Connectors**



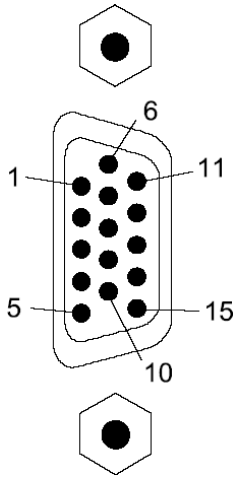

| Pin number | Designation |
|---|---|
| 1 | Keyboard signal |
| 2 | Mouse signal |
| 3 | GND |
| 4 | 5 VDC |
| 5 | Keyboard sync signal |
| 6 | Mouse sync signal |

**COM1 Connectors**



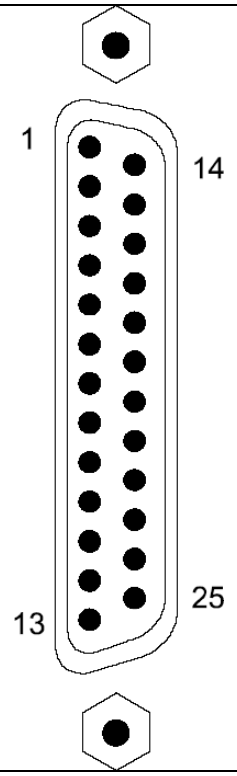

| Pin number | Designation |
|---|---|
| 1 | DCD |
| 2 | RxD |
| 3 | TxD |
| 4 | DTR |
| 5 | GND |
| 6 | DSR |
| 7 | RTS |
| 8 | CTS |
| 9 | RI |

**VGA Connector**




| Pin number | Designation |
|---|---|
| 1 | Red |
| 2 | Green |
| 3 | Blue |
| 4 | NC |
| 5 | NC |
| 6 | GND |
| 7 | GND |
| 8 | GND |
| 9 | NC |
| 10 | GND |
| 11 | GND |
| 12 | GND |
| 13 | HSYNC |
| 14 | VSYNC |
| 15 | NC |

