

SHIP SECURITY SURVEILLANCE TV SYSTEM, DIGITAL COT II – 2003/1 TYPE

Technical description

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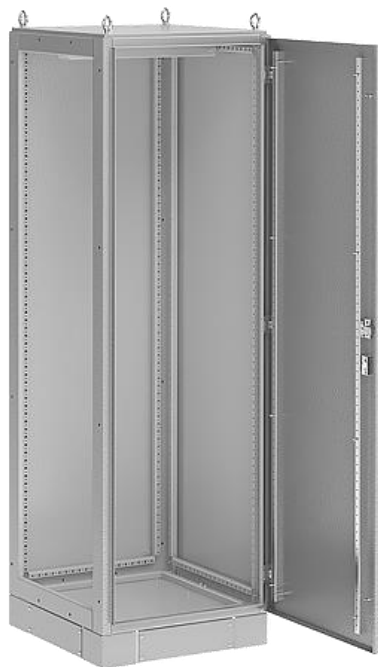
INTRODUCTION

This technical description covers the Ship security surveillance TV system, digital COT II – 2003/1 type (hereinafter referred to as the «System») and any System configurations.

The technical description is intended to describe the System components, structure, operating principles, technical specifications.

The System's scalable architecture allows for compliance with any project.

MOUNTING RACK (19")



Design

19IR-21 (19IR-21-2003/1)
 19IR-25 (19IR-25-2003/1)
 19IR-30 (19IR-30-2003/1)
 19IR-34 (19IR-34-2003/1)
 19IR-39 (19IR-39-2003/1)
 19IR-43 (19IR-43-2003/1)
 19IR-48 (19IR-48-2003/1)

Description

The rack is designed for comfortable mounting of the System units.

Material: painted steel

Mounting type: on the floor

Protection degree: IP22



Registry of Shipping's certificate
 №18.10558.120 (Electrical equipment)
 Registry of Shipping's certificate
 № 19.02296.120 (Radioequipment)



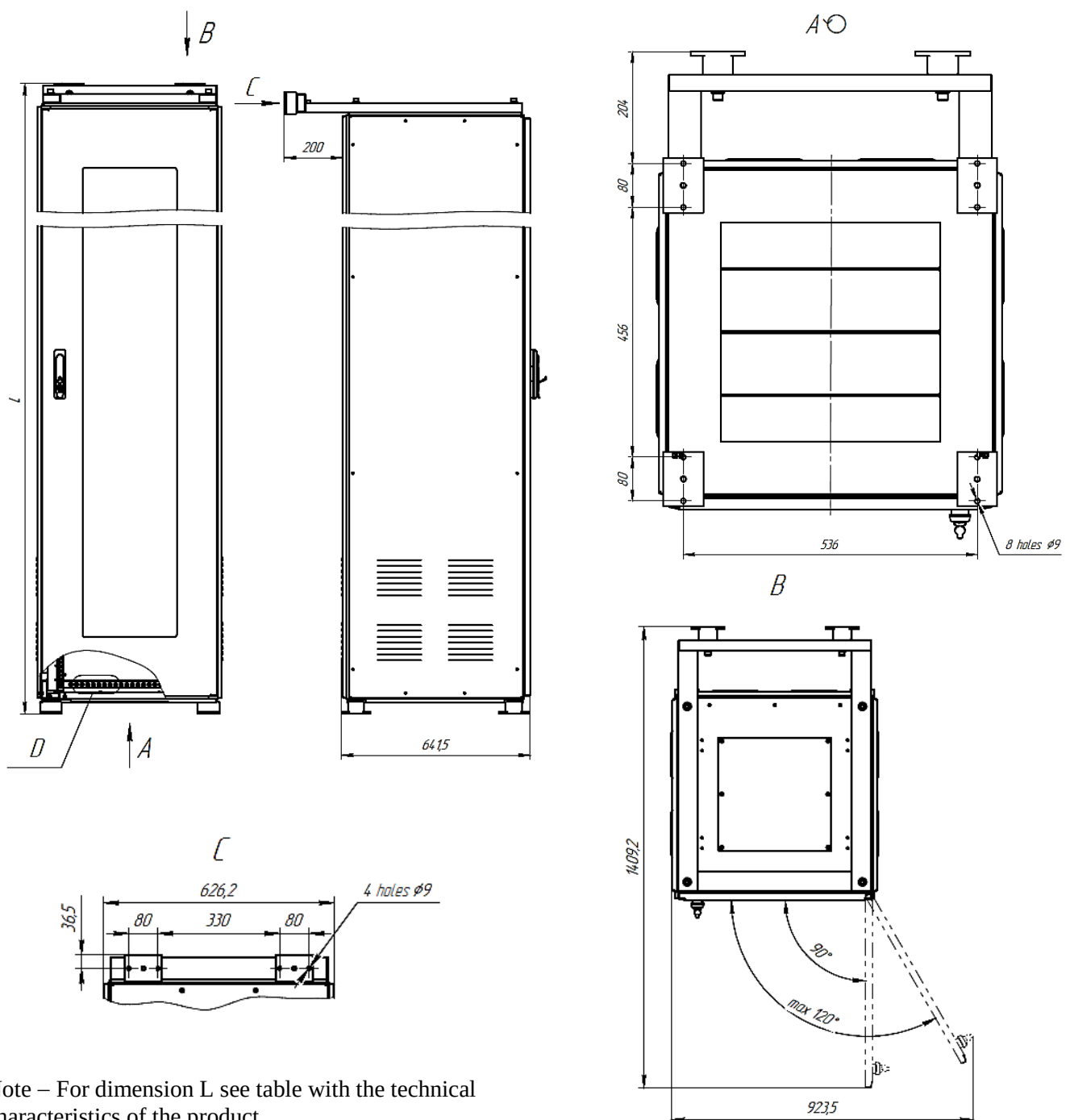
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Technical specifications

Design	Parameter			
	Input voltage (main)	Input voltage (standby)	Height (L), mm	Weight, kg
	Value			
19IR-21/112	220 VAC	220 VAC	1130	85
19IR-21/122	220 VAC	24 VDC		
19IR-21/222	24 VDC	24 VDC		
19IR-21/102	220 VAC	—		
19IR-21/202	24 VDC	—		
19IR-25/112	220 VAC	220 VAC	1350	96
19IR-25/122	220 VAC	24 VDC		
19IR-25/222	24 VDC	24 VDC		
19IR-25/102	220 VAC	—		
19IR-25/202	24 VDC	—		
19IR-30/112	220 VAC	220 VAC	1530	110
19IR-30/122	220 VAC	24 VDC		
19IR-30/222	24 VDC	24 VDC		
19IR-30/102	220 VAC	—		
19IR-30/202	24 VDC	—		
19IR-34/112	220 VAC	220 VAC	1730	121
19IR-34/122	220 VAC	24 VDC		
19IR-34/222	24 VDC	24 VDC		
19IR-34/102	220 VAC	—		
19IR-34/202	24 VDC	—		
19IR-39/112	220 VAC	220 VAC	1930	134
19IR-39/122	220 VAC	24 VDC		
19IR-39/222	24 VDC	24 VDC		
19IR-39/102	220 VAC	—		
19IR-39/202	24 VDC	—		

Design	Parameter			
	Input voltage (main)	Input voltage (standby)	Height (L), mm	Weight, kg
	Value			
19IR-43/112	220 VAC	220 VAC	2130	144
19IR-43/122	220 VAC	24 VDC		
19IR-43/222	24 VDC	24 VDC		
19IR-43/102	220 VAC	—		
19IR-43/202	24 VDC	—		
19IR-48/112	220 VAC	220 VAC	2330	156
19IR-48/122	220 VAC	24 VDC		
19IR-48/222	24 VDC	24 VDC		
19IR-48/102	220 VAC	—		
19IR-48/202	24 VDC	—		

Dimensions



Note – For dimension L see table with the technical characteristics of the product.

19" TELECOMMUNICATION CABINET



Design

TCW-9 (TCW-9-2003/1)
 TCW-12 (TCW-12-2003/1)
 TCW-15 (TCW-15-2003/1)

Description

The cabinet is designed for comfortable mounting of the System units.

Material: painted steel

Mounting type: wall

Protection degree: IP22



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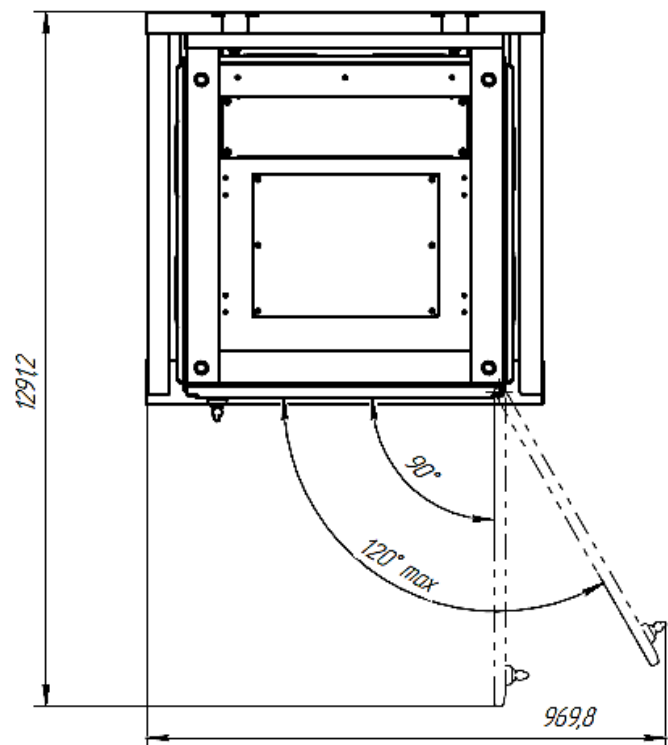
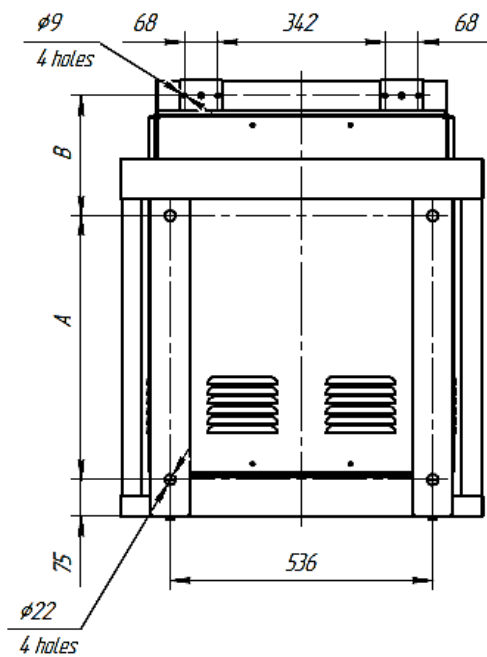
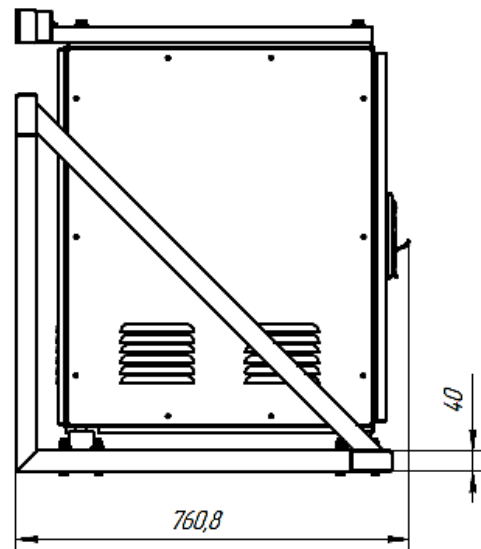
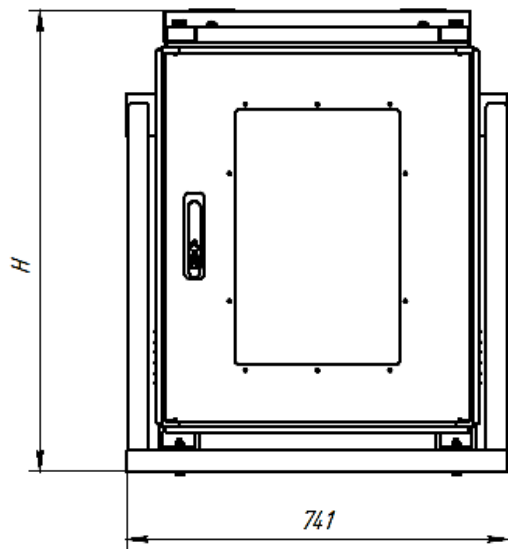


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Technical specifications

Design	Parameter		
	Input voltage (main)	Input voltage (standby)	Weight, kg
	Value		
TCW-9/112	220 VAC	220 VAC	95
TCW-9/122	220 VAC	24 VDC	
TCW-9/222	24 VDC	24 VDC	
TCW-9/102	220 VAC	—	
TCW-9/202	24 VDC	—	
TCW-12/112	220 VAC	220 VAC	102
TCW-12/122	220 VAC	24 VDC	
TCW-12/222	24 VDC	24 VDC	
TCW-12/102	220 VAC	—	
TCW-12/202	24 VDC	—	
TCW-15/112	220 VAC	220 VAC	111
TCW-15/122	220 VAC	24 VDC	
TCW-15/222	24 VDC	24 VDC	
TCW-15/102	220 VAC	—	
TCW-15/202	24 VDC	—	

Dimensions



Design	H, mm	A, mm	B, mm
TCW-9	623	356	162
TCW-12	757	356	296
TCW-15	892,5	540	246

NETWORK VIDEO SERVERS NVS-16 (NVS DVS-2-2003/1), 19- NVS-16 (NVS DVS-2-2003/2)



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Design

NVS-16 (NVS DVS-2-2003/1)

19- NVS-16 (NVS DVS-2-2003/2)

Description

The unit is designed to record audio and video data from the video cameras; delivered with pre-installed software.

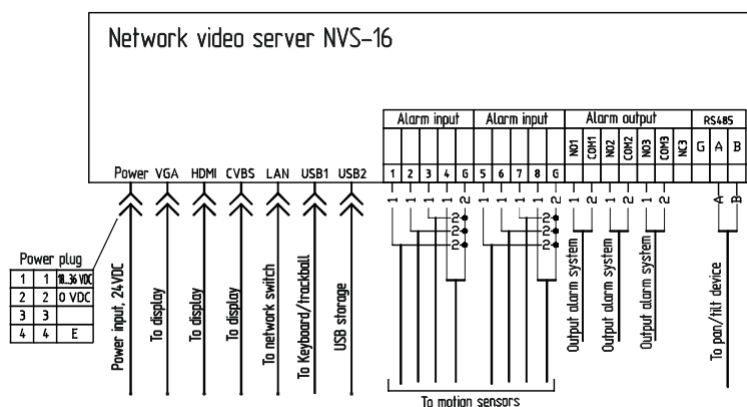
Features:

- used only together with the network switch; video cam-eras are connected to the network switch;
- power LED;
- overload protection (input power circuit fuse);
- to playback recorded audio and video data use the displays MV-XX04, MV-XX05 (recommended).

Technical specifications

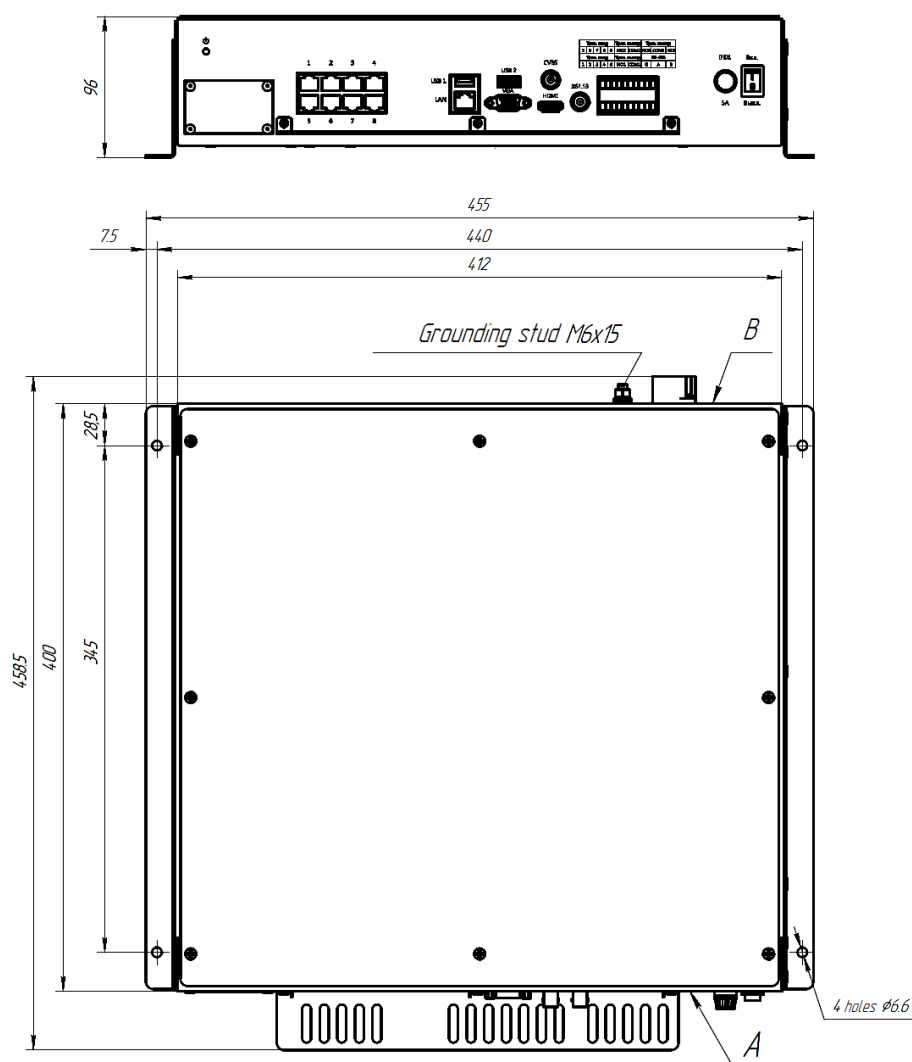
Parameter	NVS-16 (NVS DVS-2-2003/1)	19- NVS-16 (NVS DVS-2-2003/2)
	Value	
Number of channels (to display video data from cameras)	16	
Network protocols	TCP/IP, UDP, HTTP, RTP, RTSP, DHCP, PPOE, DDNS, SMTP, SNTP, FTP, UPnP, P2P, 3G	
Bandwidth (total / per channel), Mbit/s	128/8	
Compression	H.264	
Internal storage, TB	2, 4, 6, 8, 10, 12, 24	
Budget PoE, W	120	
Input voltage, VDC	19...36	
Power consumption, W	200	
Operating temperature, °C	-15...+55	
Protection degree	IP22	IP20
Material	painted steel	
Ports, pc.	8 x Ethernet 10/100Base-TX (PoE support) 1x Ethernet 10/100Base-T 1 x HDMI; 1 x VGA; 1 x RS-485 1 x audio output; 1 x CVBS; 2 x USB 2.0 alarm inputs – 8 (detecting the NO or NC state of the connected relay) alarm outputs – 2 NO and 1 NO/NC	
Mounting type	wall	into the rack 19"
Weight, kg	9.13	8.69

Connection diagram



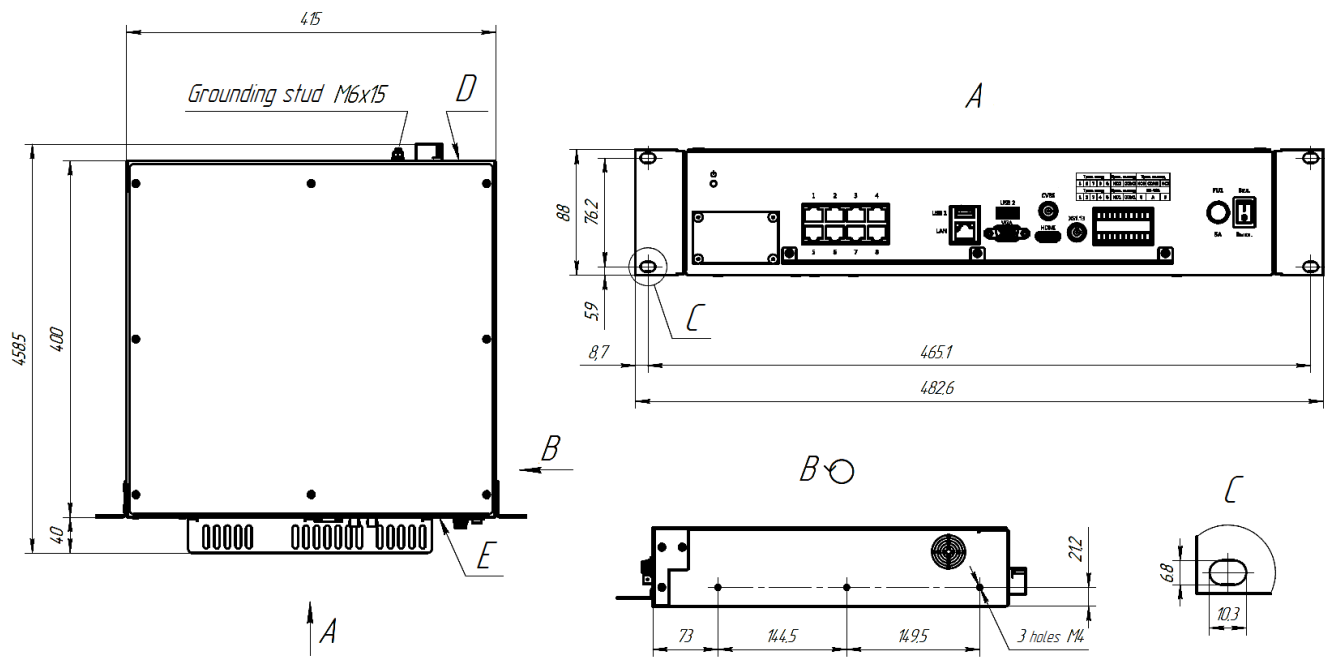
Dimensions

NVS-16 (NVS DVS-2-2003/1)



Note – When installing provide a free space 140 mm from the surface A and 160 mm from the surface B for connecting the product.

19-NVS-16 (NVS DVS-2-2003/2)



Note – When installing provide a free space 140 mm from the surface E and 160 mm from the surface D for connecting the product.

HYBRID VIDEO SERVER HVS-16 (HVS DVS-3-2003/1)



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Description

The unit is designed to record audio and video data from the analogue and digital video cameras; delivered with pre-installed software.

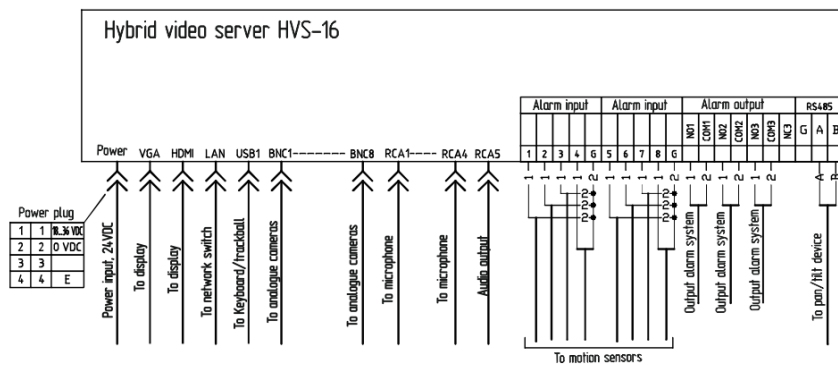
Features:

- analogue cameras can be connected;
- the unit can be used together with the network switch, which allows for the digital cameras connection;
- power LED;
- overload protection (input power circuit fuse);
- to playback recorded audio and video data, use the displays MV-XX04, MV-XX05 (recommended).