**LPT1 Connector**

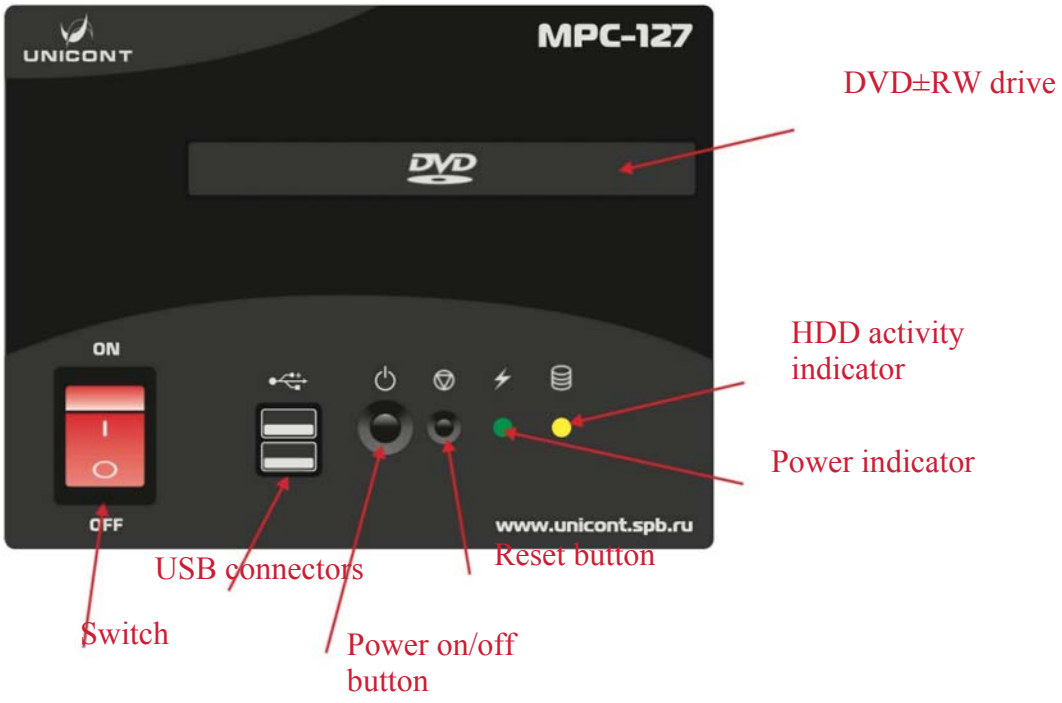



| Pin number | Designation |
|---|---|
| 1 | -STROBE |
| 2 | DATA0 |
| 3 | DATA1 |
| 4 | DATA2 |
| 5 | DATA3 |
| 6 | DATA4 |
| 7 | DATA5 |
| 8 | DATA6 |
| 9 | DATA7 |
| 10 | -ACKN |
| 11 | BUSY |
| 12 | PE |
| 13 | SELECT |
| 14 | -AUTOFD |
| 15 | -ERROR |
| 16 | -INIT |
| 17 | -SLCTIN |
| 18–25 | GND |

# 5. CONTROLS

The following elements are located on the front panel:

- 2 USB connectors (Type A)
- Power button to turn the power on/off
- Reset button
- Power indicator
- HDD (Hard Disc Drive) activity indicator
- Switch
- DVD-drive



# 6. DEVICE MOUNTING

Device casing provides for it to be mounted on the desktop, on the floor or even in the rack.

Before mounting choose the mounting type (with or without brackets). Following the dimensional drawing (ref. to Figure 1) prepare the place for mounting. Use brackets as necessary (ref. to Figure 2**Ошибка! Источник ссылки не найден.**). Mount the device, fix it with screws.

Mounting being completed, lay connecting cables from external devices and connect it to the matching connectors on MPC-127. Tighten the fixing screws to avoid their inadvertent disengagement.