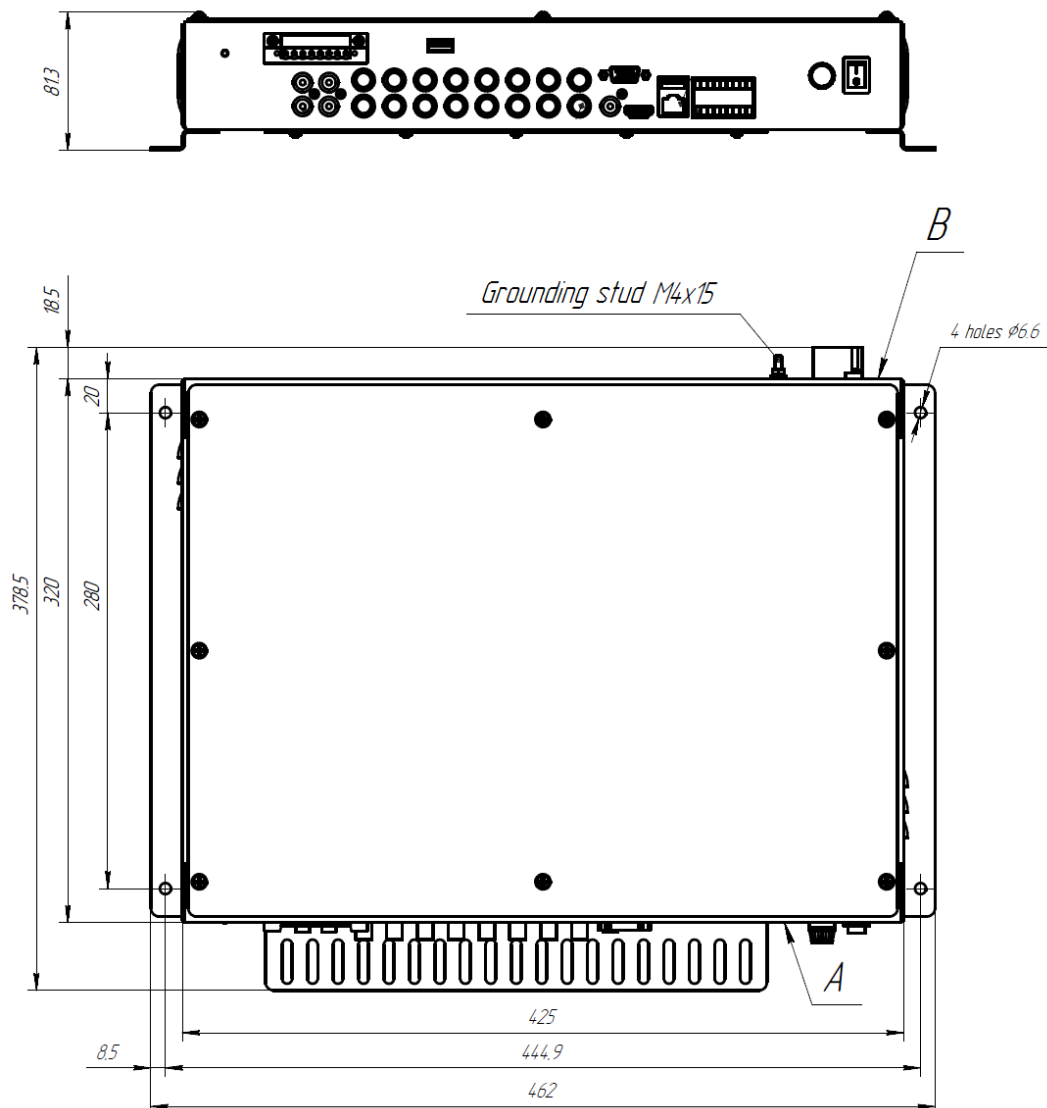
Technical specifications

Parameter	Value
Number of channels (to display video data from cameras)	8 analog and 8 digital
Network protocols	TCP/IP, UDP, HTTP, RTP, RTSP, DHCP, PPOE, DDNS, SMTP, SNTP, FTP, UPnP, P2P, 3G
Bandwidth (total / per channel), Mbit/s	128/8
Compression	H.264
Internal storage, TB	2, 4, 6, 8, 10, 12, 24
Budget PoE, W	120
Input voltage, VDC	19...36
Power consumption, W	50
Operating temperature, °C	-15...+55
Protection degree	IP22
Material	painted steel
Ports, pc.	16 x BNC; 1 x Ethernet 10/100/1000Base-T 2 x USB 2.0; 1 x HDMI; 1 x VGA; 1 x RS-485 1 x external microphone power supply 4 x audio input, 1 x audio output alarm inputs – 8 (detecting the NO or NC state of the connected relay) alarm outputs – 2 NO and 1 NO/NC
Mounting type	wall
Weight, kg	7.13

Connection diagram



Dimensions



Note – When installing provide a free space 140 mm from the surface A and 160 mm from the surface B for connecting the product.

**NVS REMOTE CLIENTS (COMPUTERS) MPC-127 (NVC DVS 1-2003/4),
MPC-19-4 (NVC DVS 1-2003/3)**



MPC-127



MPC-

19-4



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Design

MPC-127 (NVC DVS 1-2003/4)
MPC-19-4 (NVC DVS 1-2003/3)

Description

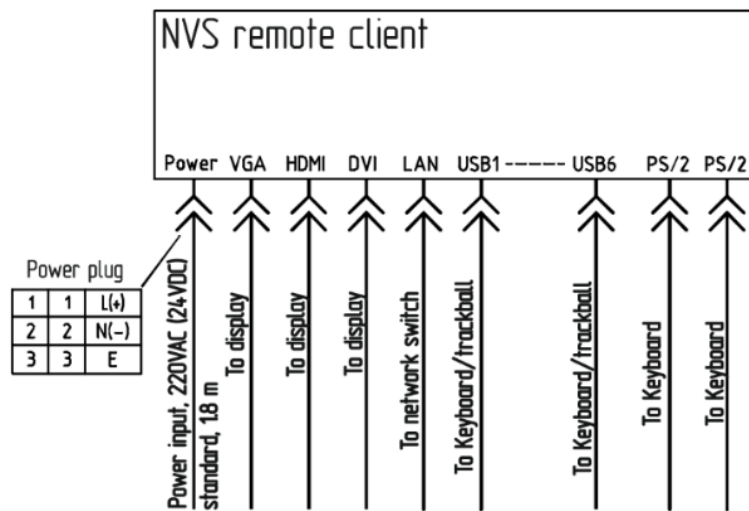
The unit ensures display and recording (further playback) of video data from the digital and analogue cameras (max 64), connected to the video servers. The unit can be additionally equipped with RAID-controller, providing data recording on several drives (backup recording).

Technical specifications

Parameter	MPC-127 (NVC DVS 1-2003/4)	MPC-19-4 (NVC DVS 1-2003/3)
	Value	
Processor	Intel Core i7	
RAM, GB	32	
HDD, GB	SSD 480	
Graphics card, GB	4	
DVD-drive	DVD-RW	
OS	Windows 10 x64	
Ports, pc. ¹⁾	8xUSB 2.0 type A (4 backpanel; 4 front panel) 2xUSB 3.0 type A (backpanel) 1 x audio input, audio output, microphone 2xEthernet 10/100/1000 (RJ-45) 1xVGA; 1xDVI-D; 1xHDMI; 1xDisplayPort; 1xCOM (RS-232) 2xPS/2 (a mouse, keyboard)	6xUSB 2.0 type A (4 backpanel; 2 front panel) 2xUSB 3.0 type A (backpanel) 1 x audio input, audio output, microphone 2xEthernet 10/100/1000 (RJ-45) 1xVGA; 1xDVI-D; 1xHDMI; 1xDisplayPort; 1xCOM (RS-232) 2xPS/2 (a mouse, keyboard)
Input voltage	24 VDC or 220 VAC	
Max. power consumption, W	500	
Protection degree	IP22	IP20
Weight, kg	12	21
Operating temperature, °C	-15 ...+55	
Mounting type	wall	into the rack 19" (4U)

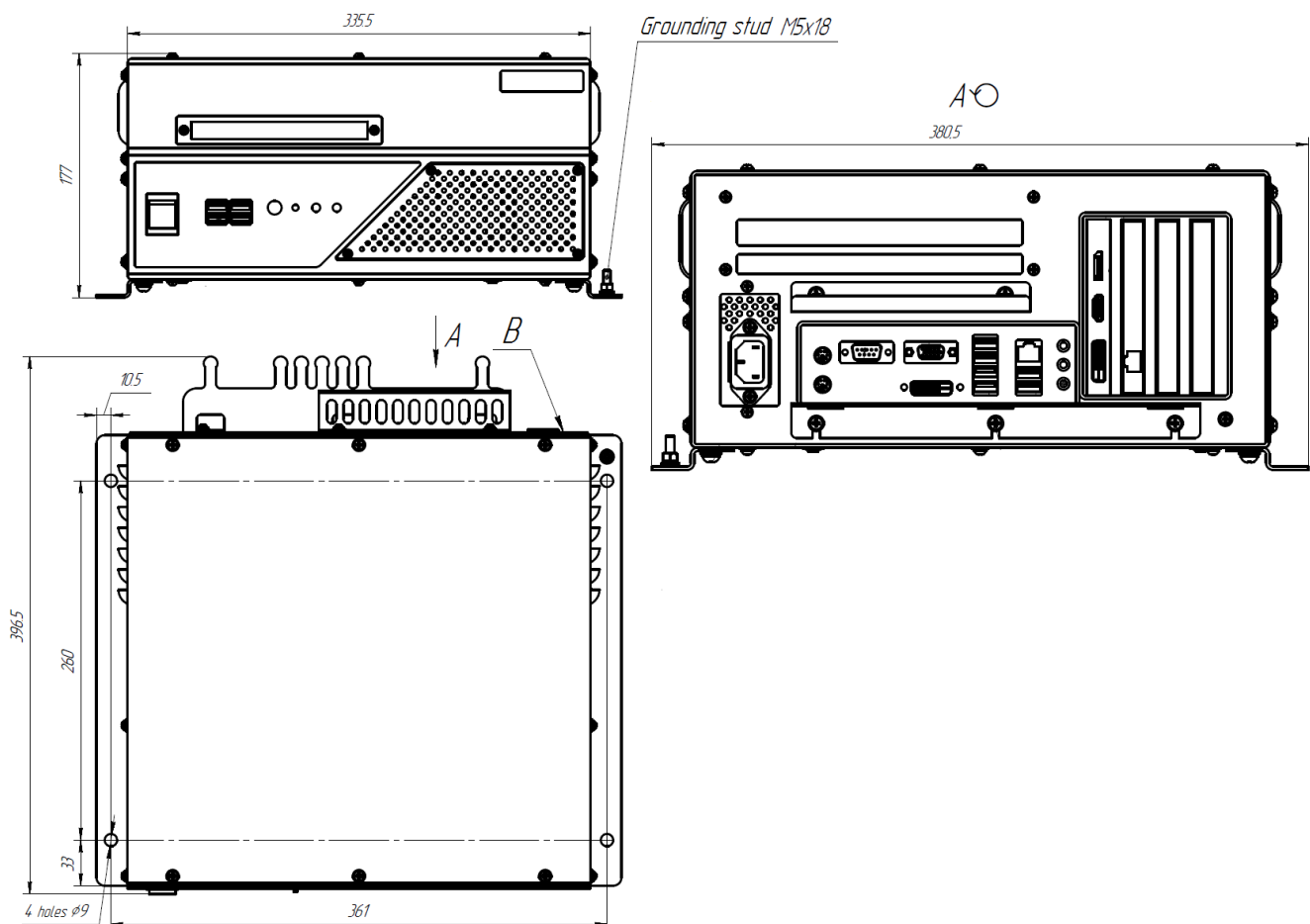
¹⁾ Type and number of ports can be changed on request.

Connection diagram



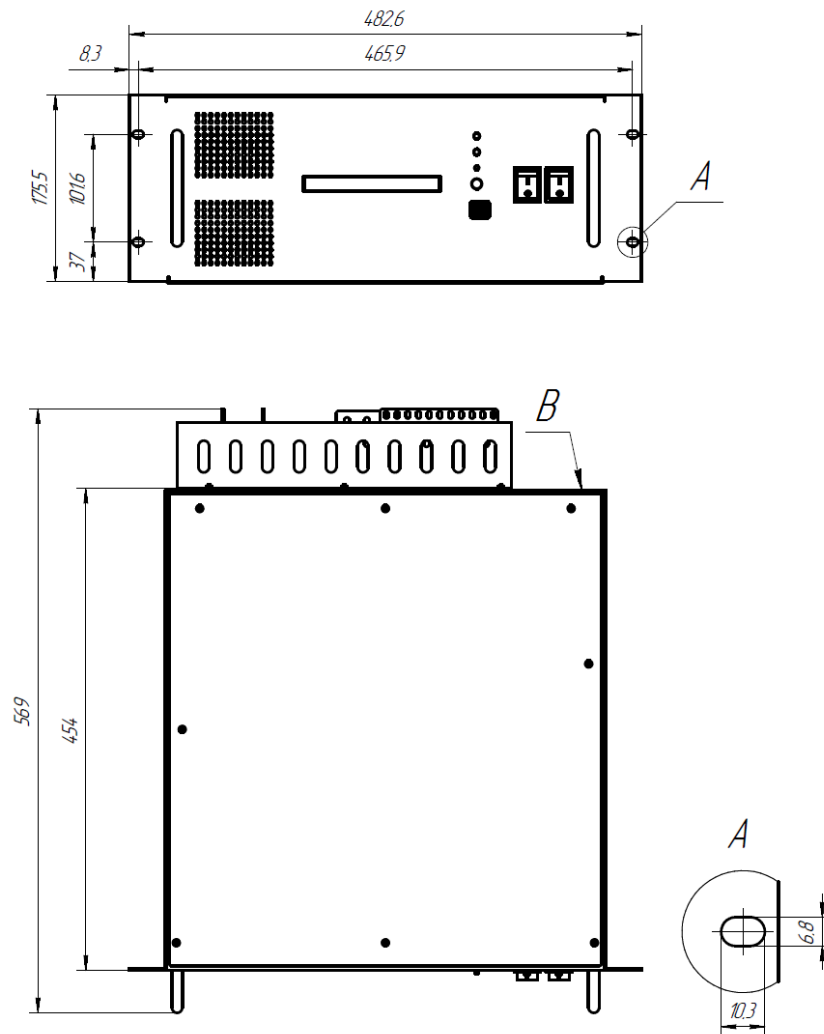
Dimensions

MPC-127 (NVC DVS 1-2003/4)



Note – When installing provide a free space 140 mm from the surface B for connecting the product.

MPC-19-4 (NVC DVS 1-2003/3)



Note – When installing provide a free space 140 mm from the surface B for connecting the product.

NETWORK SWITCHES POE-SW-8 (POE-SW-8 DVS-2003/1), POE-SW-8-WM (POE-SW-8-WM DVS-2003/2)



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 Registry of Shipping's certificate
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Design

POE-SW-8 (POE-SW-8 DVS-2003/1)
 POE-SW-8-WM (POE-SW-8-WM DVS-2003/2)

Description

The network switches are designed to create a local network and transmit data by Ethernet network (10/100/1000Base-T) with PoE support.

Features:

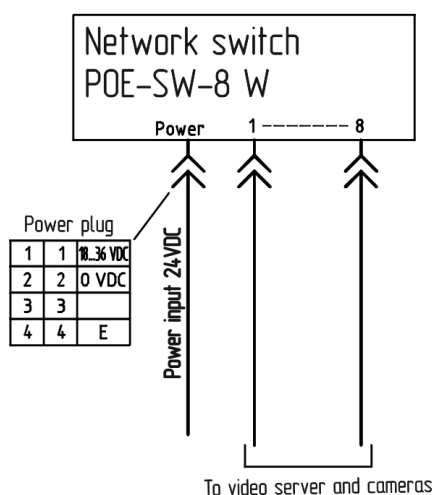
- max line length (switching unit – video camera) – 100 m;
- provides power supply to the connected video cameras from the video channel (depending on the camera type);
- power LED, data exchange, PoE status.

Technical specifications

Parameter	POE-SW-8 (POE-SW-8 DVS-2003/1)	POE-SW-8-WM (POE-SW-8-WM DVS-2003/2)
	Value	
Input voltage, VDC	19...36	
Power consumption, W	156	
Feedthrough power, W	30	
PoE budget, W	125	
Number of ports, pc.	8 x 10/100/1000 BASE-T (PoE) 1 x 10/100/1000 BASE-T 1 x 1000Base-X SFP	
Protection degree	IP20	
Material	painted steel	
Weight, kg	7.44 (9.05)*	6.07
Operating temperature, °C	-15...+55	
Mounting type	into the rack 19"	wall

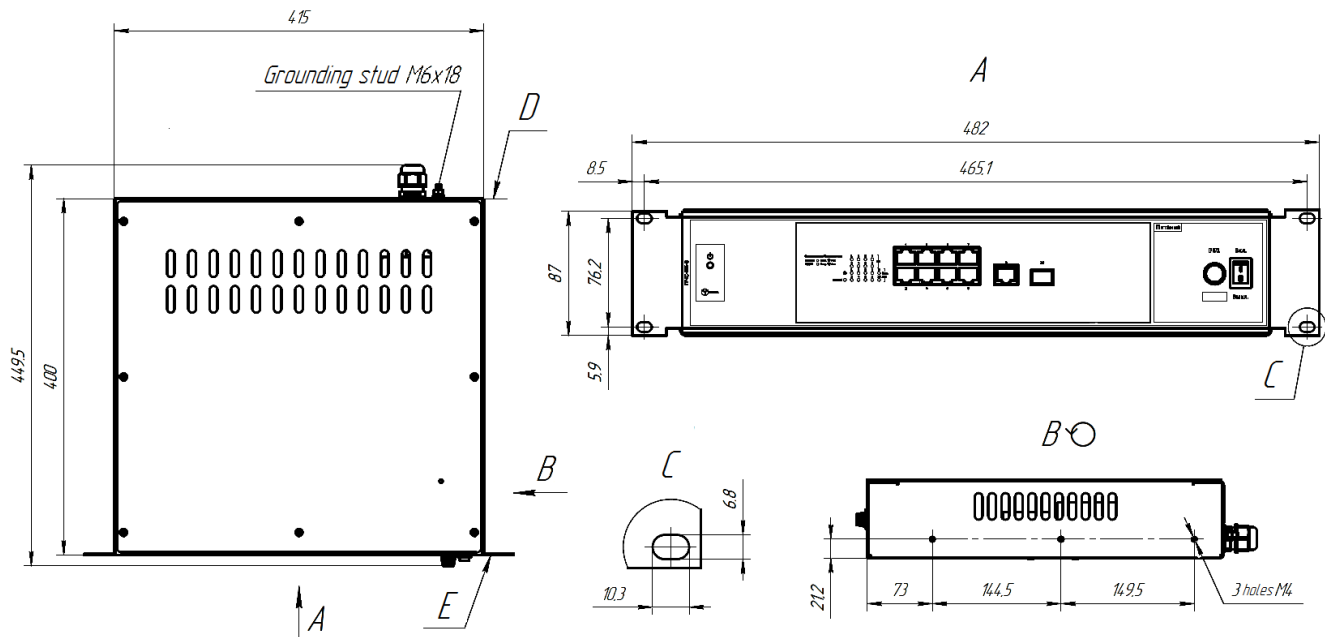
* Weight with installation kit in brackets.

Connection diagram



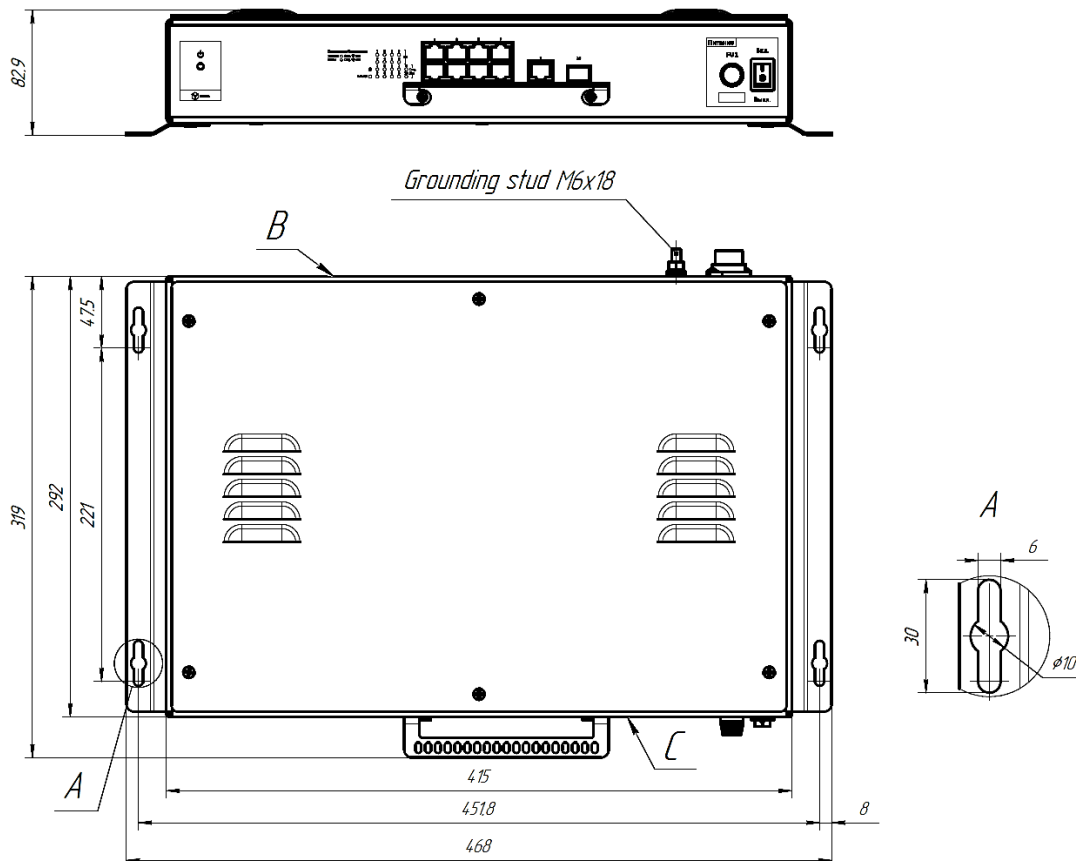
Dimensions

POE-SW-8 (POE-SW-8 DVS-2003/1)



Note – When installing provide a free space 120 mm from the surfaces D, E for connecting the product.

POE-SW-8-WM (POE-SW-8-WM DVS-2003/2)



Note – When installing provide a free space 160 mm from the surface B and 90 mm from the surface C for connecting the product.

NETWORK SWITCHES POE-SW-16 (POE-SW-16 DVS-2003/1), POE-SW-16-WM (POE-SW-16-WM DVS-2003/2)



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№ 19.02296.120 (Radioequipment)



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Design

POE-SW-16 (POE-SW-16 DVS-2003/1)
POE-SW-16-WM (POE-SW-16-WM DVS-2003/2)

Description

The network switches are designed to create a local network and transmit data by Ethernet network (10/100/1000Base-T) with PoE support.

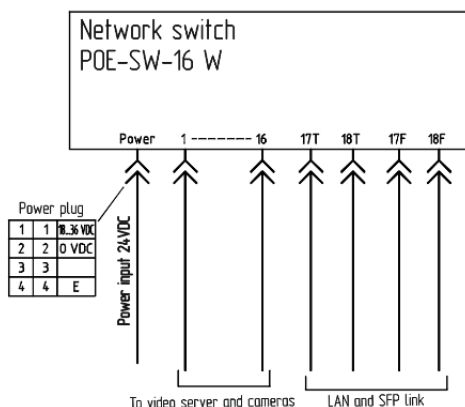
Features:

- max line length (switching unit – video camera) – 100 m;
- provides power supply to the connected video cameras from the video channel (depending on the camera type);
- power LED, data exchange, PoE status.

Technical specifications

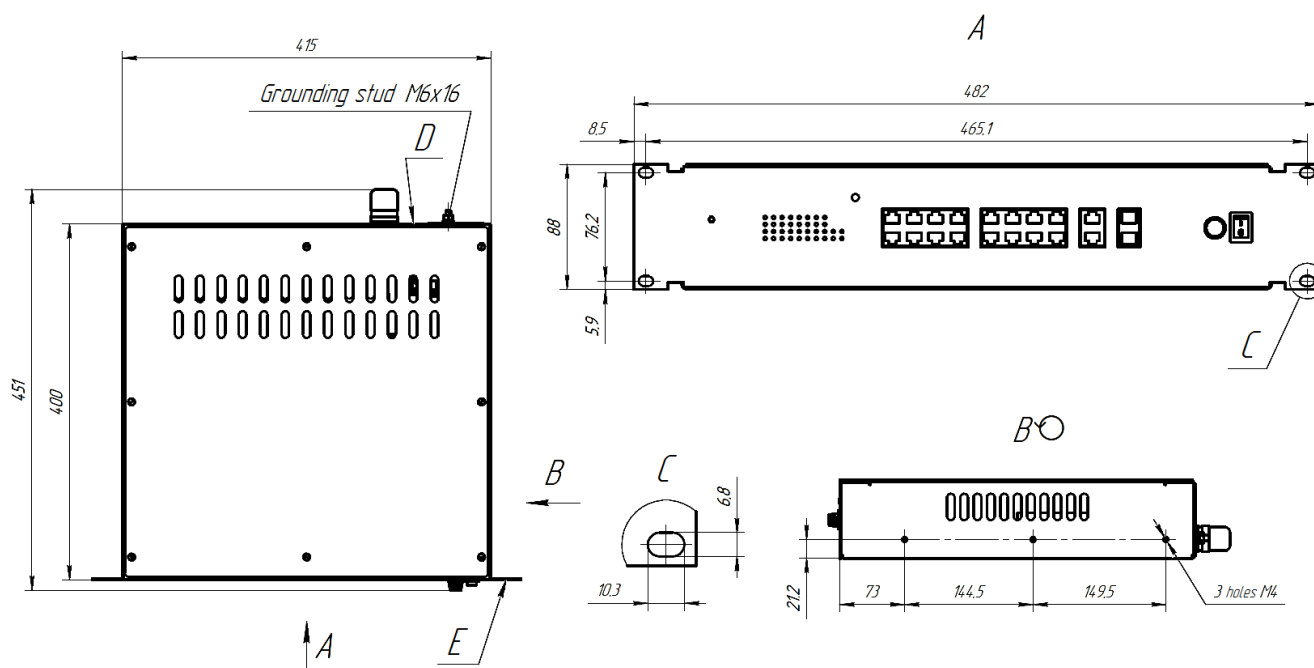
Parameter	POE-SW-16 (POE-SW-16 DVS-2003/1)	POE-SW-16-WM (POE-SW-16-WM DVS-2003/2)
	Value	
Input voltage, VDC	19...36	
Power consumption, W	359	
Feedthrough power, W	15.4	
PoE budget, W	246.4	
Number of ports, pc.	16 x 10/100 BASE-TX (PoE) 2 x 10/100/1000BASE-T and 1000Base-X SFP	
Protection degree	IP20	
Material	painted steel	
Wight, kg	3.12	3.57
Operating temperature, °C	-15...+55	
Mounting type	into the rack 19"	wall

Connection diagram



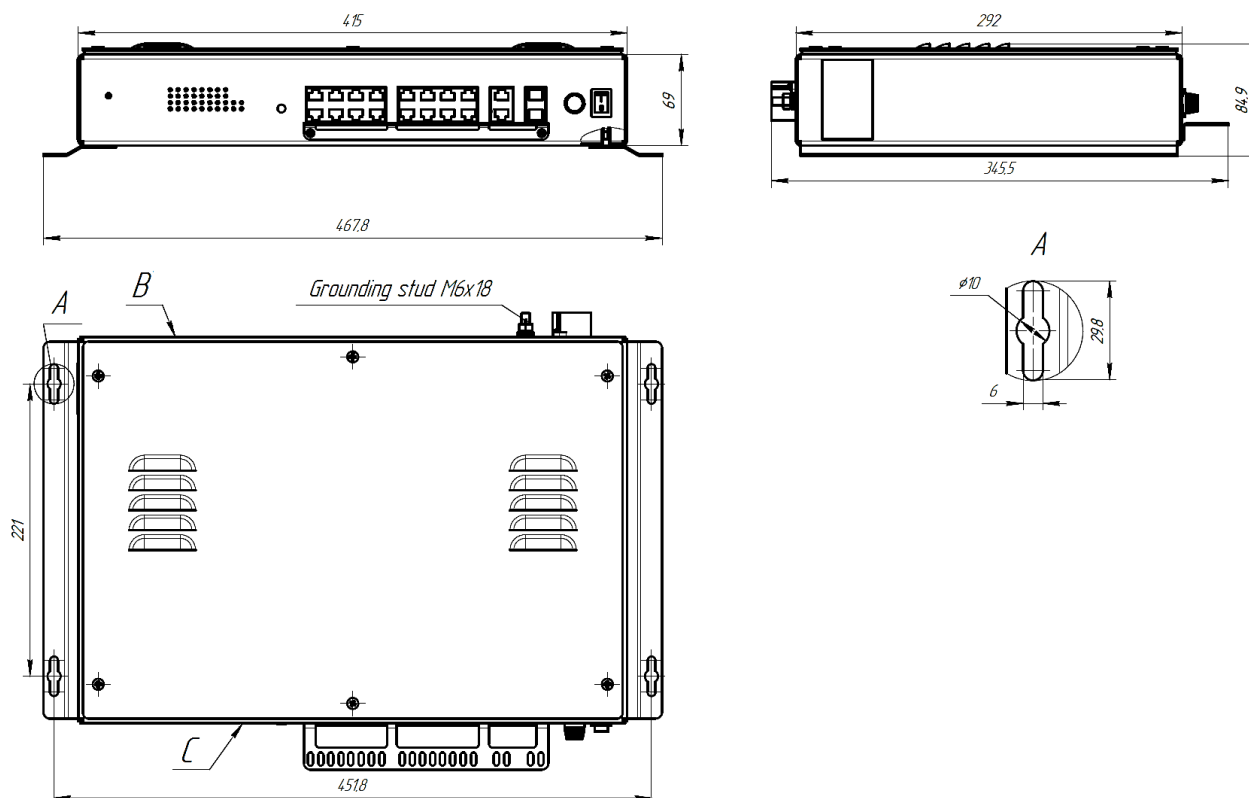
Dimensions

POE-SW-16 (POE-SW-16 DVS-2003/1)



Note – When installing provide a free space 120 mm from the surfaces D, E for connecting the product.

POE-SW-16-WM (POE-SW-16-WM DVS-2003/2)



Note – When installing provide a free space 160 mm from the surface B and 90 mm from the surface C for connecting the product.

NETWORK SWITCH POE-SW-24 (POE-SW-24 DVS-2003/1)



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Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)



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Description

The network switches are designed to create a local network and transmit data by Ethernet network (10/100/1000Base-T) with PoE support.

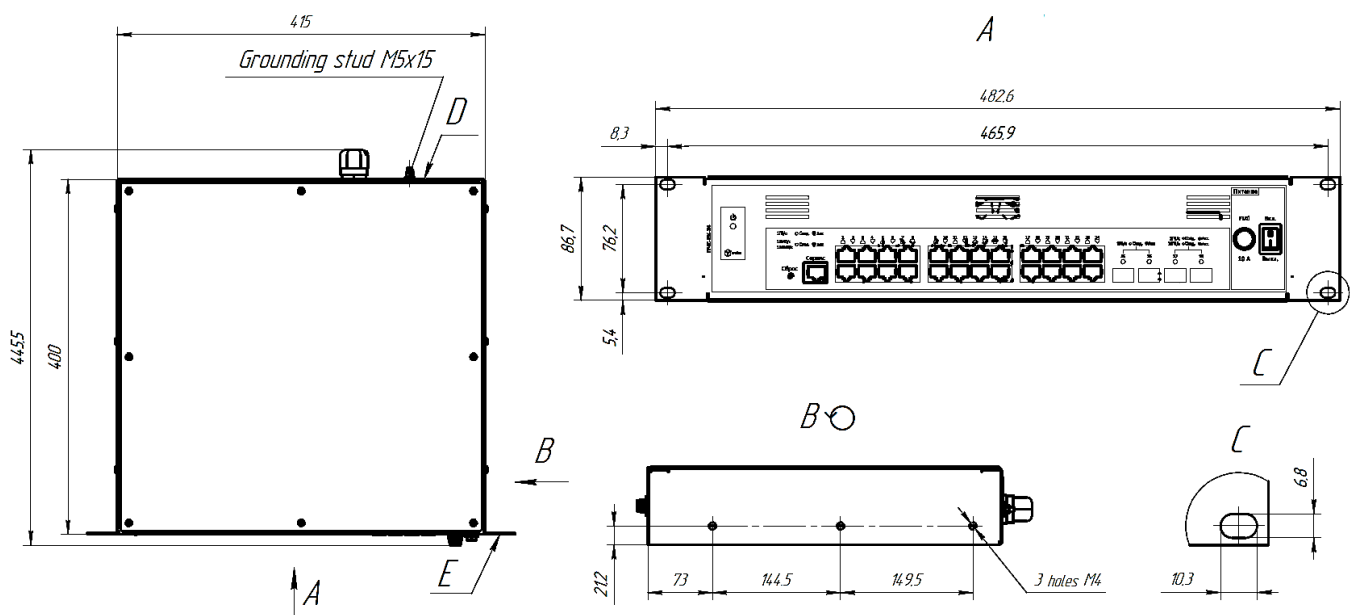
Features:

- max line length (switching unit – video camera) – 100 m;
- provides power supply to the connected video cameras from the video channel (depending on the camera type);
- power LED, data exchange, PoE status;
- overload protection (input power circuit fuse), POE-SW-24 switch L2+.

Technical specifications

Parameter	Value
Input voltage, VDC	19...36
Power consumption, W	285
Feedthrough power, W	30
PoE budget, W	193
Number of ports, pc.	24 x 10/100/1000 BASE-T (PoE) 2 x 1000Base-X SFP 2 x 10G Base-X SFP+
Protection degree	IP20
Material	painted steel
Wight, kg	3.5
Operating temperature, °C	-15...+55
Mounting type	into the rack 19"

Dimensions



Note – When installing provide a free space 90 mm from the surfaces D, E for connecting the product.

NETWORK SWITCHES SW-16 (SW-16 DVS-2003/4), SW-16-WM (SW-16-WM DVS-2003/3)



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equipment)

Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)



Certificate of conformity
№МБД РФ.03.000606

Design

SW-16 (SW-16 DVS-2003/4)
SW-16-WM (SW-16-WM DVS-2003/3)

Description

The network switch, 16 ports, 10/100/1000M Base-TX (w/o power from network).

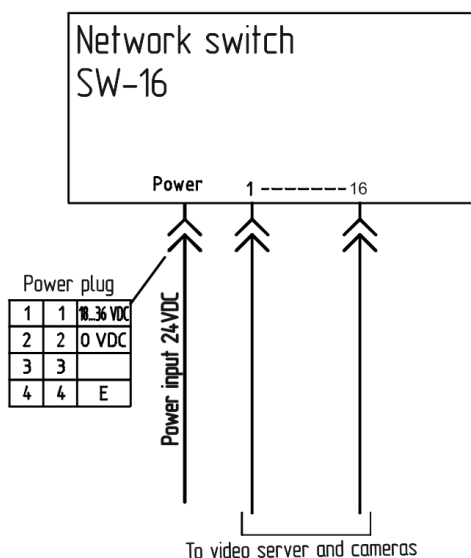
Feature – Reverse polarity and overload protection (fuse on the input mains).

Technical specifications

Parameter	SW-16 (SW-16 DVS-2003/4)	SW-16-WM (SW-16-WM DVS-2003/3)
	Value	
Input voltage, VDC	19...36	
Power consumption, W	13	
Number of ports, pc.	16 x 10/100/1000 Base-TX	
Protection degree	IP20	
Material	painted steel	
Wight, kg	5.62 (7.23)*	3.5
Operating temperature, °C	-15...+55	
Mounting type	into the rack 19"	wall

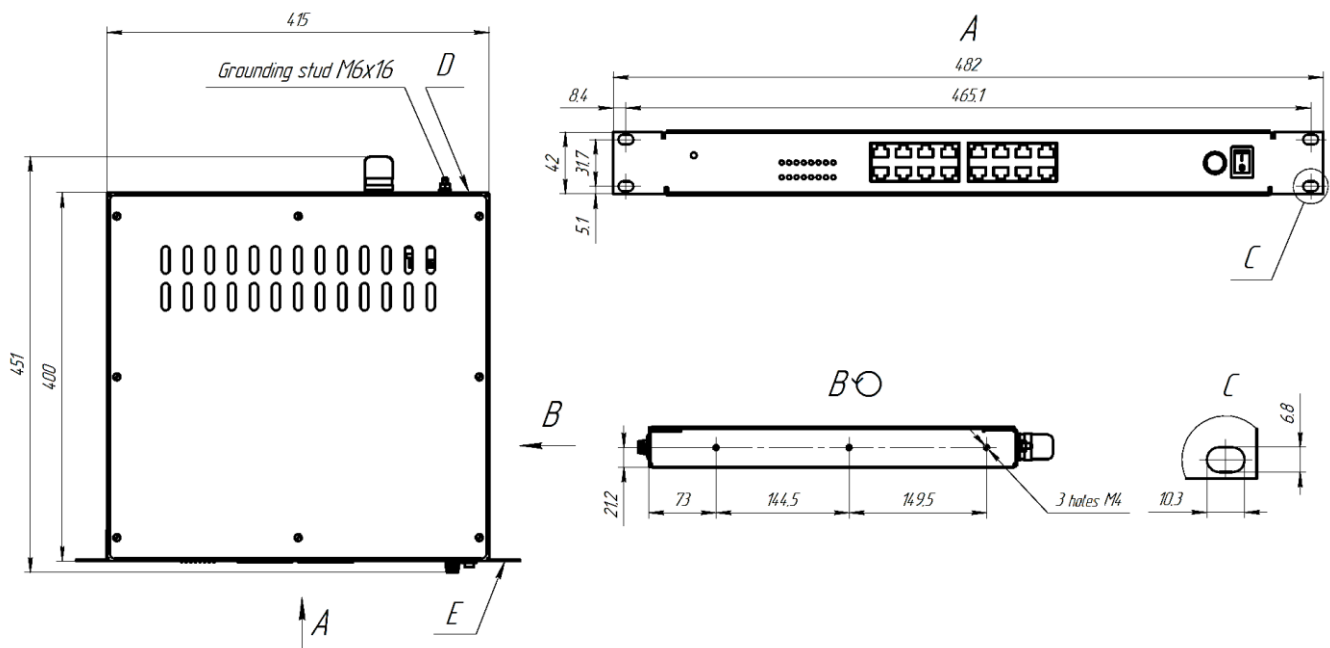
* Weight with installation kit in brackets.

Connection diagrams



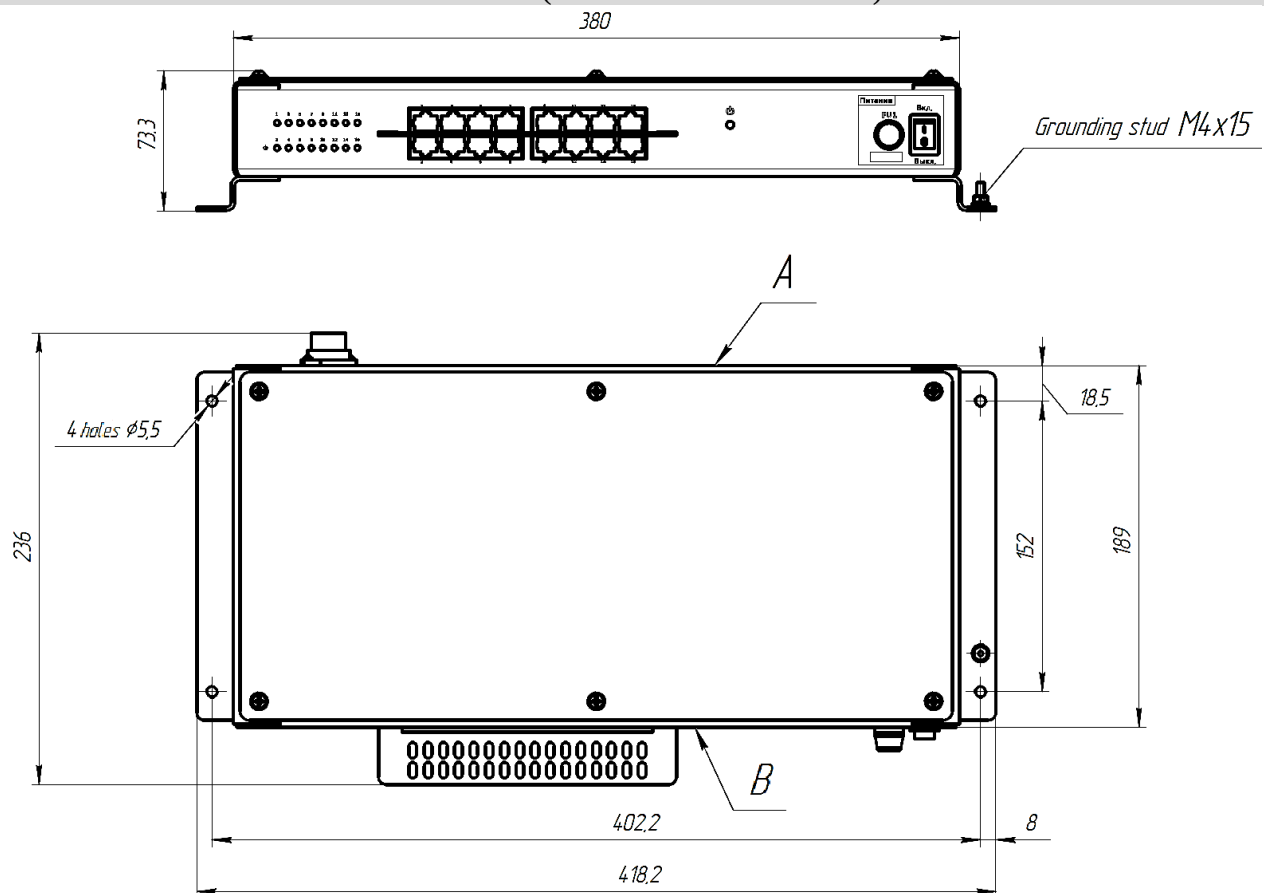
Dimensions

SW-16 (SW-16 DVS-2003/4)



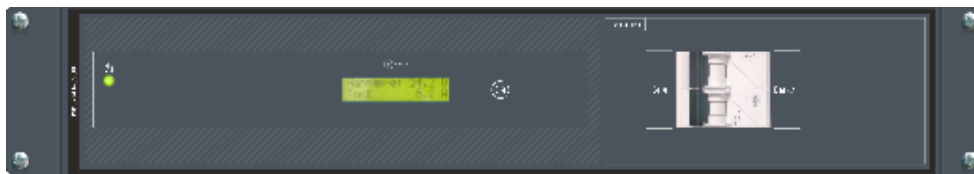
Note – When installing provide a free space 120 mm from the surfaces D, E for connecting the product.

SW-16-WM (SW-16-WM DVS-2003/3)



Note – When installing provide a free space 160 mm from the surfaces A, B for connecting the product.

POWER SUPPLY UNIT ITS-PS-1500-24 (ITS-PS-1500-24 DVS-2003/1)



Описание

Provides power supply to the rack units from the mains 220 V, 50 Hz, rated output voltage 24 V DC.

Features:

- input power LED;
- input and output power mains overload protection;
- built-in LCD display (to show loading data: voltage, current and power).



Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)

Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

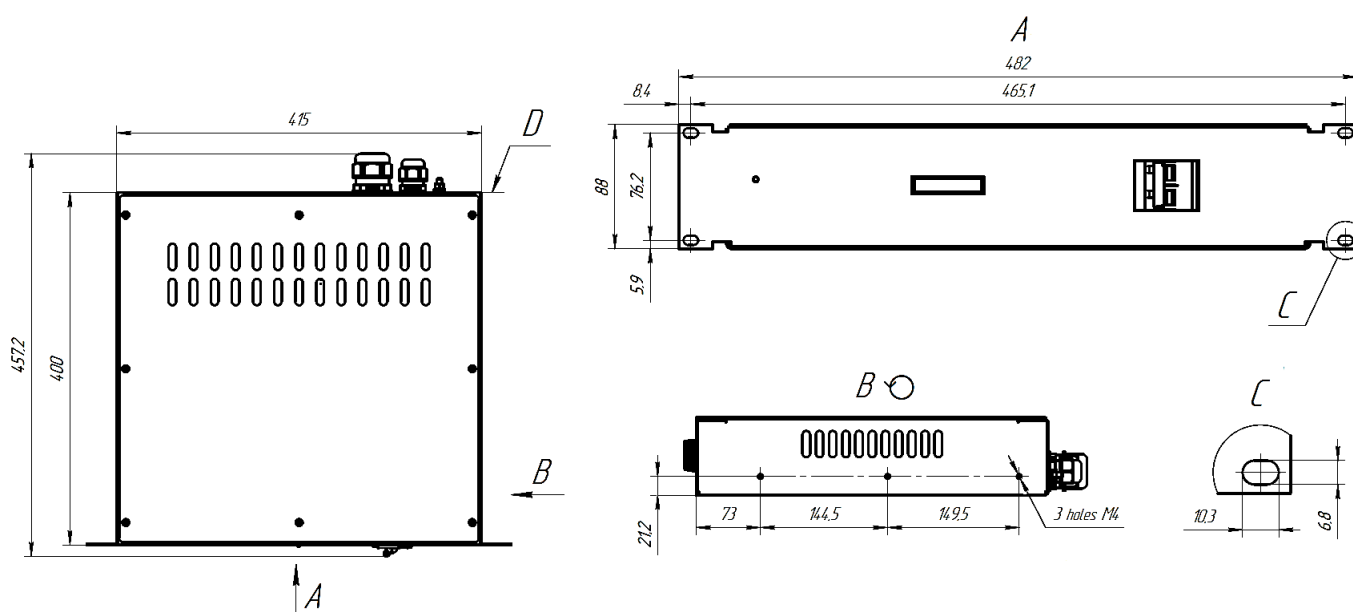


Certificate of conformity
№МВД РФ.03.000606

Technical specifications

Parameter	Value
Input voltage, VAC	220
Output voltage, VDC	24
Max output power, W	1500
Power consumption, W	1670
Protection degree	IP20
Material	painted steel
Weight, kg	8.5
Operating temperature, °C	-15...+55
Mounting type	into the rack 19"

Dimensions



Note – When installing provide a free space 200 mm from the surface D for connecting the product.

POWER SUPPLY UNITS ITS-PS-1000-24 (ITS-PS -1000-24 DVS-2003/1), ITS-PS-500-24 (ITS-PS-500-24 DVS-2003/1)



Описание

Provides power supply to the rack units from the mains 220 and 24 V (allows for switching from one to another), rated output voltage 24 V DC.



Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)

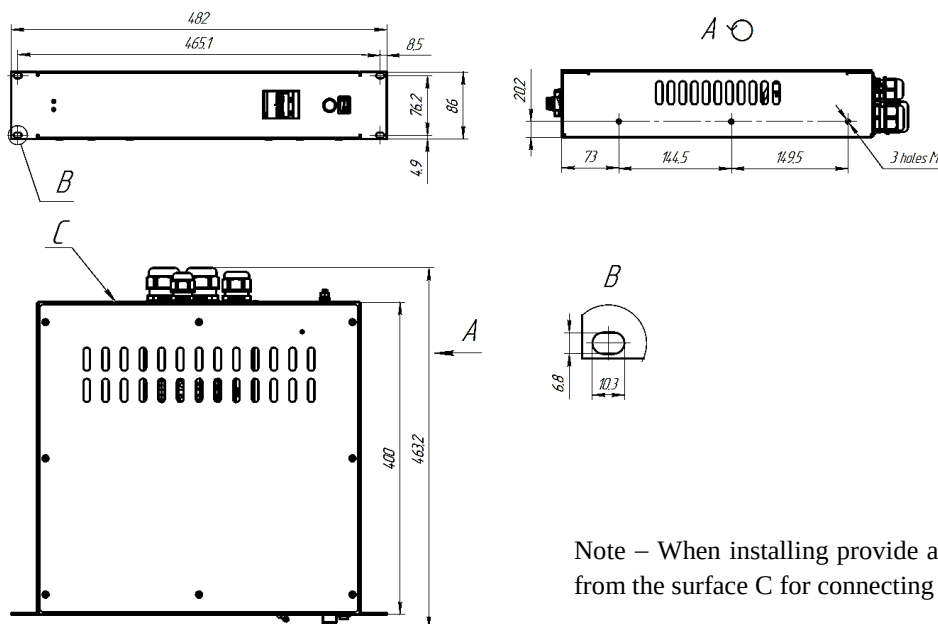
Features:

- integrated function of switching over to standby power (and vice versa) in case of 220 V mains failure (recovery);
- input power LED;
- input and output power mains overload protection.

Technical specifications

Parameter	ITS-PS-1000-24 (ITS-PS -1000-24 DVS-2003/1)	ITS-PS-500-24 (ITS-PS-500-24 DVS-2003/1)
	Value	
Input voltage, VAC	220	
Input voltage (standby), VDC	24	
Output voltage, VDC	24	
Max output power, W	800 (700 under 19 VDC)	500 (375 under 19 VDC)
Power consumption, W	1130	580
Protection degree	IP20	
Material	painted steel	
Weight, kg	8.5	7.5
Operating temperature, °C	-15...+55	
Mounting type	into the rack 19"	

Dimensions



Note – When installing provide a free space 200 mm from the surface C for connecting the product.

**POWER SUPPLY UNITS 19-PS-1000-24 (19-PS-1000-24 DVS-2003/1),
19-PS-500-24 (19-PS-500-24 DVS-2003/1)**



Описание

Provides power supply to the rack units from the mains 220 and 24 V (allows for switching from one to another), rated output voltage 24 V DC.



Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

Features:

- integrated function of switching over to standby power (and vice versa) in case of 220 V mains failure (recovery);
- input power LED;
- input and output power mains overload protection.

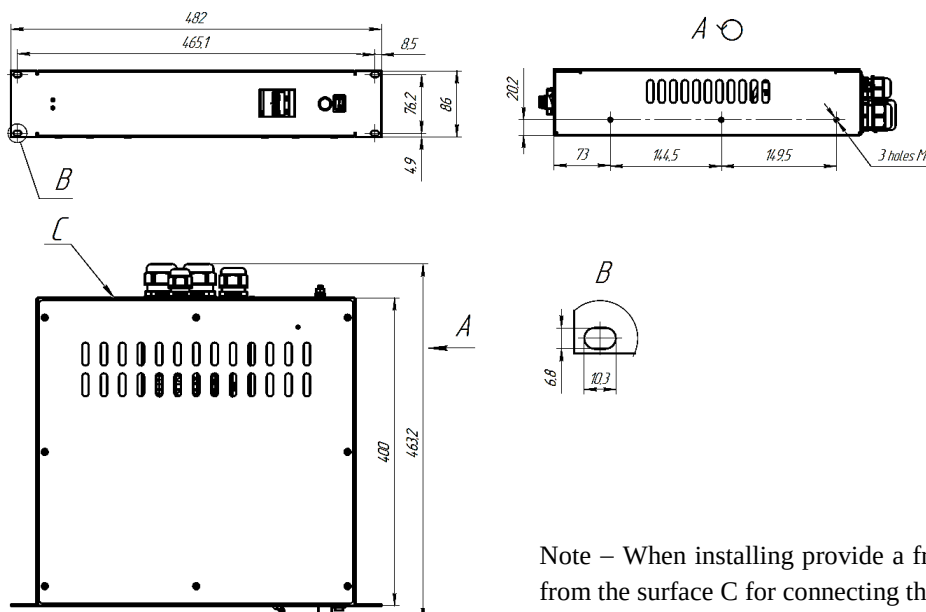


Certificate of conformity
№МВД РФ.03.000606

Technical specifications

Parameter	19-PS-1000-24 (19-PS-1000-24 DVS-2003/1)	19-PS-500-24 (19-PS-500-24 DVS-2003/1)
	Value	
Input voltage, VAC	220	
Input voltage (standby), VDC	24	
Output voltage, VDC	24	
Max output power, W	800 (700 under 19 VDC)	500 (375 under 19 VDC)
Power consumption, W	1130	580
Protection degree	IP20	
Material	painted steel	
Weight, kg	8,5	7,5
Operating temperature, °C	-15...+55	
Mounting type	into the rack 19"	

Dimensions



Note – When installing provide a free space 200 mm from the surface C for connecting the product.

POWER SUPPLY UNIT ITS-PS-350 (ITS-PS-350 DVS-2003/1)



Описание

Provides power supply to the rack units from the mains 220 V (allows for switching from one to another) in case of power mains failure (from built-in storage battery).

Features:

- input power LED;
- input power mains overload protection;
- output power mains overload and short-circuit protection.



Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)

Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

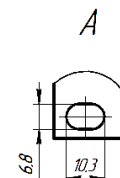
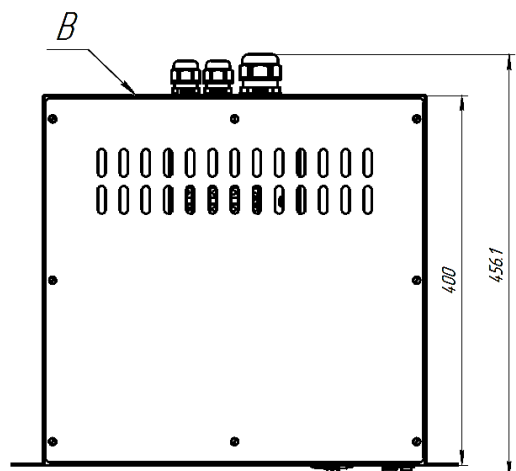
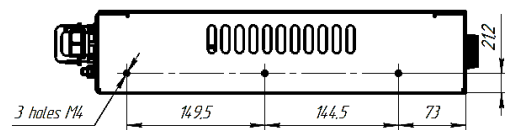
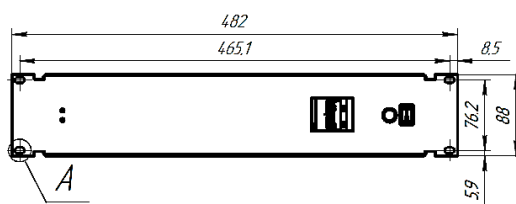


Certificate of conformity
№МВД РФ.03.000606

Technical specifications

Parameter	Value
Input voltage, VAC	220
Output voltage, VDC	28,4
Output voltage, battery operation, VDC	19.2...28.0
Max output power, W	320
Power consumption, W	450
Capacity of built-in storage battery, A·h	18
Protection degree	IP20
Material	painted steel
Weight, kg	8.5
Operating temperature, °C	-15...+55
Mounting type	into the rack 19"

Dimensions



Note – When installing provide a free space 200 mm from the surface B for connecting the product.

POWER SUPPLY UNIT BPS-114-24 (BPS-114-24 DVS-2003/1)



Description

Provides power supply to the rack units from the mains 220 V (allows for switching from one to another) in case of power mains failure (from built-in storage battery).

Features:

- input power mains overload protection;
- output power mains overload and short-circuit protection.



Registry of Shipping's certificate
№18.10558.120 (Electrical
equipment)

Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

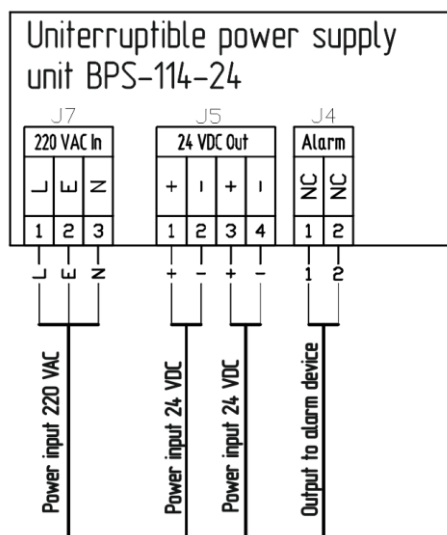


Certificate of conformity
№MBД PΦ.03.000606

Technical specifications

Parameter	Value
Input voltage, VAC	220
Output voltage, VDC	28.4
Output voltage, battery operation, VDC	19.2...28.0
Max output power, W	320
Power consumption, W	450
Capacity of built-in storage battery, A·h	18
Protection degree	IP22
Material	painted steel
Weight, kg	21.7
Operating temperature, °C	-15...+55
Mounting type	wall

Connection diagram



[illegible]

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POWER SUPPLY UNITS PS-103 (PS-103 DVS-2003/1), PS-103-20 (PS-103-20 DVS-2003/1)



Description

Supplies power to the System units with unregulated voltage 24 V DC.

Features:

- number of connected loads: 3 (PS-103), 4 (PS-103-20);
- power failure alarm, an external signaling unit can be connected;
- galvanic isolation from power mains;
- integrated automatic switch over to standby power supply (24 V).



Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)
Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)



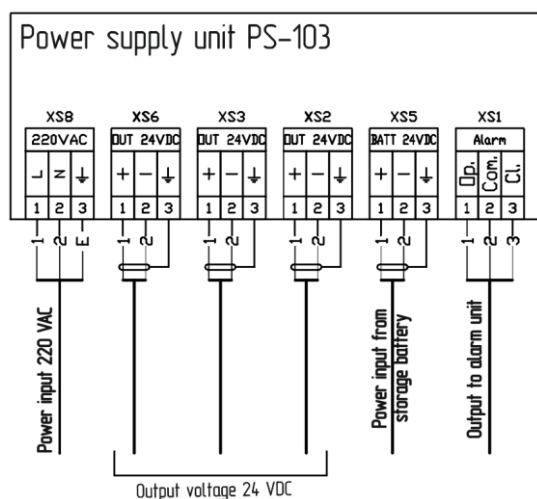
Certificate of conformity
№МБД РФ.03.000606

Technical specifications

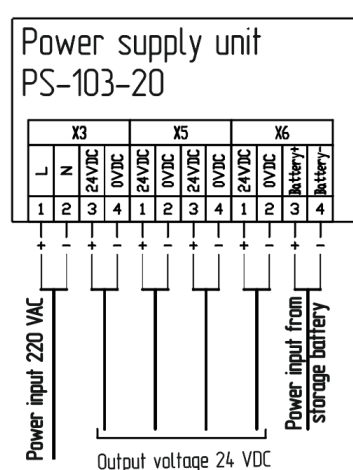
Parameter	PS-103 (PS-103 DVS-2003/1)	PS-103-20 (PS-103-20 DVS-2003/1)
	Value	
Input voltage, VAC	220 (110 optional)	
Input voltage (standby), VDC	24	
Output voltage, VDC	18...31	
Max output power, W	190	400
Power consumption, W	240	450
Protection degree	IP22	
Material	painted steel	
Weight, kg	4.4	9.3
Operating temperature, °C	-15...+55	
Mounting type	wall	

Connection diagrams

PS-103 (PS-103 DVS-2003/1)

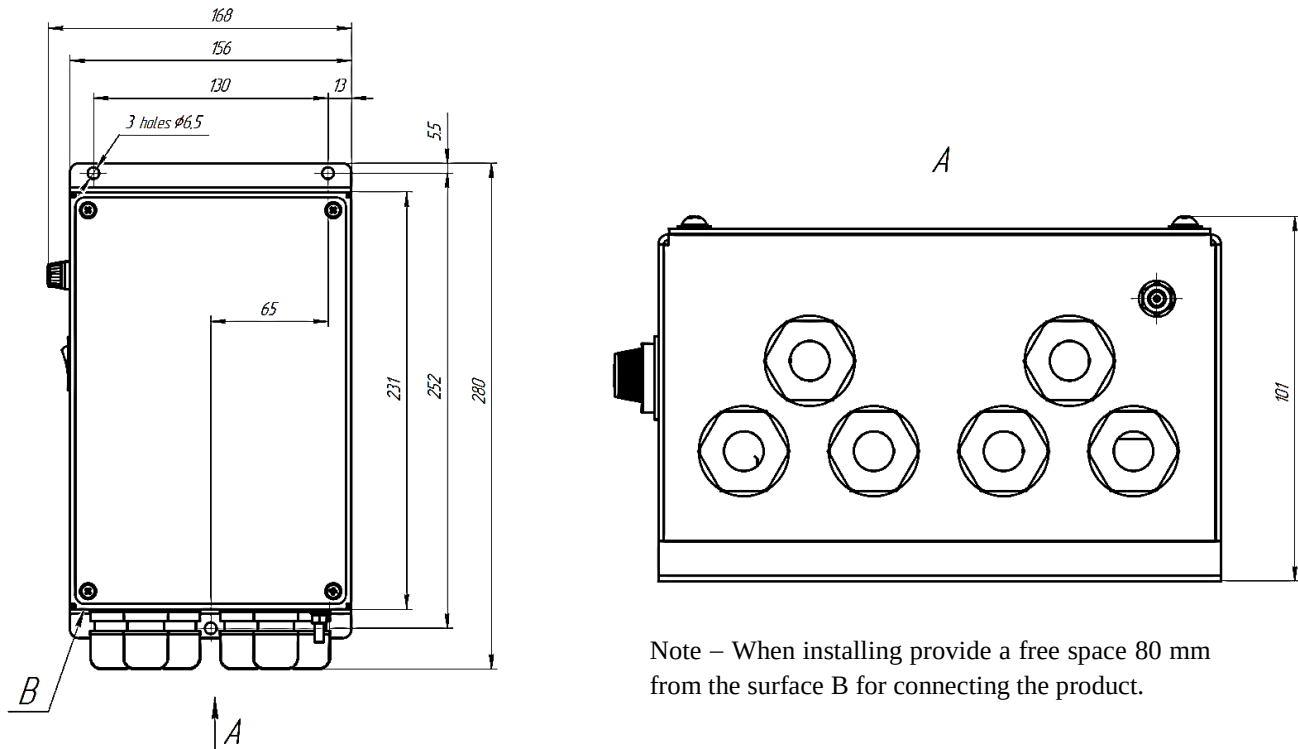


PS-103-20 (PS-103-20 DVS-2003/1)

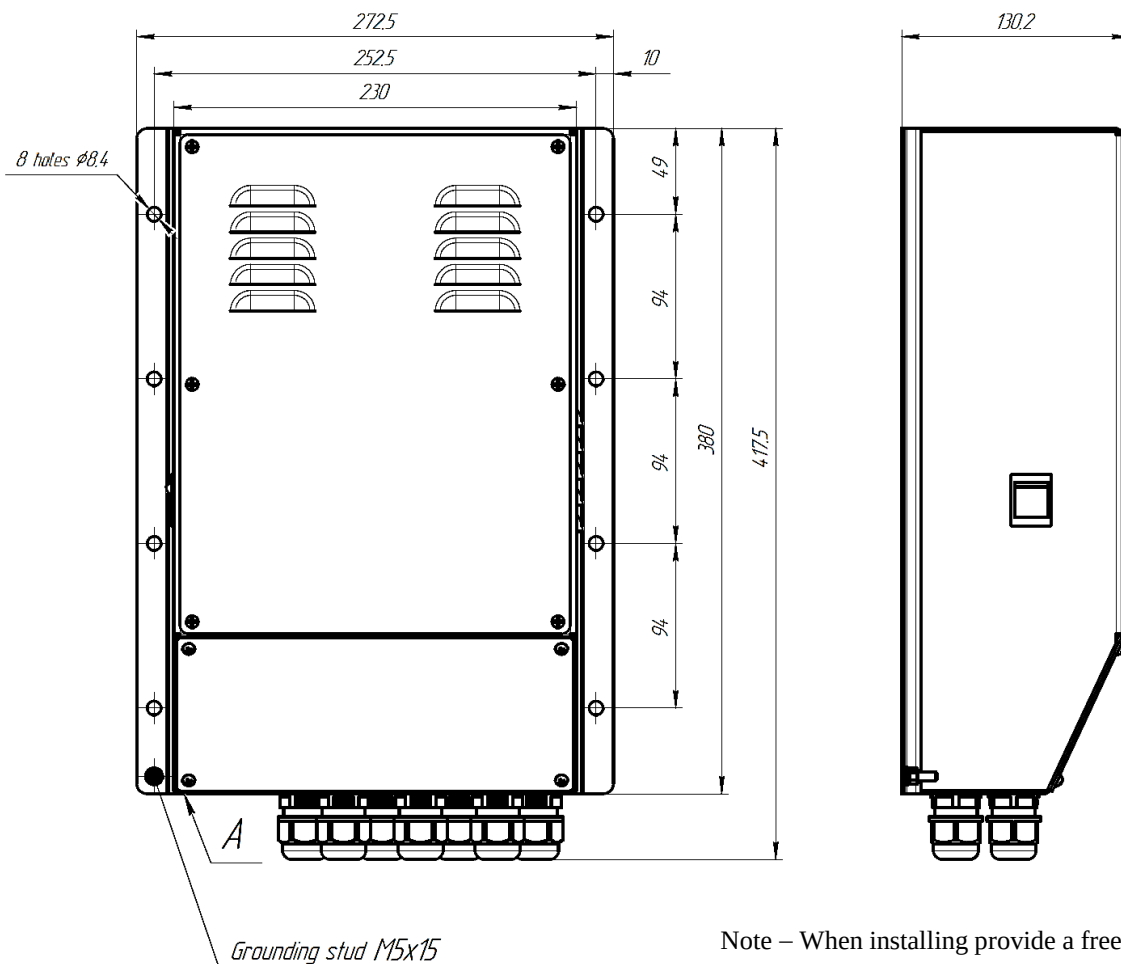


Dimensions

PS-103 (PS-103 DVS-2003/1)



PS-103-20 of (PS-103-20 DVS-2003/1)



CHARGING UNIT ITS-CH-105-24 (ITS-CH-105 DVS-2003/1), ITS-CH-105-220 (ITS-CH-105 DVS-2003/1)



Design

ITS-CH-105-24 (ITS-CH-105 DVS-2003/1)
ITS-CH-105-220 (ITS-CH-105 DVS-2003/1)

Description

Charges the external storage battery, 24 V, max capacity 200 A·h and provides power supply to the rack equipment from the chargeable battery.

Features:

- charger type: automatic;
- LEDs:
 - charge voltage and current;
 - automatic charger operating mode: charge, normal, error;
- reverse polarity, overload, short-circuit, deep discharge protection;
- alarms:
 - main power supply failure;
 - reverse polarity battery connection;
 - switching on the automatic charger when storage battery disconnected (circuit rupture);
 - overvoltage;
 - overload or short-circuit;
 - excessive charge current or voltage.



Registry of Shipping's certificate
№18.10558.120 (Electrical
equipment)
Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)



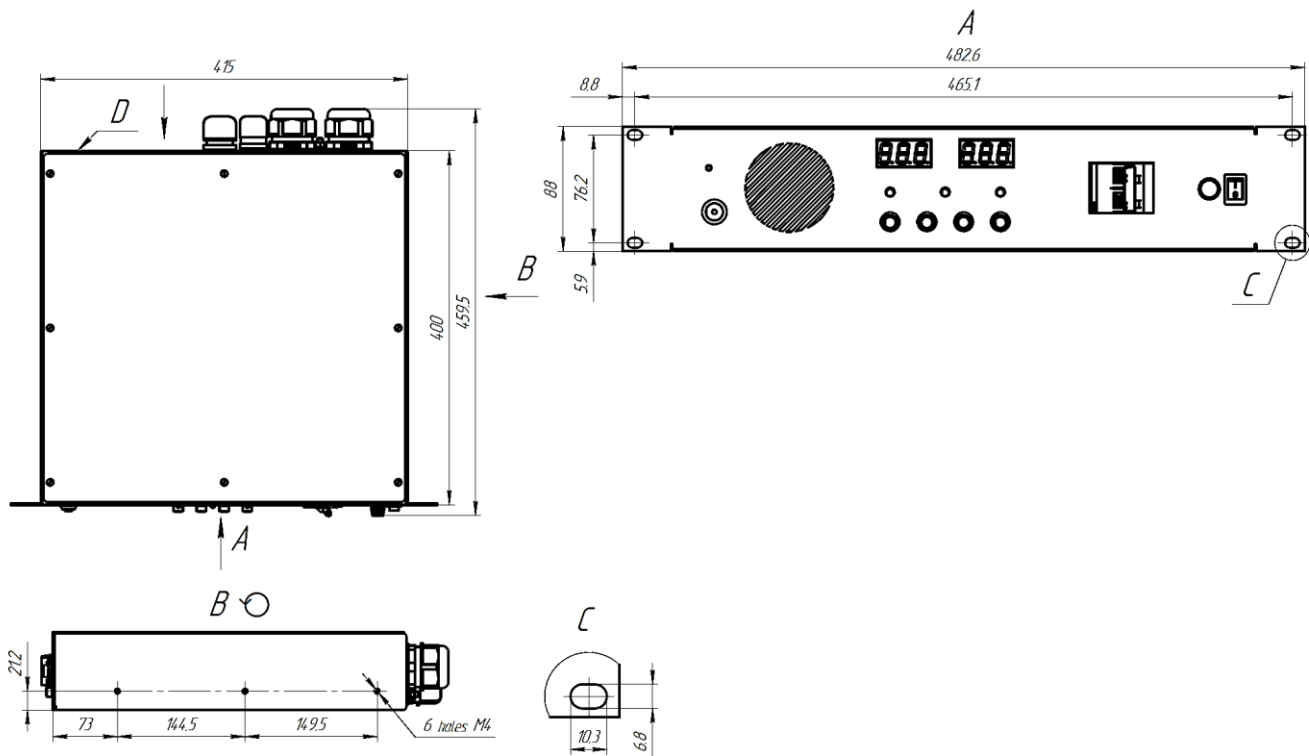
Certificate of conformity
№МБД РФ.03.000606

Technical specifications

Parameter	ITS-CH-105-24 (ITS-CH-105 DVS-2003/1)	ITS-CH-105-220 (ITS-CH-105 DVS-2003/1)
	Value	
Input voltage, VDC	24 (19...36)	220 (198...242)
Parameters of chargeable battery, A·h	24 VDC, 200	
Protection degree	IP20	
Material	painted steel	
Weight, kg	10.23 (11.84)*	
Operating temperature, °C	–15...+55	
Mounting type	into the rack 19"	

* Weight with installation kit in brackets.

Dimensions



Note – When installing provide a free space 240 mm from the surface D for connecting the product.

AUTOMATIC POWER SUPPLY SWITCH



Design

ITS-APS-120-24 (ITS-APS-120-24 DVS-2003/1)

ITS-APS -120-220 (ITS-APS-120-220 DVS-2003/2)

Description

Provides for a switchover between main and standby power, distributes input main and standby power to 6 outputs.

Features:

- input and output power LEDs;
- input power mains overload protection;
- output power mains overload and short-circuit protection.



Registry of Shipping's certificate
№18.10558.120 (Electrical
equipment)

Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

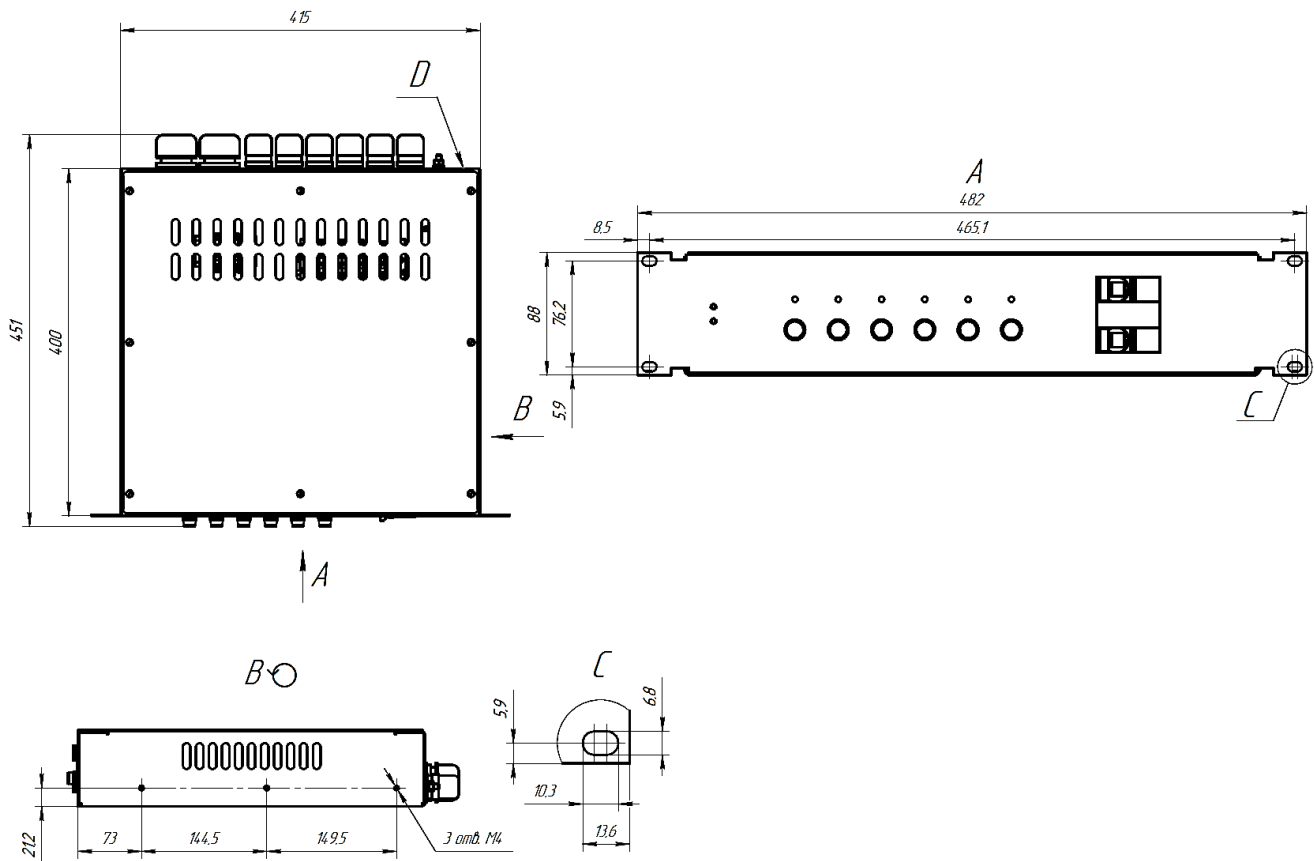


Certificate of conformity
№МБД РФ.03.000606

Technical specifications

Parameter	ITS-APS-120-24 (ITS-APS-120-24 DVS-2003/1)	ITS-APS -120-220 (ITS-APS-120-220 DVS-2003/2)
	Value	
Input voltage	24 VDC	220 VAC
Max power consumption, W	10	
Number of outputs, pc.	6	
Protection degree	IP20	
Material	painted steel	
Weight, kg	9.57 (11.18)*	9.61 (11.22)*
Operating temperature, °C	−15...+55	
Mounting type	into the rack 19"	
* Weight with installation kit in brackets.		