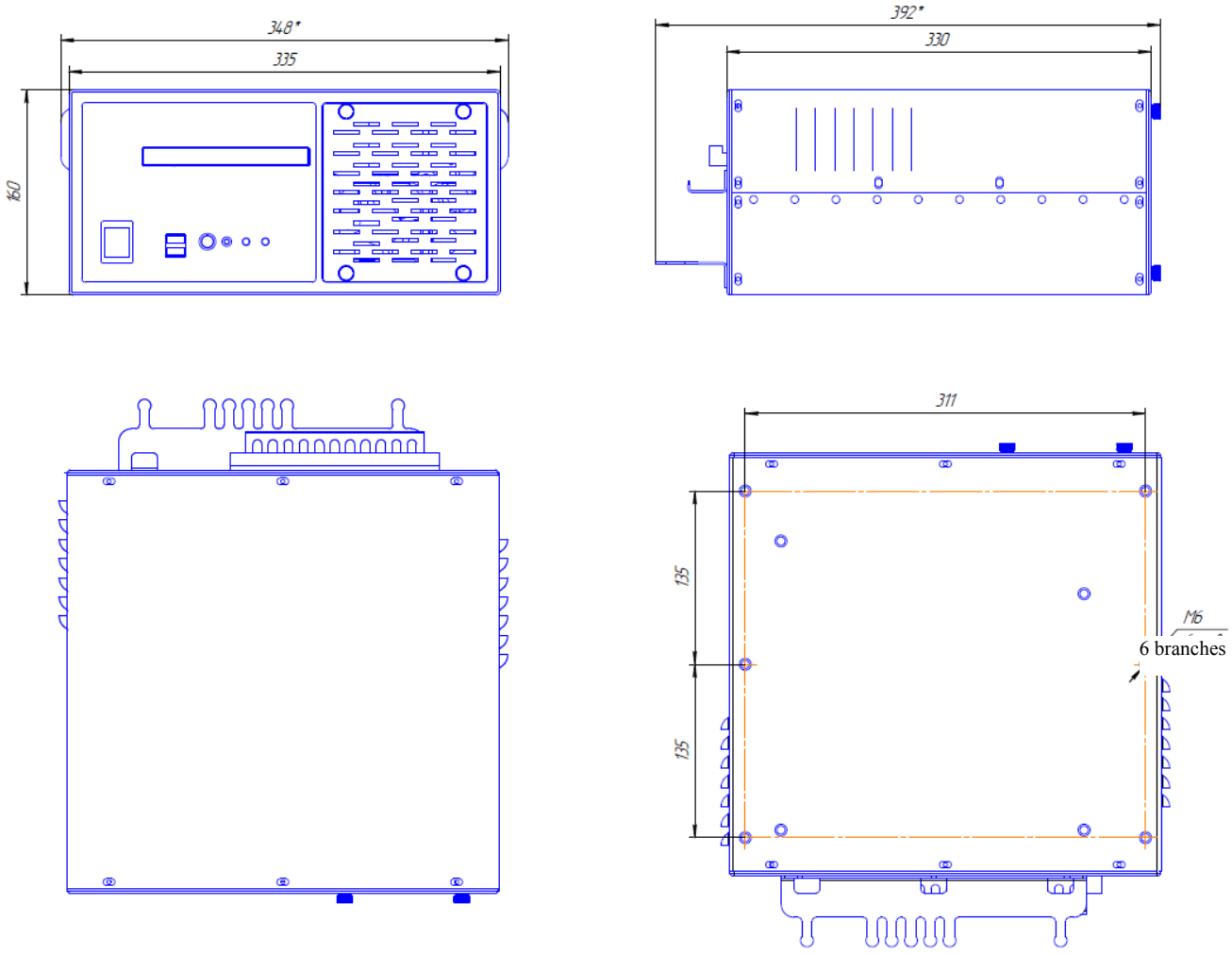



Figure 1 Dimensional Drawing of the Mainframe without Brackets

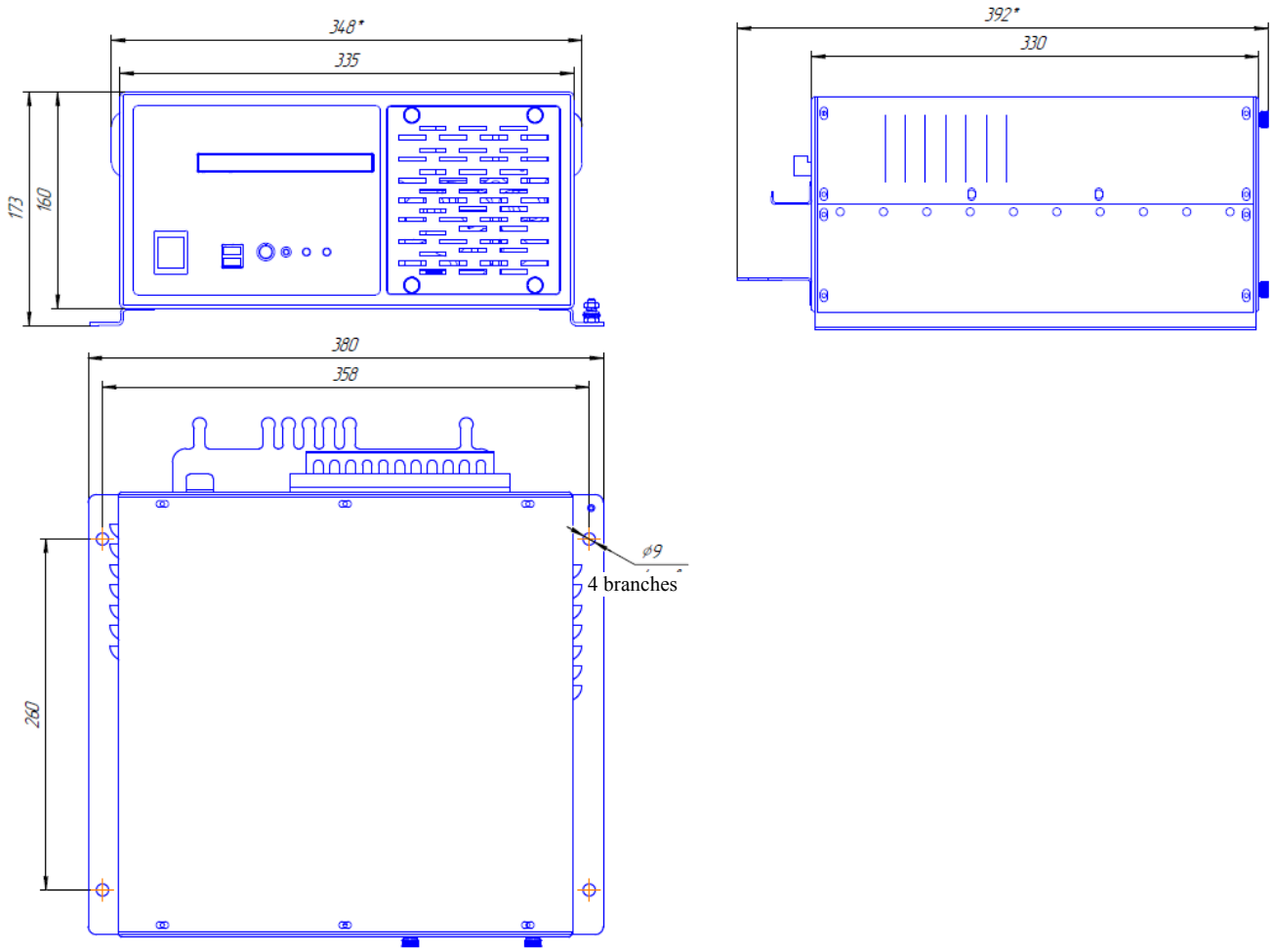



Figure 2 Dimensional Drawing of the Mainframe with Brackets

For the detailed information on the mainframe dimensions refer to the Appendix 1 of this manual.

# 7. TRANSPORTATION AND STORAGE

The battery charger shall be stored in heated space at air temperature of +5 ºC to +35 ºC (maximum values of -25 ºC to +70 ºC), at relative humidity of air not exceeding 95 % at temperature of +25 °C and content of dust, oil, moisture and aggressive admixtures in the air not exceeding the norms envisaged by GOST 12.1.005-88 for the working zone of production areas.

The device shall be transported in transport container of the manufacturer in closed transport.

Means of transport:

- automobile and railway closed transport (covered wagons, universal containers)
- by air (in pressurized and heated bays of airplane)
- by sea (in dry service spaces).

The device shall be transported in accordance with the transport regulations in force for the particular transport.

During handling operations and transportations strictly observe the requirements of handling marks on boxes and do not allow bumps and impacts which can affect preservation and serviceability of the device.

Packed devices shall be reliably secured in vehicles.

After storage in stores or transportation at temperature below +10 ºC the devices shall be unpacked only in heated spaces after keeping them unpacked in under normal climatic conditions for12 hours.

# 8. WARRANTY

The manufacturer guarantees the unit MPC-127 complies with this manual provided that the operation, transportation and storage conditions are adhered to during the warranty period.

The unit's warranty period expires 24 months from the date of its shipping from the manufacturer's storehouse.

Within the warranty period, the owner is entitled for a free repair, or a replacement of a separate part, provided that the malfunction occurred through the manufacturer's fault.

Warranty repair is provided if the unit is submitted with the manufacturer's label and a legible serial number available on it, as well as this operating manual.

The manufacturer is not responsible and cannot guarantee the unit's operation:

1. After the warranty period is over;
2. In case of the failure to observe the unit's operation, transportation, storage and installation rules and conditions;
3. If the unit is in an unmarketable condition, or has a damaged body, and other causes beyond the manufacturer's control;
4. If self-made electrical devices were used.
5. If there was an attempt to repair the unit by a person who is not an authorized representative of the manufacturer.