Dimensions



Note – When installing provide a free space 120 mm from the surface *D* for connecting the product.

DIGITAL COLOUR VIDEO CAMERA CMS-100 (VC DVS 22121-2003/1)



Description

Digital colour fixed-focus lens video camera with built-in motion sensor. The cameras marked “M” are equipped with a built-in microphone.



Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)

Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

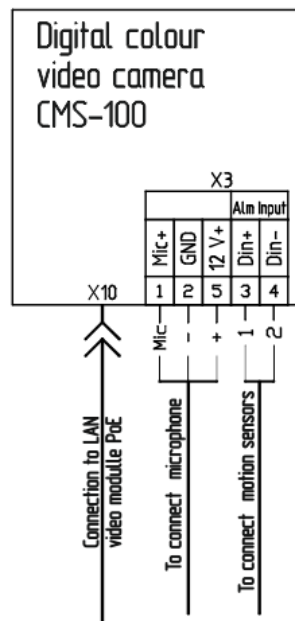


Certificate of conformity
№МБД РФ.03.000606

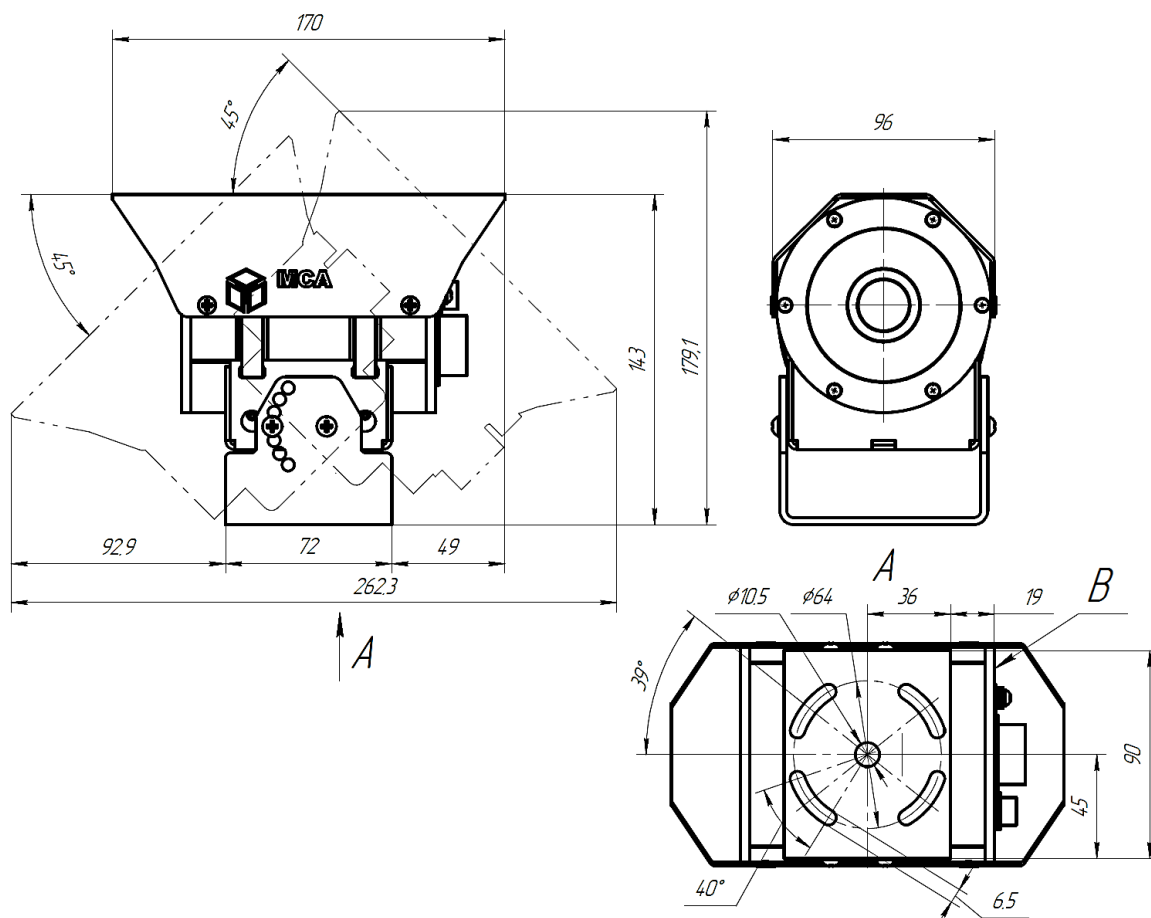
Technical specifications

Parameter	CMS-100/3.6*	CMS-100/6	CMS-100/8	CMS-100/12	CMS-100/3.6/M*	CMS-100/6/M	CMS-100/8/M	CMS-100/12/M
	Value							
Resolution	2 MP, 1920x1080							
Focus length, mm	3.6	6.0	8.0	12.0	3.6	6.0	8.0	12.0
Angle of view, horizontal	84°	56°	34°	25°	84°	56°	34°	25°
Angle of view, vertical	40°	25°	16°	12°	40°	25°	16°	12°
Matrix	CMOS							
Noise suppression	2D- and 3DNR							
IR range, m	30							
Signal / noise ratio, dB	≥ 52							
Min illumination, lux	0.01							
Connection of external sensors	+							
Day / night mode	+							
Backlight compensation	+							
Built-in IR filter	+							
Image settings	brightness, sharpness, saturation, contrast, colour depth							
Brightness adjustment	WDR							
Input voltage, VDC PoE	48							
Power consumption (w/o heating), W	6							
Heating power, W	7							
Weight, kg	3							
Operating temperature, °C	-60...+55							
Protection degree	IP66				IP56			
Material	stainless steel							
Mounting type	on horizontal surface or pan / tilt platform							
* Washer nozzle and tank may be delivered at option.								

Connection diagram

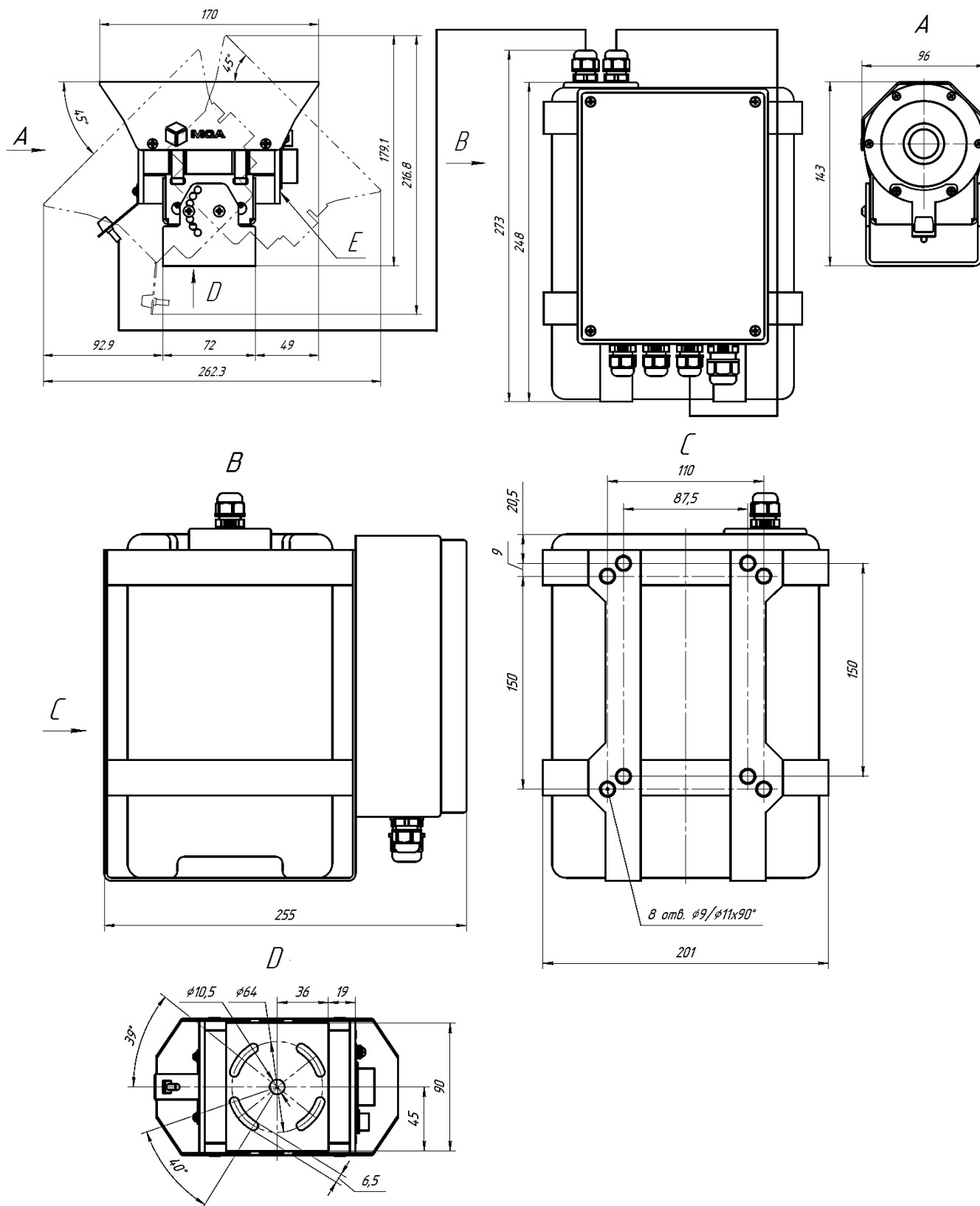


Dimensions



Note – When installing provide a free space 120 mm from the surface B for connecting the product.

Digital colour video camera CMS-100/3.6, CMS-100/3.6/M
with the washer nozzle and tank



Note – When installing provide a free space 120 mm from the surface E for connecting the product.

DIGITAL COLOUR VIDEO CAMERA DCIA-100 (VC DVS 22223-2003/1)



Description

Dome digital colour video camera, varifocal lens, built-in motion sensor, for installation inside. The camera DCIA-100M is equipped with a built-in microphone.



Registry of Shipping's certificate
 №18.10558.120 (Electrical
 equipment)

Registry of Shipping's certificate
 № 19.02296.120 (Radioequipment)

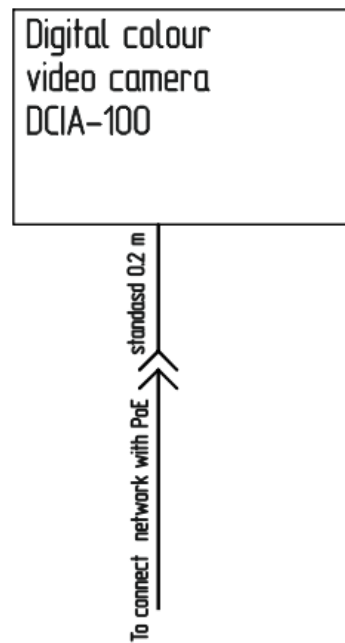


Certificate of conformity
 №МБД РФ.03.000606

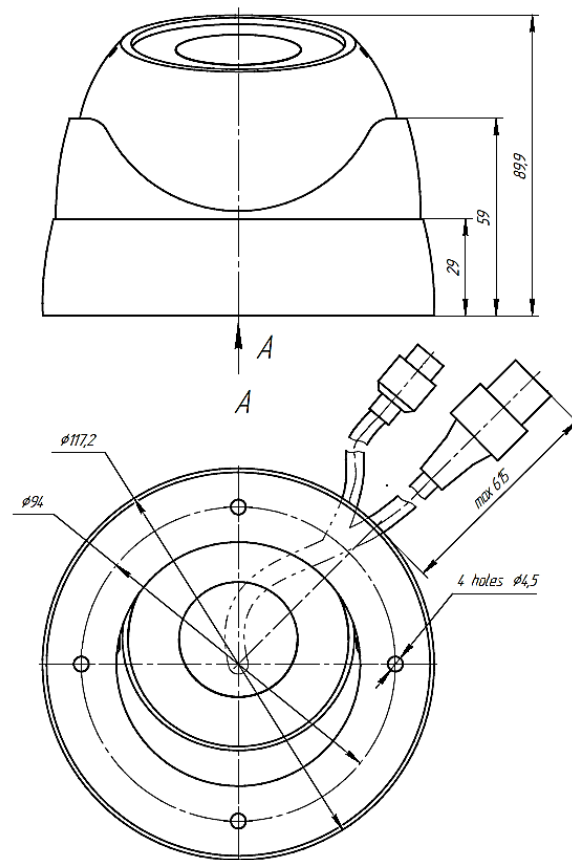
Technical specifications

Parameter	DCIA-100	DCIA-100M
	Value	
Resolution	1920x1080	
Focus length, mm	2.8...12.0	
Angle of view, horizontal	90°...28°	
Angle of view, vertical	52°...15°	
Matrix	CMOS	
Noise suppression	2D- and 3DNR	
IR range, m	15	
Signal / noise ratio, dB	50	
Min illumination, lux	0.01	
Day / night mode	+	
Backlight compensation	+	
Built-in IR filter	+	
Image settings	brightness, sharpness, saturation, contrast, colour depth	
Brightness adjustment	WDR	
Input voltage, VDC PoE	48	
Power consumption, W	6	
Weight, kg	0.68	
Operating temperature, °C	-15...+55	
Protection degree	IP44	
Material	aluminium	
Mounting type	wall or ceiling	

Connection diagram



Dimensions



ANALOGUE COLOUR VIDEO CAMERA DCIA-100A (VC DVS 12223-2003/1)



Description

Dome analogue colour video camera, varifocal lens, for installation inside (material: aluminium).



Registry of Shipping's certificate
№18.10558.120 (Electrical
equipment)
Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

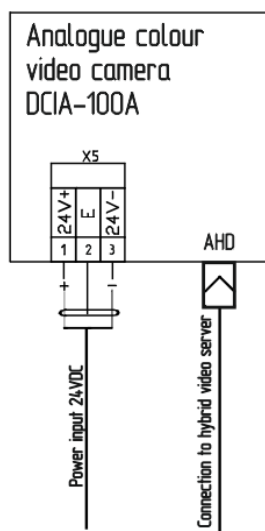


Certificate of conformity
№МБД РФ.03.000606

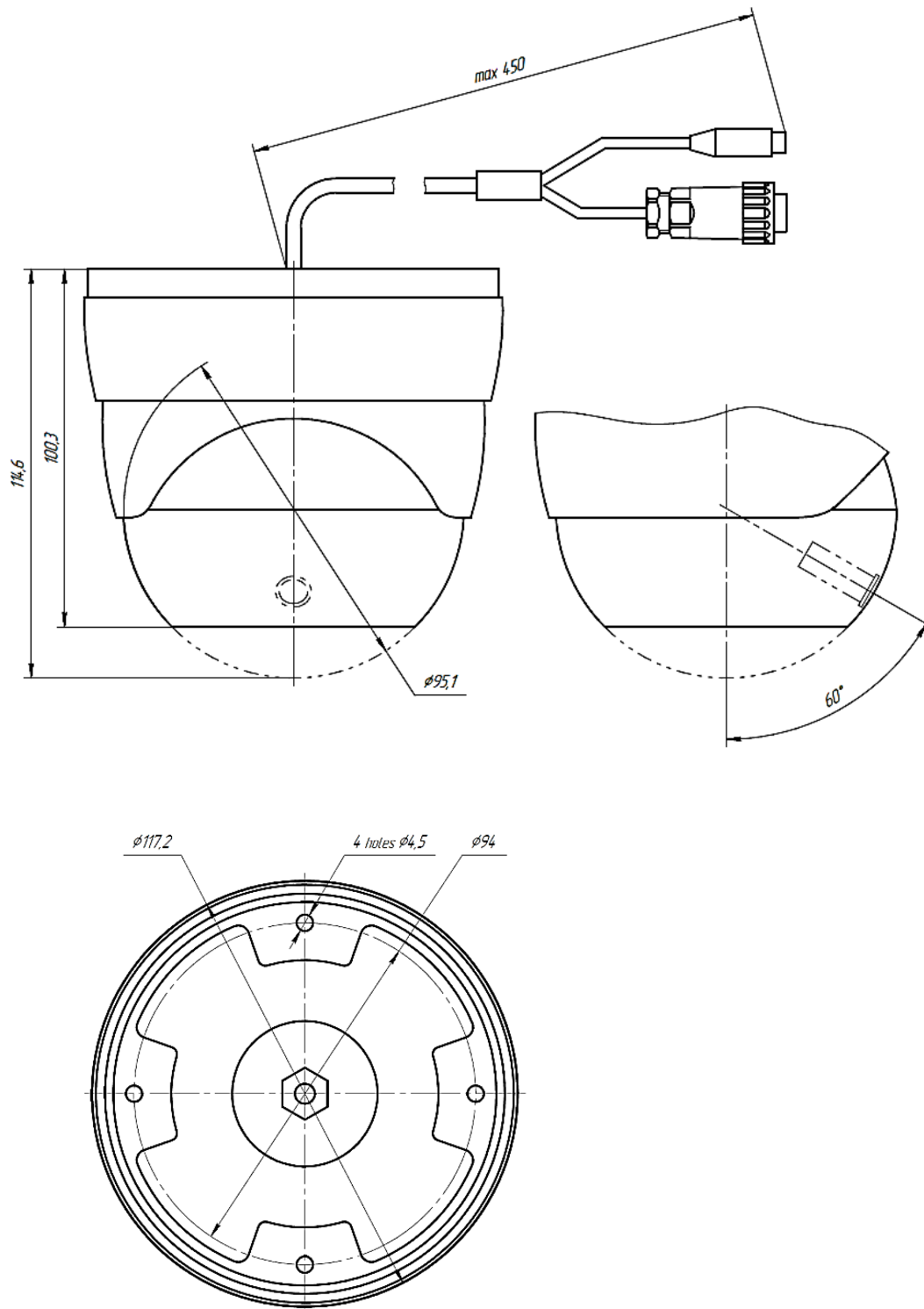
Technical specifications

Parameter	Value
Resolution	2 MP, 1920x1080
Focus length, mm	3.6 / 6.0 / 8.0 / 12.0
Angle of view, horizontal	105° / 65° / 45° / 28°
Max aperture	F/2.0
Matrix	CMOS
IR range, m	15
Signal / noise ratio, dB	50
Min illumination, lux	0.01
Input voltage, VDC	19...36
Power consumption, W	6
Weight, kg	3.5
Operating temperature, °C	-15...+55
Protection degree	IP44
Material	stainless steel
Mounting type	wall or ceiling

Connection diagram



Dimensions



DIGITAL COLOUR VIDEO CAMERA CMA-130 EX (VC DVS 22121-2003/4)



Description

Digital colour video camera, for installation inside, fixed lens, built-in motion sensor, explosion-proof. The camera is delivered with two cable glands and two glands for armoured cables.



Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)
Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

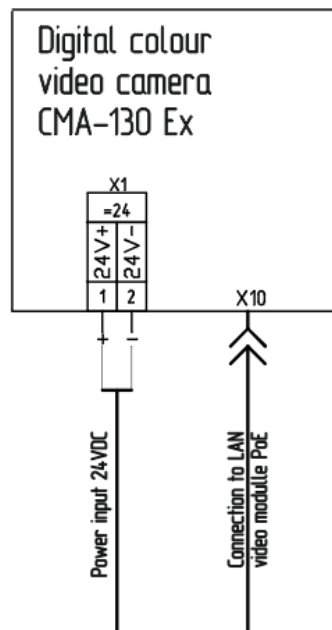


Certificate of conformity
№МБД РФ.03.000606

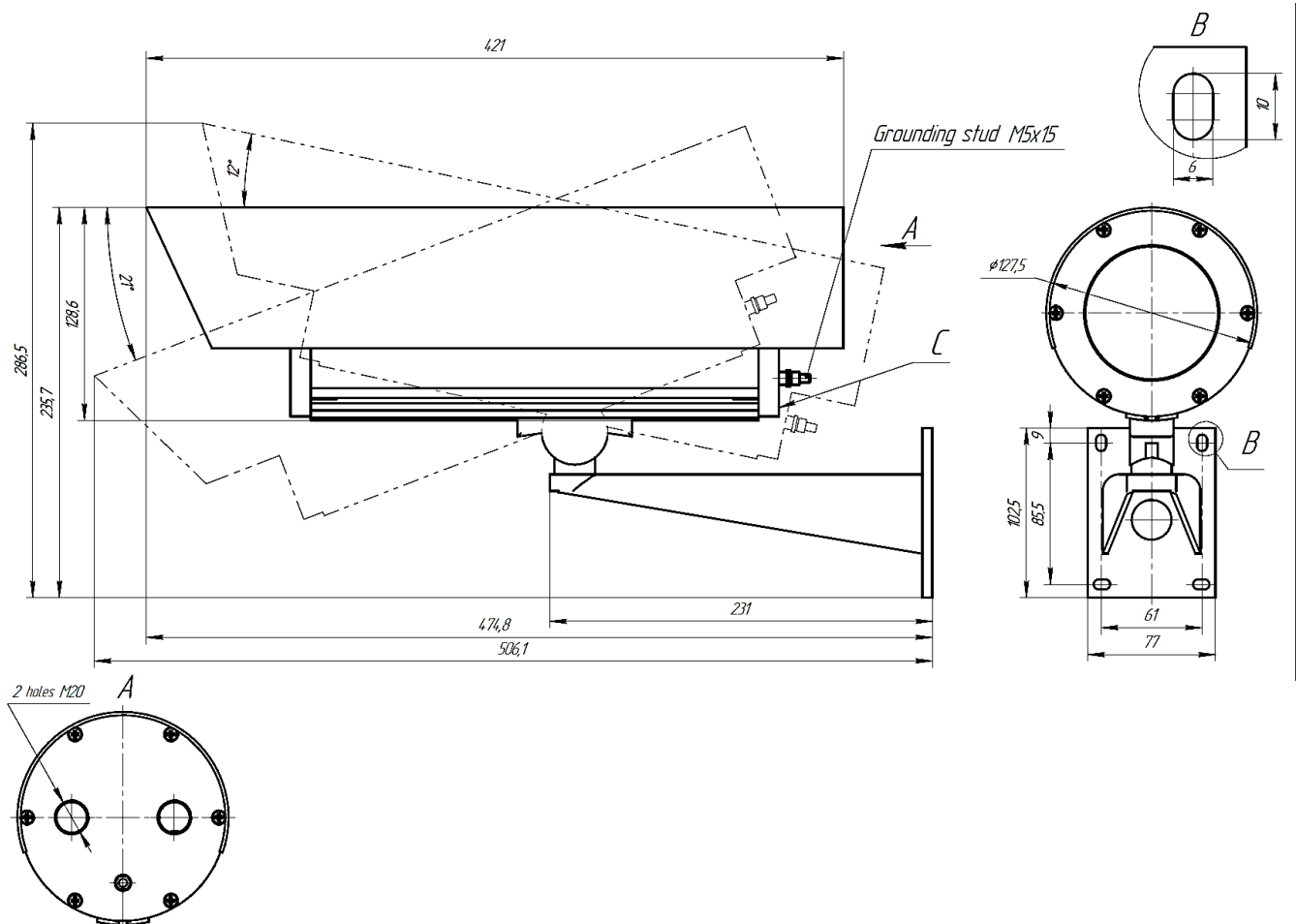
Technical specifications

Parameter	CMA-130Ex/3.6	CMA-130Ex/6	CMA-130Ex/8	CMA-130Ex/12
	Value			
Resolution	2 MP, 1920 x 1080			
Focus length, mm	3.6	6.0	8.0	12.0
Max aperture	F/2.0			
Angle of view, horizontal	105°	65°	45°	28°
Matrix	CMOS			
Noise suppression	2D- and 3DNR			
Signal / noise ratio, dB	50			
Min illumination, lux	0.01			
Image settings	brightness, sharpness, saturation, contrast, colour depth			
Brightness adjustment	WDR			
Backlight compensation	+			
Explosion protection	1Ex d IIB T6 X			
Input voltage, VDC	19...36			
Power consumption (w/o heating), W	2			
Heating power, W	21			
Weight, kg	8.5			
Operating temperature, °C	-40...+55			
Protection degree	IP66			
Material	aluminium			
Mounting type	wall or on the tilt platform PTR-407Ex			

Connection diagram



Dimensions



Note – When installing provide a free space 120 mm from the surface C for connecting the product.