If the owner loses this operating manual or the manufacturer's label with a serial number, the manufacturer shall not provide their copies, and the owner shall be divested of the right for a free repair during the warranty period.

Upon the warranty expiry, the manufacturer shall facilitate the repair of the unit at the owner's expense.

Note: in case of warranty repair, the unit's disassembling from the installation site and its delivery to the manufacturer's service center are done at the owner's expense.

Visit the manufacturer's website www.unicont.spb.ru (section "support/warranty") to find:

- forms to fill in claims,
- full warranty description;
- full description of the warranty service rendering procedure.

**The manufacturer service center's address and contact details:**
**Unicont SPb, Ltd.**
**Bld. 26E Kibalchich Str., Saint Petersburg, 192174, Russia**
**tel.: + 7 (812) 622 23 10, +7 (812) 622 23 11**
**fax: +7 (812) 362 76 36**
**e-mail: service@unicont.spb.ru**

## 9. DATE OF PACKING

Computer Mainframe (name of article) MPC-127 (designation) № (serial number)

Packed *Unicont SPb Ltd., Russia.* (Manufacturer)

according to the requirements of the current technical documentation.

post signature clarification of signature

year, month, day

## 10. ACCEPTANCE DETAILS

Computer Mainframe (name of article) MPC-127 (designation) № (serial number)

was manufactured and accepted in accordance with the regulatory requirements of the state standards and applicable technical documentation, and is suitable for operation.

Quality control representative

Stamp here signature clarification of signature

year, month, day

## 11. DATE OF COMMISSIONING

Computer Mainframe (name of article) MPC-127 (designation) № (serial number)

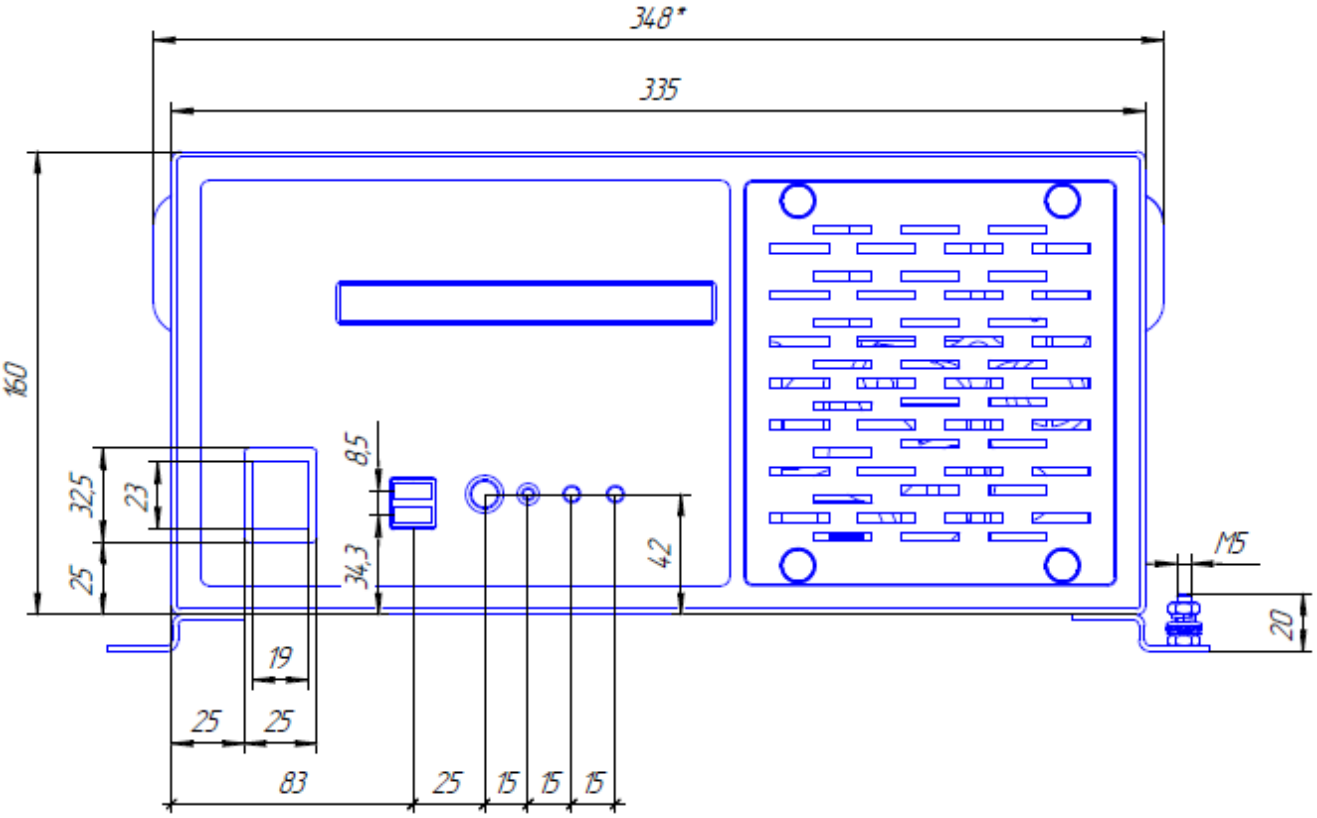
The unit has been put into operation.