DIGITAL COLOUR VIDEO CAMERA CMS-150 EX (VC DVS 22121-2003/5)



Description

Digital colour video camera, fixed lens, with built-in motion sensor, for installation inside, explosion-proof. The camera is delivered with two cable glands and two glands for armoured cables.



Registry of Shipping's certificate
№18.10558.120 (Electrical
equipment)

Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

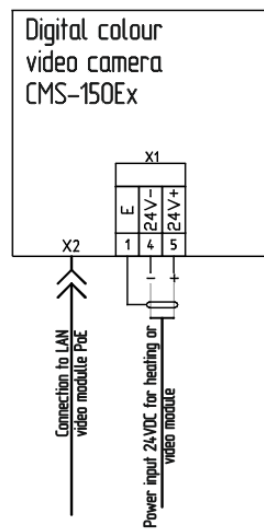


Certificate of conformity
№MBД PΦ.03.000606

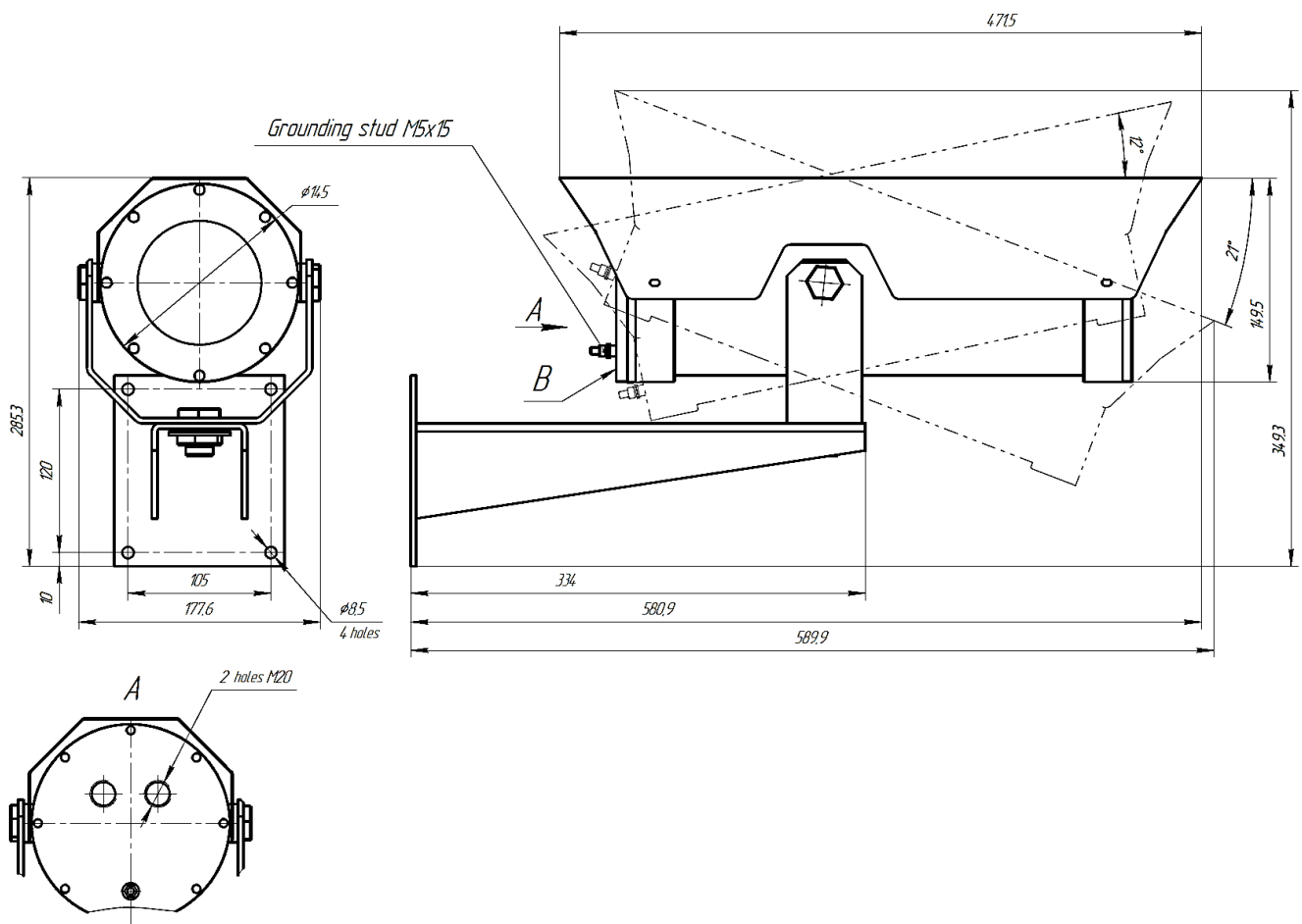
Technical specifications

Parameter	CMS-150Ex/3,6	CMS-150Ex/6	CMS-150Ex/8	CMS-150Ex/12
	Value			
Resolution	2 MP, 1920 x 1080			
Focus length, mm	3.6	6.0	8.0	12.0
Max aperture	F/2.0			
Angle of view, horizontal	105°	65°	45°	28°
Matrix	CMOS			
Noise suppression	2D- and 3DNR			
Signal / noise ratio, dB	50			
IR range, m	30			
Min illumination, lux	0.01			
Image settings	brightness, sharpness, saturation, contrast, colour depth			
Brightness adjustment	WDR			
Backlight compensation	+			
Explosion protection	1Ex d IIC T6			
Input voltage, VDC	19...36			
Power consumption (w/o heating), W	9			
Heating power, W	30			
Weight, kg	12.8			
Operating temperature, °C	-40...+55			
Protection degree	IP66			
Material	stainless steel			
Mounting type	wall or on the tilt platform PTR-407Ex			

Connection diagram



Dimensions



Note – When installing provide a free space 120 mm from the surface B for connecting the product.

DIGITAL COLOUR VIDEO CAMERA CMS-140Z AND CMS-140Z/LW



Design

CMS-140/Z (VC DVS 22121-2003/6)

CMS-140Z/LW (VC DVS 22121-2003/7)

Description

Digital colour video camera, varifocal lens and built-in motion sensor, for installation on open deck.



Registry of Shipping's certificate

№18.10558.120 (Electrical equipment)

Registry of Shipping's certificate

№ 19.02296.120 (Radioequipment)



Certificate of conformity

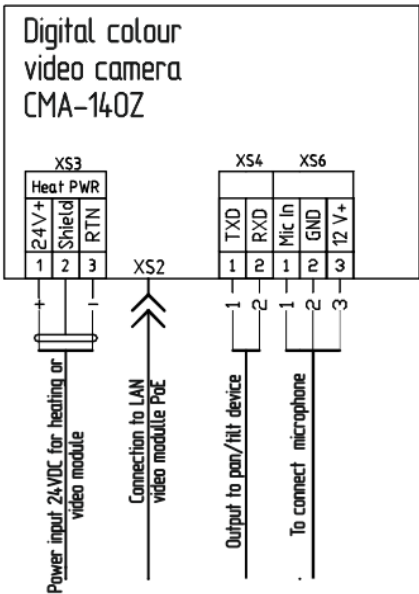
№MBД PΦ.03.000606

Technical specifications

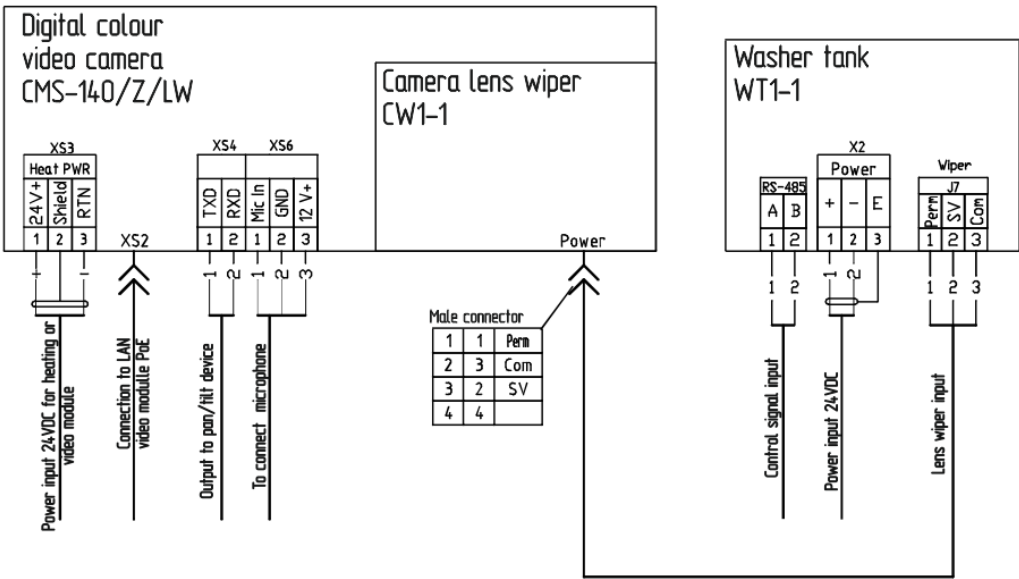
Parameter	CMS-140/Z (VC DVS 22121-2003/6)	CMS-140Z/LW (VC DVS 22121-2003/7)
	Value	
Resolution	2 MP, 1920x1080	
Focus length, mm	6...180	
Angle of view, horizontal	56°...3°	
Angle of view, vertical	33°...1,7°	
Max aperture	F/1.5–F/4.3	
Optical zoom	30X	
Matrix	CMOS	
IR range, m	15	
Signal / noise ratio, dB	55	
Noise suppression	3DNR	
Min illumination, lux	0.005	
Input voltage, VDC	19...36	
Power consumption (w/o heating), W	13	
Heating power, W	15	
Weight, kg	4.1	8.3
Operating temperature, °C	–60...+55	–40...+55
Protection degree	IP66	
Material	stainless steel	
Mounting type	on horizontal surface or pan or tilt platform	on vertical surface or pan or tilt platform
Backlight compensation	+	
Connection of external microphone	+	
Day / night mode	+	
Image settings	brightness, sharpness, saturation, contrast, colour depth	
Brightness adjustment	D-WDR	

Connection diagrams

CMS-140/Z (VC DVS 22121-2003/6)

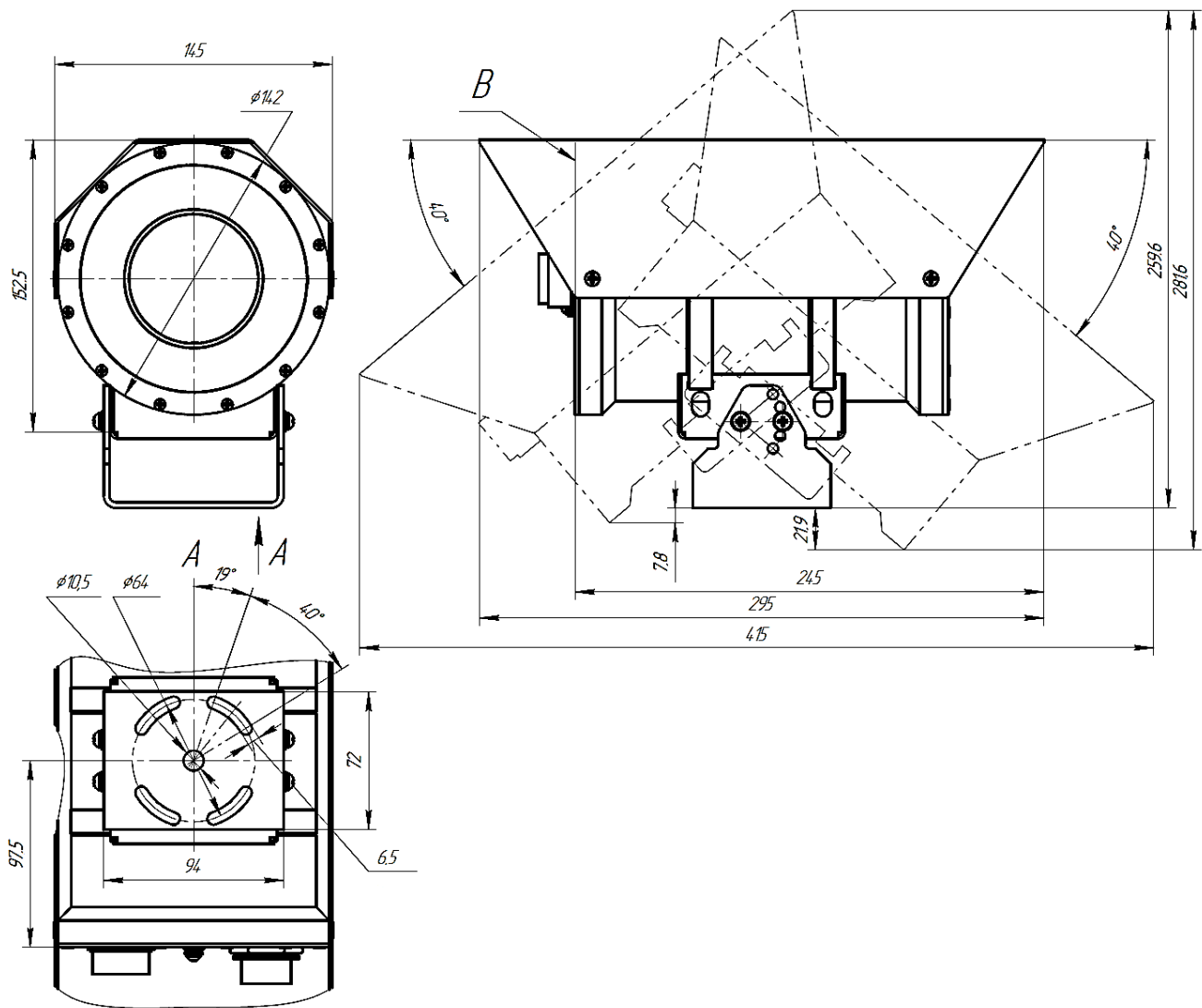


CMS-140Z/LW (VC DVS 22121-2003/7)



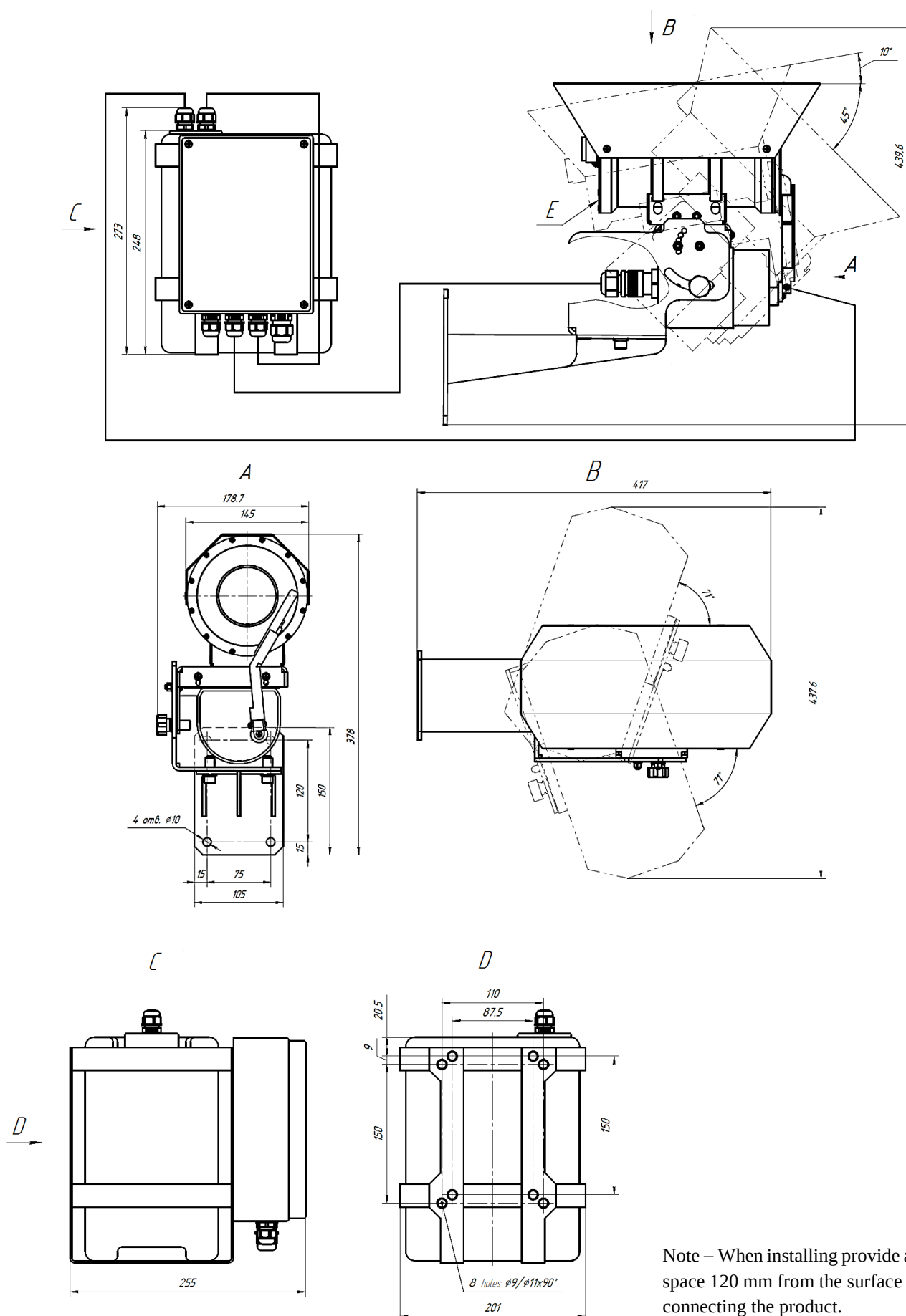
Dimensions

CMS-140/Z (VC DVS 22121-2003/6)



Note – When installing provide a free space 120 mm from the surface B for connecting the product.

CMS-140Z/LW (VC DVS 22121-2003/7)



DIGITAL COLOUR VIDEO CAMERA DCMA-210Z (VC DVS 22222-2003/1)

Description

Digital dome PTZ colour video camera, varifocal lens and built-in motion sensor, for installation on open deck, equipped with a lens wiper.

Registry of Shipping's certificate
 №18.10558.120 (Electrical equipment)

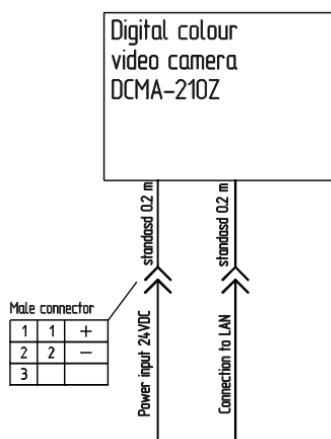


Registry of Shipping's certificate
 № 19.02296.120 (Radioequipment)

Certificate of conformity
 №МБД РФ.03.000606

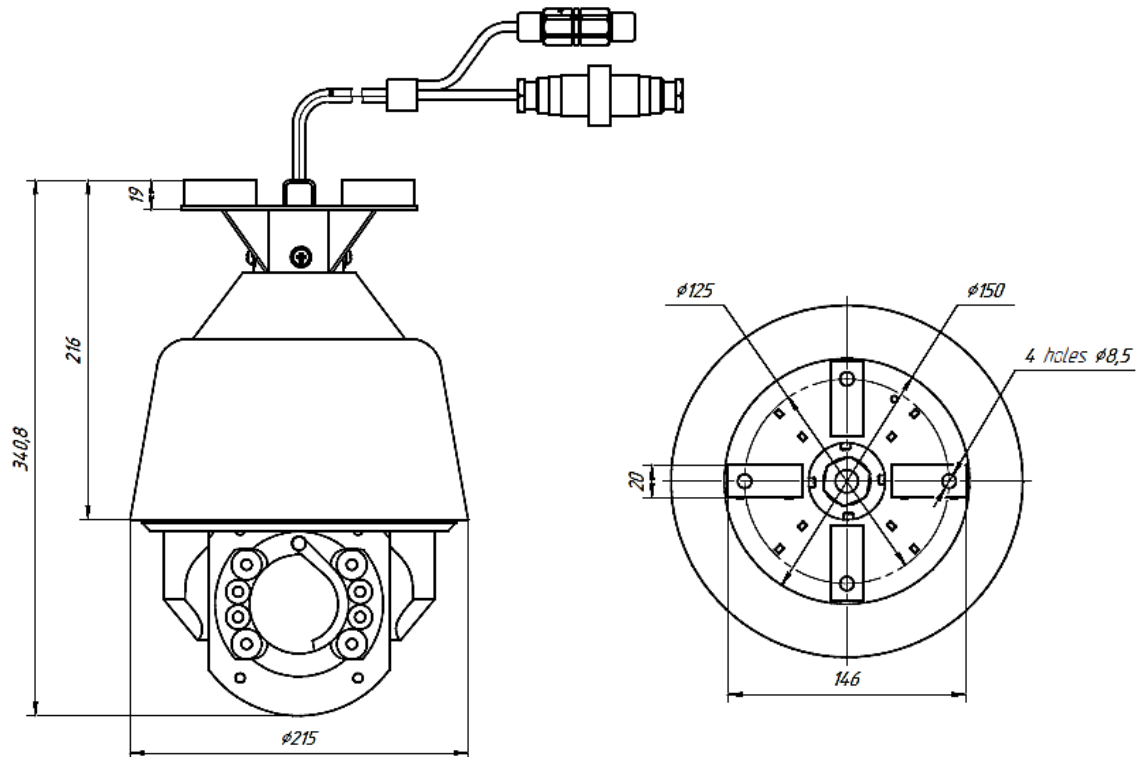

Technical specifications

Parameter	Design 1	Design 2	Design 3
	Value		
Resolution	2 MP, 1920x1080		
Focus length, mm	4.7...94.0		
Max aperture	F/1.6...F/3.5		
Angle of view, horizontal	61.4°...2.9°		
Matrix	CMOS		
Noise suppression	3DNR		
IR range, m	120		
Signal / noise ratio, dB	52		
Min illumination, lux	0.01		
Day / night mode	+		
Backlight compensation	+		
Image settings	brightness, sharpness, saturation, contrast, colour depth		
Input voltage, VDC	19...36		
Power consumption (with heating), W	38		
Heating power, W	10		
Weight, kg	4.2	4.1	7.2
Operating temperature, °C	-40...+55		
Protection degree	IP66		
Material	aluminium		
Mounting type	ceiling or on the bracket		