Date of installation: _____

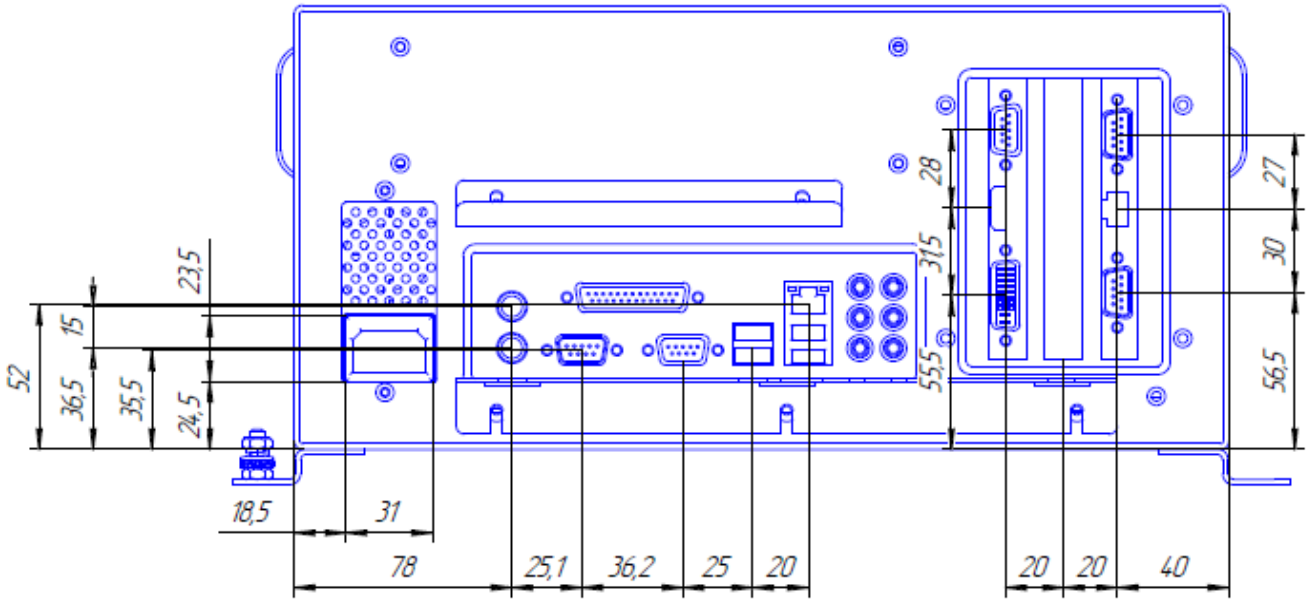
Place of installation: _____

Person in charge of installation: _____

# APPENDIX 1
# DEYAILED DRAWING




(Front)

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