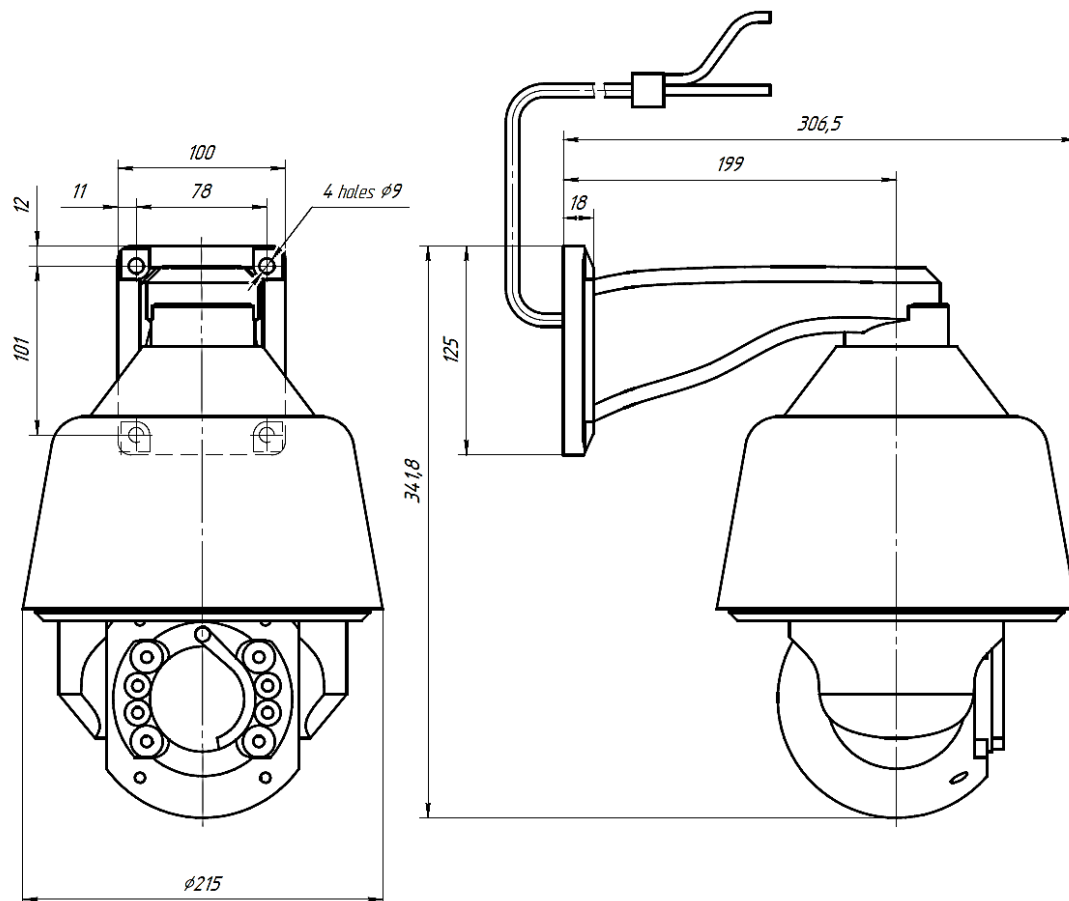
Connection diagram


Dimensions

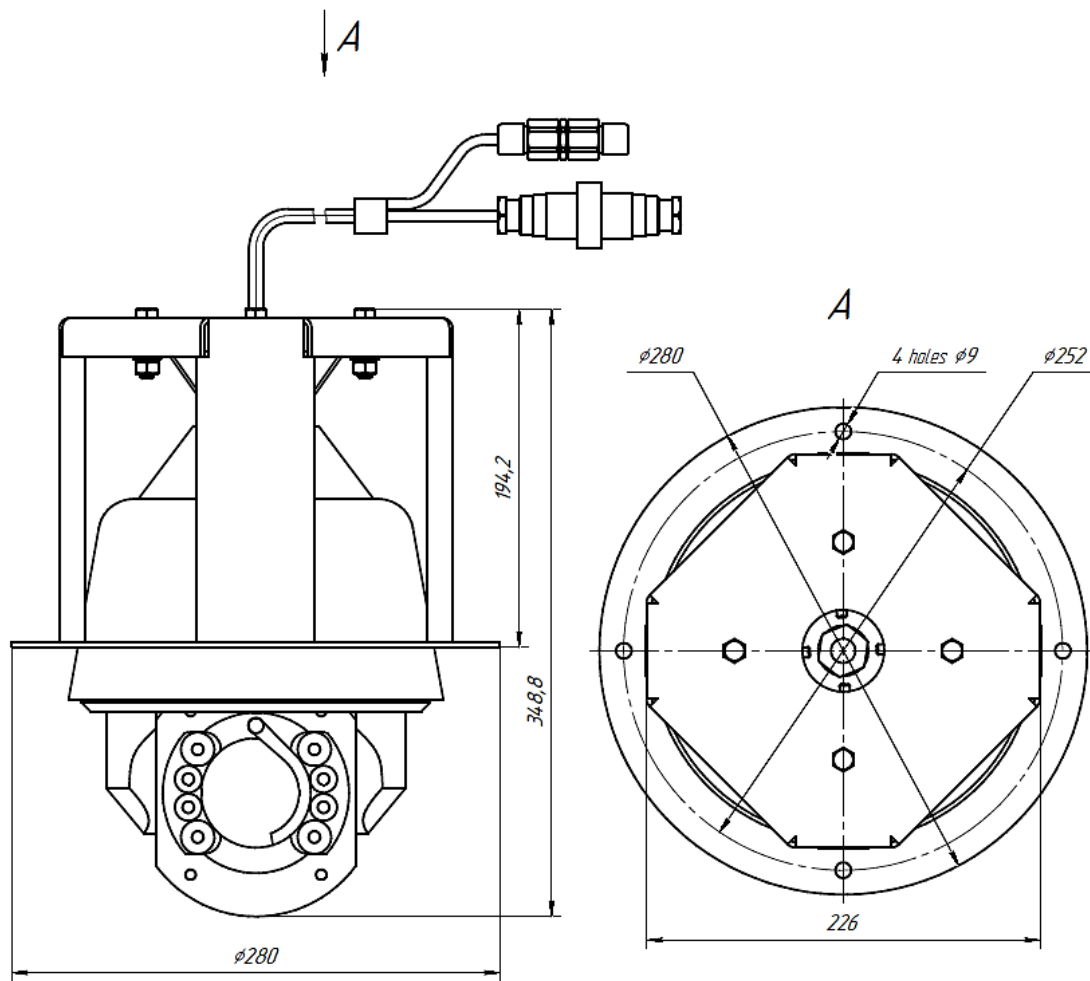
Design 1



Design 2



Design 3



THERMAL IMAGING CAMERA TMA-130 (VC DVS 22121-2003/8)



Description

Thermal imaging camera, for installation on open deck.

Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)

Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

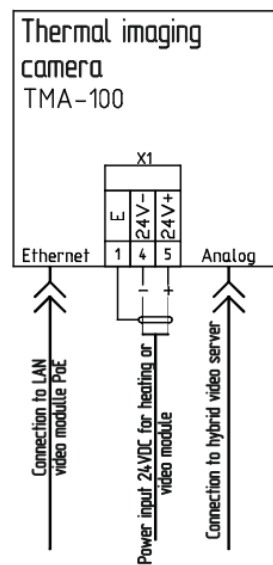
Certificate of conformity
№MBД PΦ.03.000606



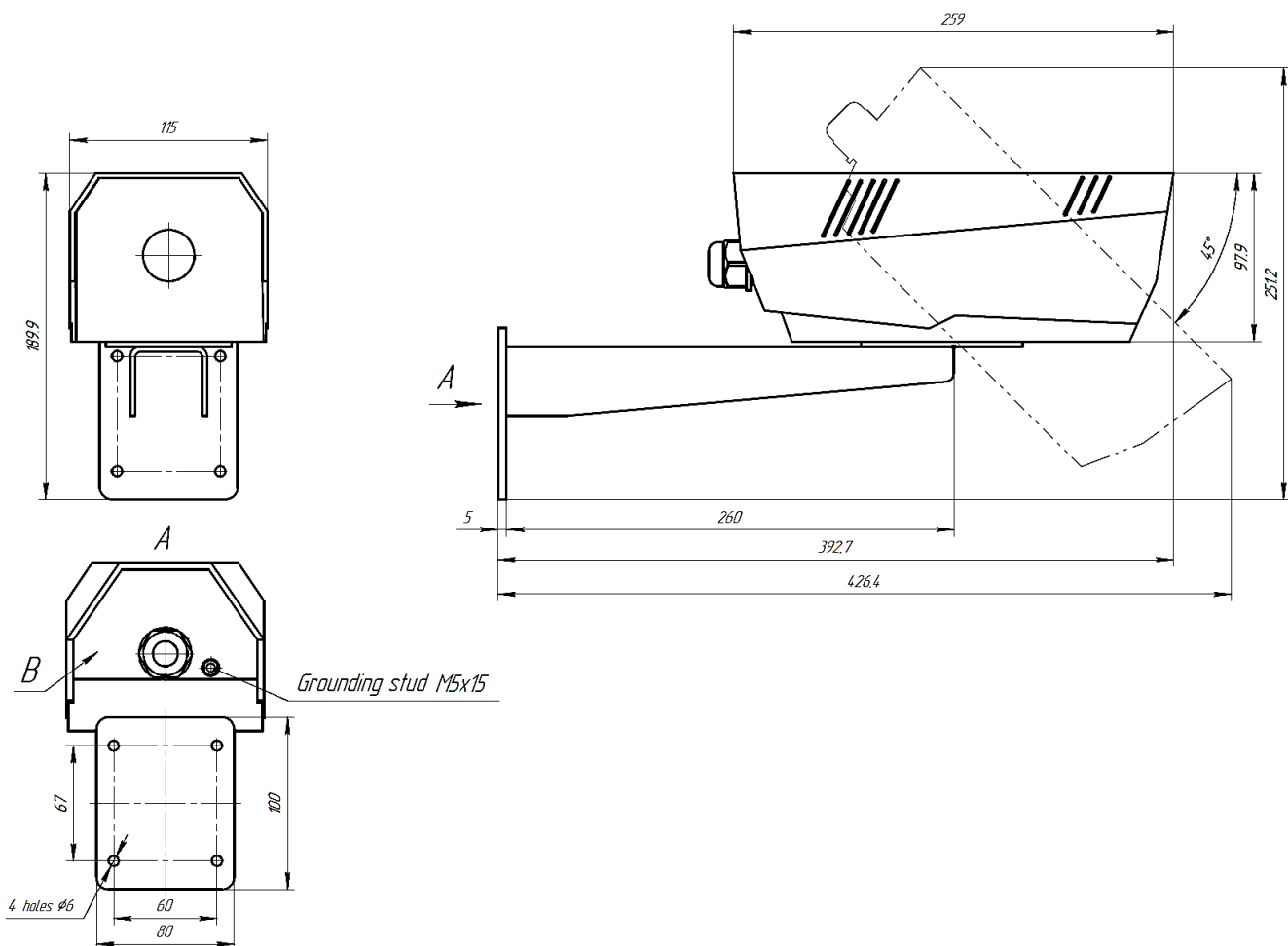
Technical specifications

Parameter	TMA-130/13/24	TMA-130/13/44	TMA-130/19/17	TMA-130/19/32	TMA-130/35/9	TMA-130/60/5	TMA-130/75/4	TMA-130/13	TMA-130/19	TMA-130/35	TMA-130/60	TMA-130/75
	Value											
Resolution	384x288 and 640x480											
Focus length, mm	13	13	19	19	35	60	75	13	19	35	60	75
Angle of view, horizontal	24.0°	44.0°	17.0°	32.0°	9.2°	5.4°	4.3°	44.0°	32.0°	17.0°	10.0°	8.6°
Matrix	focal plane array											
Input voltage, VDC	48 PoE or 19...36											
Input voltage of heating, VDC	19...36											
Power consumption (w/o heating), W	5											
Heating power, W	16											
Weight, kg	3											
Operating temperature, °C	-40...+55											
Protection degree	IP66											
Material	aluminium											
Mounting type	wall or on the bracket											

Connection diagram



Dimensions



Note – When installing provide a free space 120 mm from the surface B for connecting the product.

DIGITAL COLOUR VIDEO CAMERA CTMS-160/10.5/Z (VC DVS 22121-2003/9)



Registry of Shipping's certificate
№18.10558.120 (Electrical
equipment)
Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)



Certificate of conformity
№МБД РФ.03.000606

Design

CTMS-160/10.5/Z

CTMS-160/10.5/Z/LW

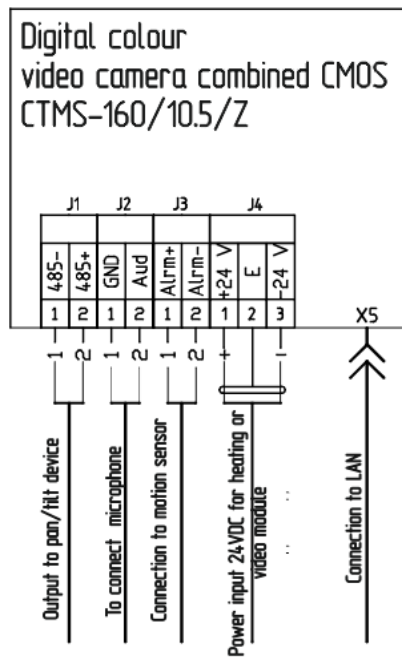
Description

Digital colour video camera, combined colour-zoom and thermal imaging, built-in motion sensor, for installation on open deck. The model CTMS-160/10.5/Z/LW is delivered with lens wiper and washer tank.

Technical specifications

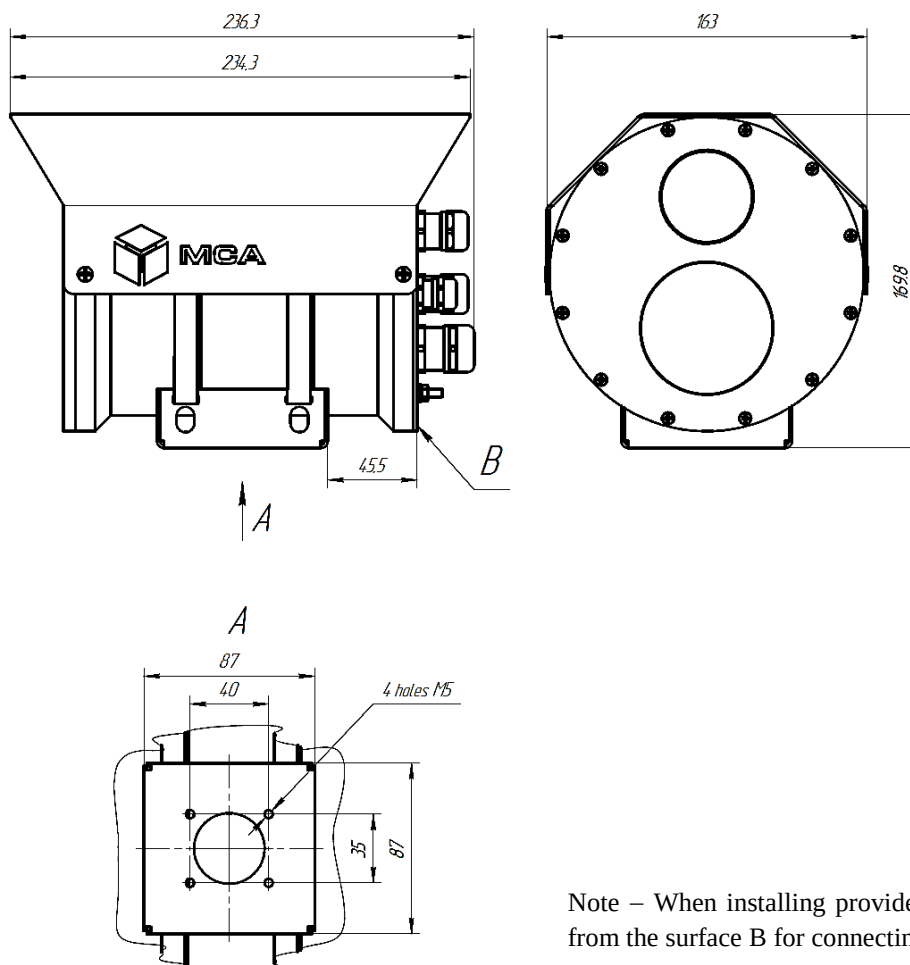
Parameter	CTMS-160/10.5/Z	CTMS-160/10.5/Z/LW
	Value	
Matrix	focal plane array	
Resolution	640x512	
Lens, mm	10.5; F/1.0	
Angle of view, horizontal	34.5°	
Spectral range, µm	8...12	
Resolution	2 MP, 1920x1080	
Focus length, mm	6...180	
Max aperture	F/1.5...F/4.3	
Angle of view, horizontal	61.2°...2.32°	
Optical zoom	30X	
Matrix	CMOS	
Noise suppression	3DNR	
Signal / noise ratio, dB	55	
Min illumination, lux	0.005	
Brightness adjustment	D-WDR	
Image settings	brightness, sharpness, saturation, contrast, colour depth	
Backlight compensation	+	
Connection of external microphone	+	
Lens wiper	+	
Input voltage, VDC	19...36	
Power consumption (w/o heating), W	15	
Heating power, W	15	
Weight, kg	3.8	
Operating temperature, °C	-40...+55	
Protection degree	IP66	
Material	stainless steel	
Mounting type	on horizontal surface or pan; or tilt platform	

Connection diagram



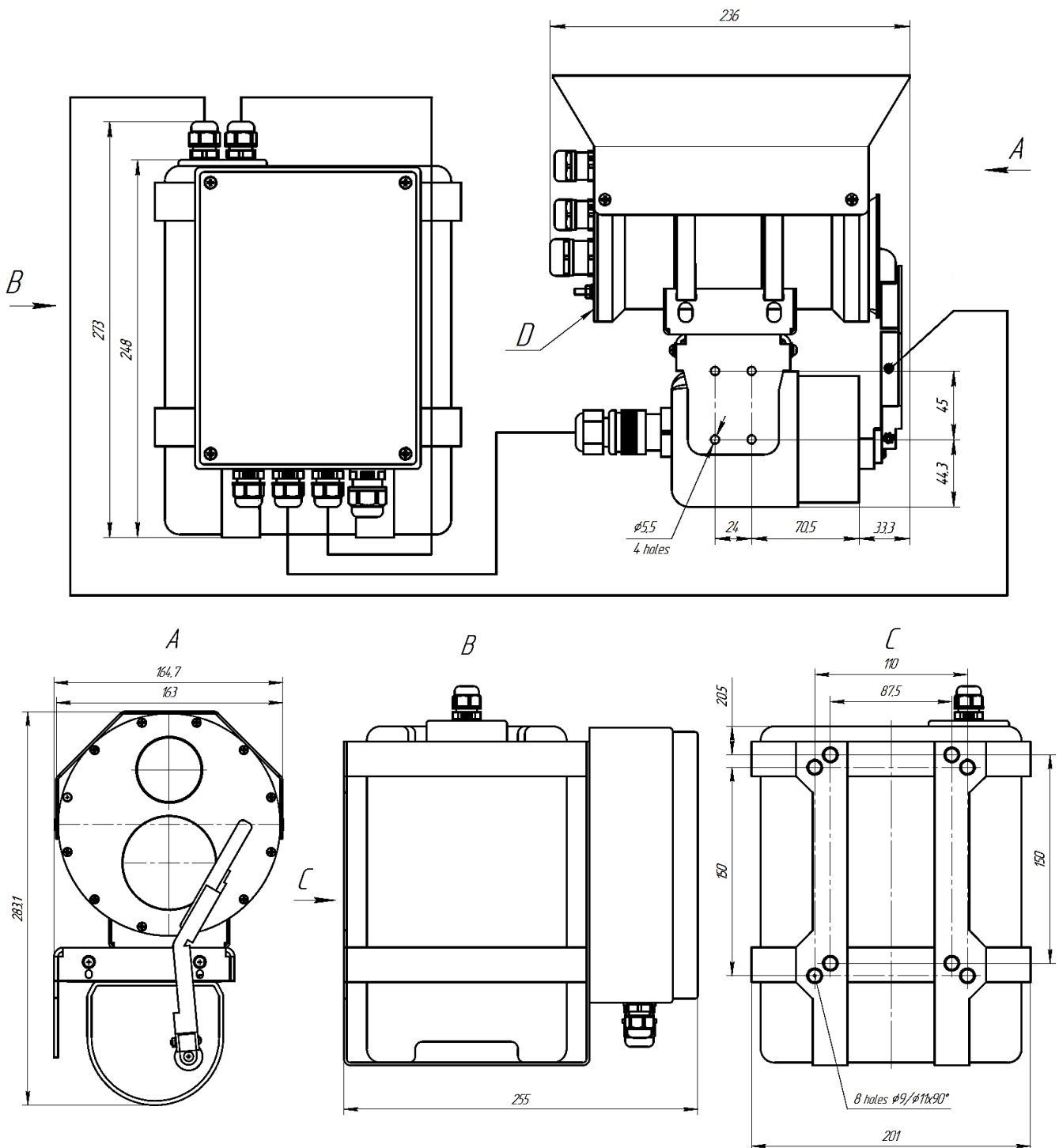
Dimensions

CTMS-160/10.5/Z



Note – When installing provide a free space 120 mm from the surface B for connecting the product.

CTMS-160/10.5/Z/LW



Note – When installing provide a free space 160 mm from the surface D for connecting the product.

DIGITAL COLOUR VIDEO CAMERA CMA-130Z/EX (VC DVS 22121-2003/10)



Description

Digital colour video camera, for installation on open deck, explosion-proof. The camera is delivered with two cable glands for cable mounting and two glands for armoured cable, and optionally IR illuminator IRI-300-A-IR.



Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)
Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

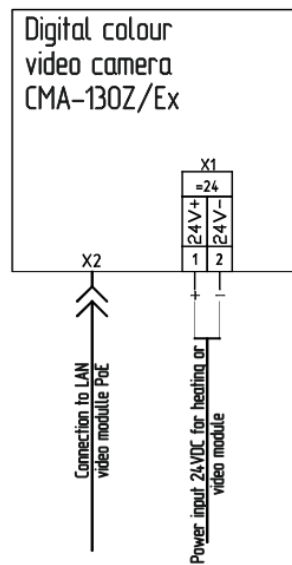


Certificate of conformity
№МБД РФ.03.000606

Technical specifications

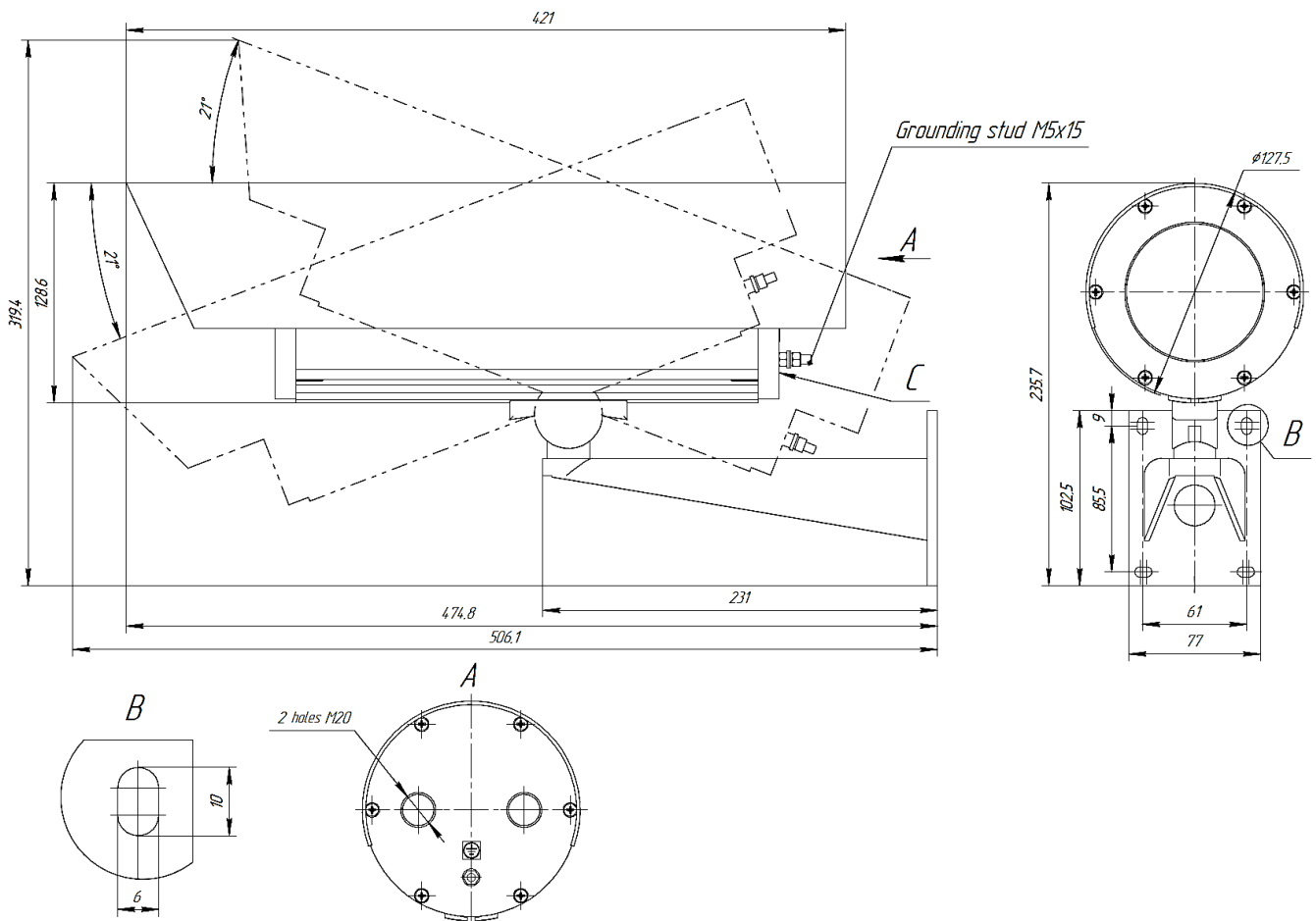
Parameter	Value
Resolution	2 MP, 1920x1080
Focus length, mm	4.7...141
Max aperture ratio	F/1.5...F/4.0
Angle of view, horizontal	56°...3°
Matrix	CMOS
Noise suppression	3DNR
IR range, m	60
Signal / noise ratio, dB	55
Min illumination, lux	0.005
Image settings	brightness, sharpness, saturation, contrast, colour depth
Brightness adjustment	D-WDR
Day / night mode	+
Backlight compensation	+
Explosion proof degree	1ExdIIBT6X
Input voltage, VDC	19...36
Power consumption (w/o heating), W	13
Heating power, W	15
Weight, kg	9
Operating temperature, °C	-40...+55
Protection degree	IP66
Material	aluminium
Mounting typea	on horizontal surface or pan; or tilt platform

Connection diagram



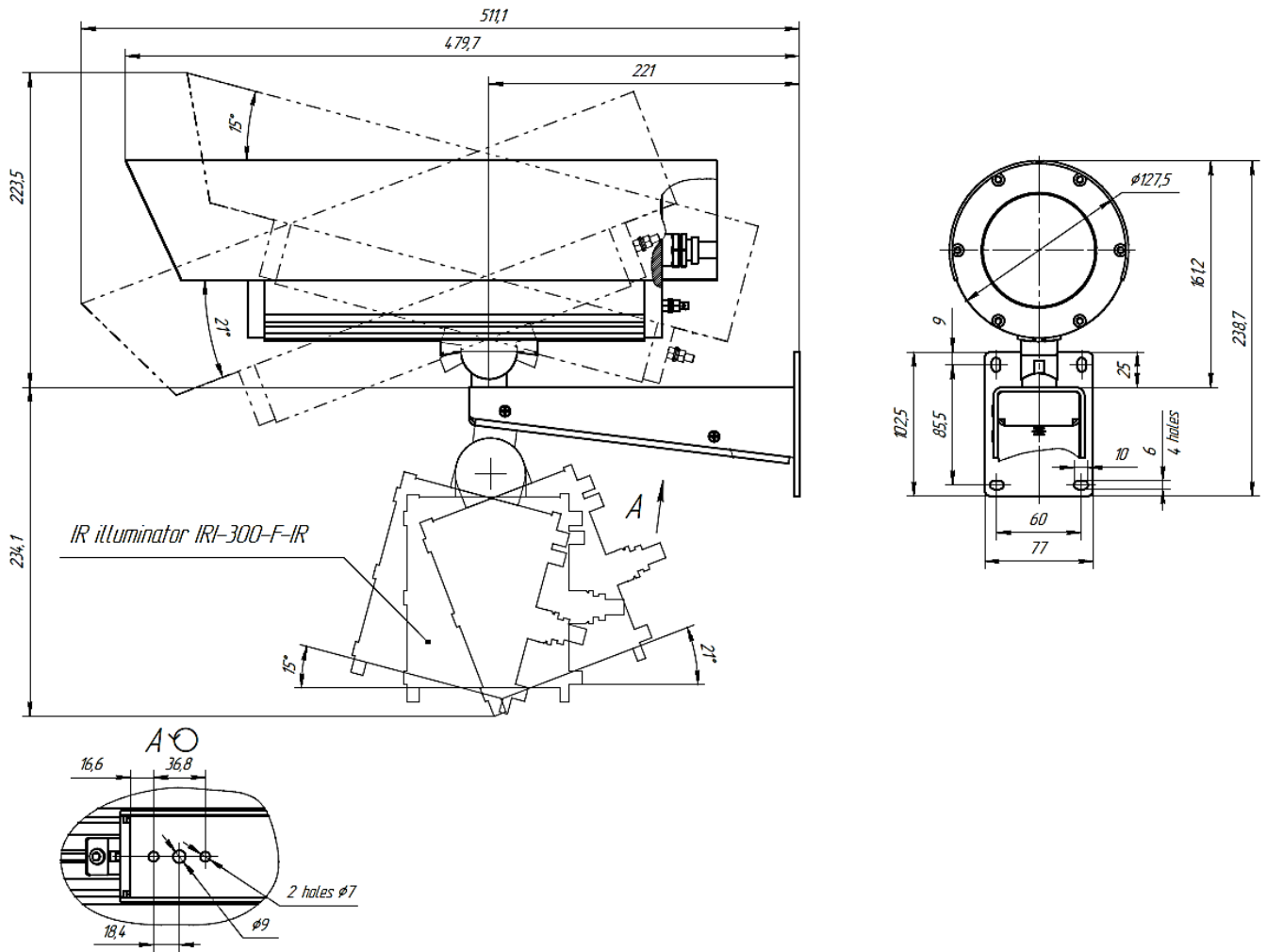
Dimensions

CMA-130Z/EX (VC DVS 22121-2003/10)



Note – When installing provide a free space 120 mm from the surface C for connecting the product.

CMA-130Z/EX (VC DVS 22121-2003/10) with IRI-300-A-IR



DIGITAL COLOUR VIDEO CAMERA CMS-150Z/EX (VC DVS 22121-2003/11)



Description

Digital colour video camera, for installation on open deck, explosion-proof. The camera is delivered with two cable glands for cable mounting and two glands for armoured cable, and optionally IR illuminator IRI-300-A-IR.



Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)
Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

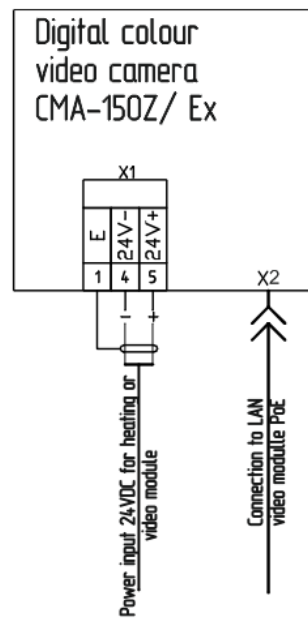


Certificate of conformity
№MBД PΦ.03.000606

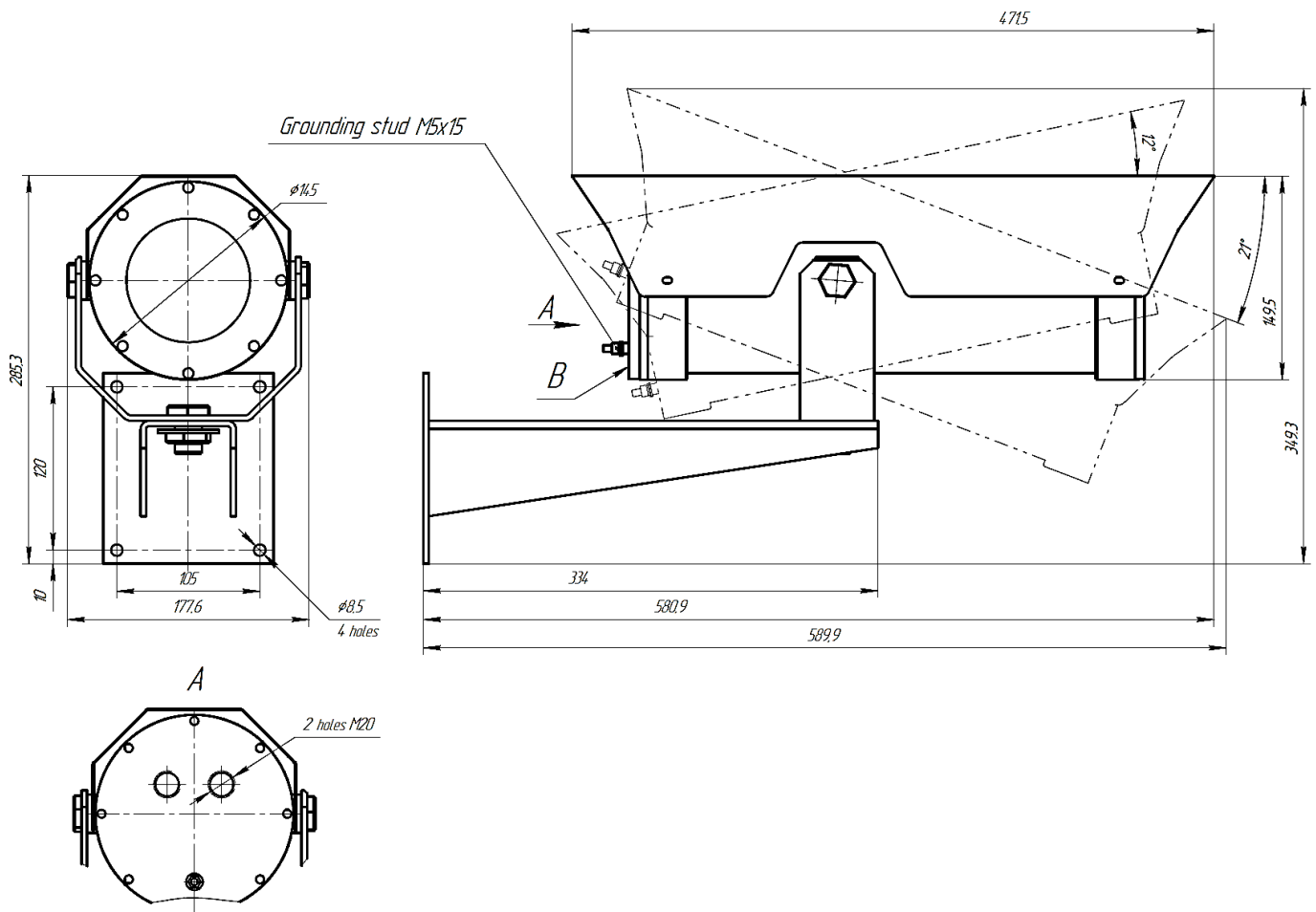
Technical specifications

Parameter	Value
Resolution	2MP, 1920x1080
Focus length, mm	4.7...141.0
Max aperture	F/1.5...F/4.0
Angle of view, horizontal	56°...3°
Matrix	CMOS
Noise suppression	3DNR
IR range, m	60
Signal / noise ratio, dB	55
Min illumination, lux	0.005
Backlight compensation	+
Brightness adjustment	D-WDR
Day / night mode	+
Explosion-proof degree	1Exd IIC T6
Input voltage, VDC	19...36
Power consumption (w/o heating), W	13
Heating power, W	15
Weight, kg	48.2
Operating temperature, °C	-40...+55
Protection degree	IP66
Material	stainless steel
Mounting type	on horizontal surface or pan; or tilt platform

Connection diagram



Dimensions



Note – When installing provide a free space 120 mm from the surface D for connecting the product.

ANALOGUE COLOUR VIDEO CAMERA CMS-100A (VC DVS 12121-2003/1)



Description

Analogue colour video camera, for installation on open deck.

Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)
Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)



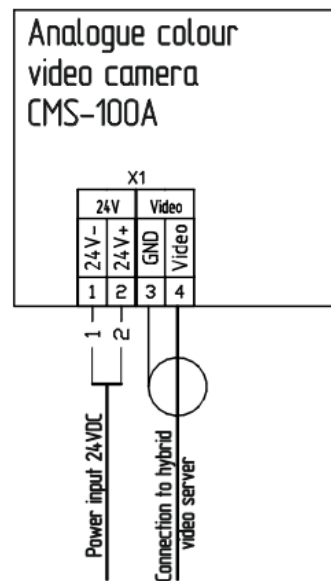
Certificate of conformity
№MBД PΦ.03.000606



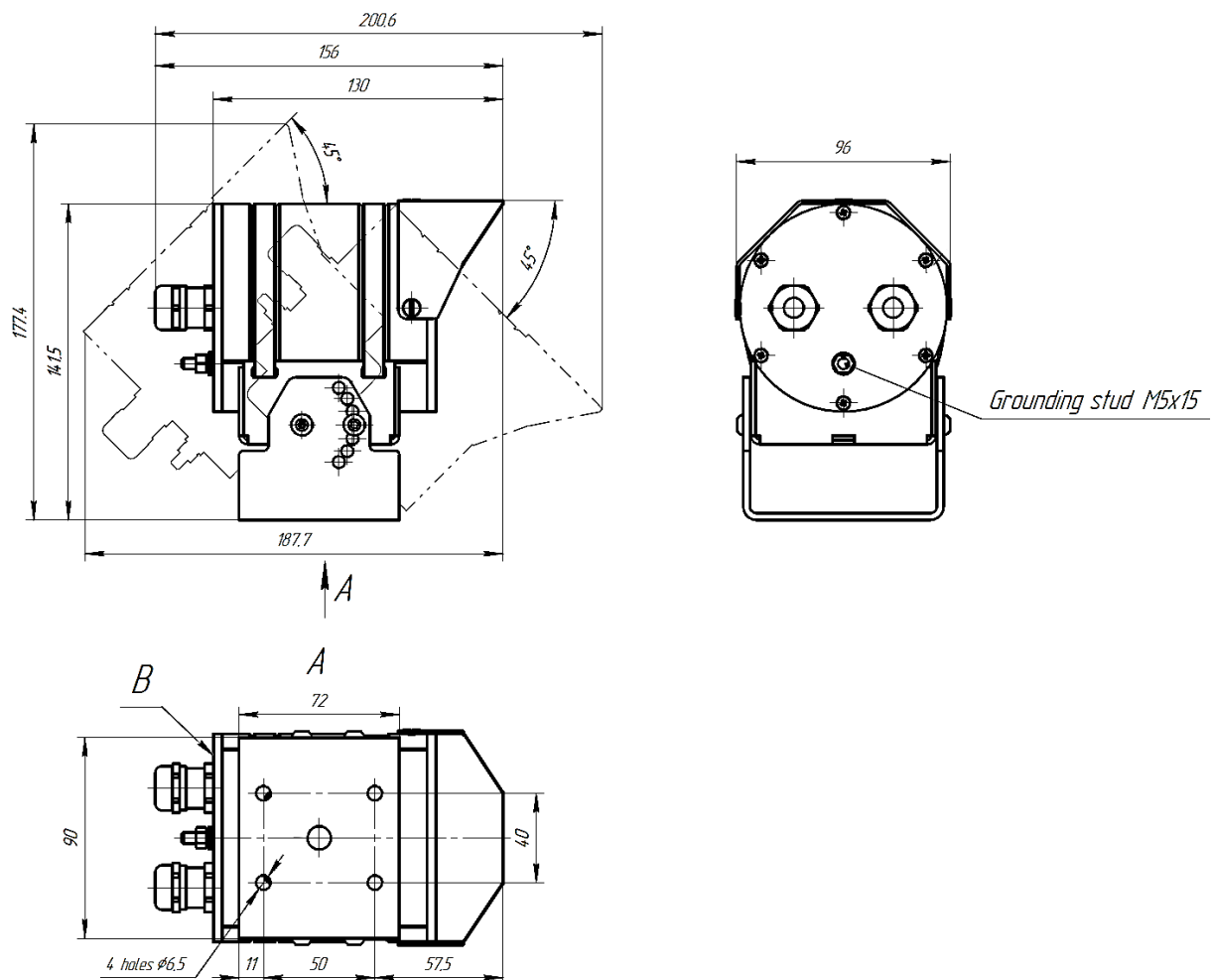
Technical specifications

Parameter	CMS-100A/3,6	CMS-100A/6	CMS-100A/8	CMS-100A/12
	Value			
Resolution	2.1 MP, 1920x1080			
Focus length, mm	3.6	6.0	8.0	12.0
Max aperture	F/2.0			
Angle of view, horizontal	105°	65°	45°	28°
Matrix	CMOS			
Signal / noise ratio, dB	> 58			
IR range, m	30			
Min illumination, lux	0.01			
Input voltage, VDC	19...36			
Input voltage of heating, VDC	19...36			
Power consumption (w/o heating), W	6			
Heating power, W	7			
Weight, kg	3.5			
Operating temperature, °C	-60...+55			
Protection degree	IP66			
Material	stainless steel			
Mounting type	on the horizontal surface or pan or tilt platform			

Connection diagram



Dimensions



Note – When installing provide a free space 80 mm from the surface B for connecting the product.

LCD DISPLAYS



Design

MV-1004 (MV DVS 22-2003/10) MV-2305 (MV DVS 22-2003/23)
MV-1204 (MV DVS 22-2003/12) MV-2405 (MV DVS 22-2003/24)
MV-1504 (MV DVS 22-2003/15) MV-2705 (MV DVS 22-2003/27)
MV-1704 (MV DVS 22-2003/17) MV-3205 (MV DVS 22-2003/32)
MV-1904 (MV DVS 22-2003/19) MV-4205 (MV DVS 22-2003/42)
MV-2104 (MV DVS 22-2003/21) MV-4605 (MV DVS 22-2003/46)
MV-2105 (MV DVS 22-2003/211)

Description

The unit is designed to display different types of data.

Features:

- screen surface:
 - anti-glare glass coating;
 - glass w/o anti-glare coating (at option);
 - touch screen (at option);
 - w/o glass (at option);
- optical bonding (at option).

Registry of Shipping's certificate

№18.10558.120 (Electrical equipment)

Registry of Shipping's certificate

№ 19.02296.120 (Radioequipment)

Certificate of conformity

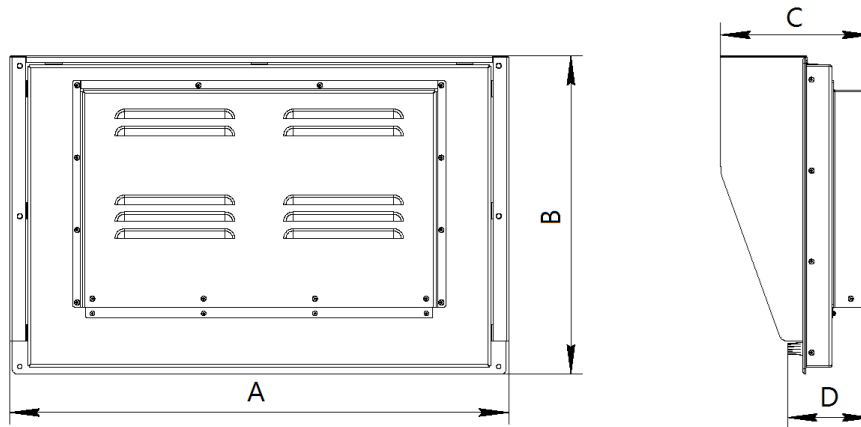
№МВД РФ.03.000606



Technical specifications

Параметр	MV-1004	MV-1204	MV-1504	MV-1704	MV-1904	MV-2104	MV-2405	MV-2305	MV-2105	MV-2705	MV-3205	MV-4205	MV-4605
	Value												
Resolution	1024x768			1280x1024		1600x1200	1920x1200	1920x1080					
Diagonal	10.4"	12.1"	15"	17"	19"	21.3"	24.1"	23"	21.5"	27"	31.5"	42"	46"
Aspect ratio	4:3			5:4		4:3	16:10	16:9					
Tilt angle relative to vertical	−2.5°...20.0°												
Ports, pc.	1 x VGA, 1 x HDMI												
Input voltage	24 VDC or 220 VAC												
Protection degree	IP22												
Operating temperature, °C	−15...+55												

Dimensions

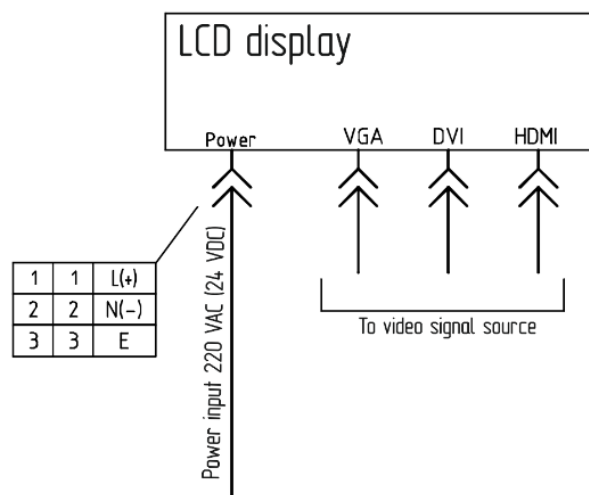


Design	A, mm	B, mm	C, mm	D, mm
MV-1004	285	238	153.5	97
MV-1204	327	263	146.5	87
MV-1504	384.5	314	181	100.5
MV-1704	417.5	360	183	102.5
MV-1904	455	389	183	103.5
MV-2104	514.5	413	193	113.5

Design	A, mm	B, mm	C, mm	D, mm
MV-2105	554	359	187.5	108
MV-2305	591.5	378	181	101.5
MV-2405	603.5	418	188.5	109
MV-2705	674	424	188.5	98
MV-3205	811	542	213	123.5
MV-4205	1051	675	262	122.5
MV-2105	1144.5	727.5	261	121.5

Note – Figures show overall dimensions of the Products' casings not including a set of mounting brackets.

Connection diagram



NVS REMOTE CLIENTS (PANEL COMPUTERS)



Design

MVPC-1904 (MVPC DVS 4-2003/19)
MVPC-2104 (MVPC DVS 4-2003/21)
MVPC-2105 (MVPC DVS 4-2003/211)
MVPC-2305 (MVPC DVS 4-2003/231)
MVPC-2405 (MVPC DVS 4-2003/24)
MVPC-2705 (MVPC DVS 4-2003/27)
MVPC-3205 (MVPC DVS 4-2003/32)
MVPC-4205 (MVPC DVS 4-2003/42)
MVPC-4605 (MVPC DVS 4-2003/46)

Description

Panel computers are designed to provide remote data display from one or several video servers (max 16 cameras).



Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)



Certificate of conformity
№МБД РФ.03.000606

Technical specifications

Параметр	MVPC-1904	MVPC-2104	MVPC-2405	MVPC-2105	MVPC-2305	MVPC-2705	MVPC-3205	MVPC-4205	MVPC-4605
	Value								
Resolution	1280x1024	1600x1200	1920x1200	1920x1080					
Diagonal	19"	21.3"	24.1"	21.5"	23"	27"	31.5"	42"	46"
Aspect ratio	5:4	4:3	16:10	16:9					
Processor	Intel Core								
RAM, GB	8...32								
HDD, GB	128...960								
OS	Windows 10x64								
Material	painted steel								
Screen surface	anti-glare glass coating								
Ports, pc.*	4 × USB (type A, back panel) 1 × USB (type A, front panel) 2 × Ethernet 10/100/1000 Mbps (RJ-45) 1 x HDMI, 1 x DisplayPort 4 x COM (RS-232/485) Audio input, microphone, audio output – 1 (3.5 mm jack)								
Input voltage	24 VDC or 220 VAC								
Protection degree	IP22								
Operating temperature, °C	–15...+55								
* Type and number of ports can be changed on request.									

Note – Dimensional and installation drawings are available upon request.

IR ILLUMINATORS



Design

IS-240 (IS DVS 3-2003/1)

IS-100 (IS DVS 2-2003/1)

IS-70 (IS DVS 1-2003/1)



Registry of Shipping's certificate

№18.10558.120 (Electrical equipment)

Registry of Shipping's certificate

№ 19.02296.120 (Radioequipment)



Certificate of conformity

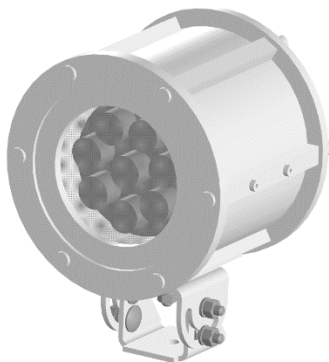
№МБД ПФ.03.000606

Description

The unit ensures illumination of the secured areas in night time. The infrared band ensures discreet surveillance, because it is invisible to a human eye.

Features:

- high efficiency and optimum angles of emission. Re-verse polarity and voltage surge protection;
- built-in photo sensor, protection from flicker at night time, anti-glare;
- optionally delivered with a bracket;
- min illumination level - 10 lux;
- max illumination level - 20 lux;
- backlight compensation.



Design

IS-300-A-IR (IS DVS 1-2003/2)

IS-300-S-IR (IS DVS 1-2003/3)



Certificate of conformity

№МБД ПФ.03.000606

Description

The unit ensures illumination of the secured areas in nighttime. The infrared band ensures discreet surveillance, because it is invisible to a human eye. Explosion-proof.

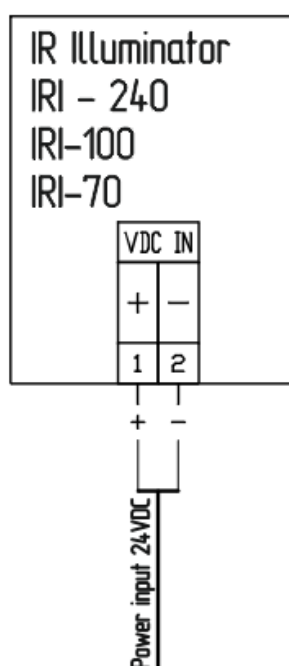
Features:

- switches on automatically, min illumination is 3 lux;
- 8 IR illuminators (focus lens) ensure illumination within 60 m;
- cable glands to connect armoured cable are included in the scope of delivery;
- explosion-proof degree:
 - IRI-300-S-IR PB ExdI / 1ExdIICT5/T6.
 - IRI-300-A-IR 1ExdIICT5/T6.

Technical specifications

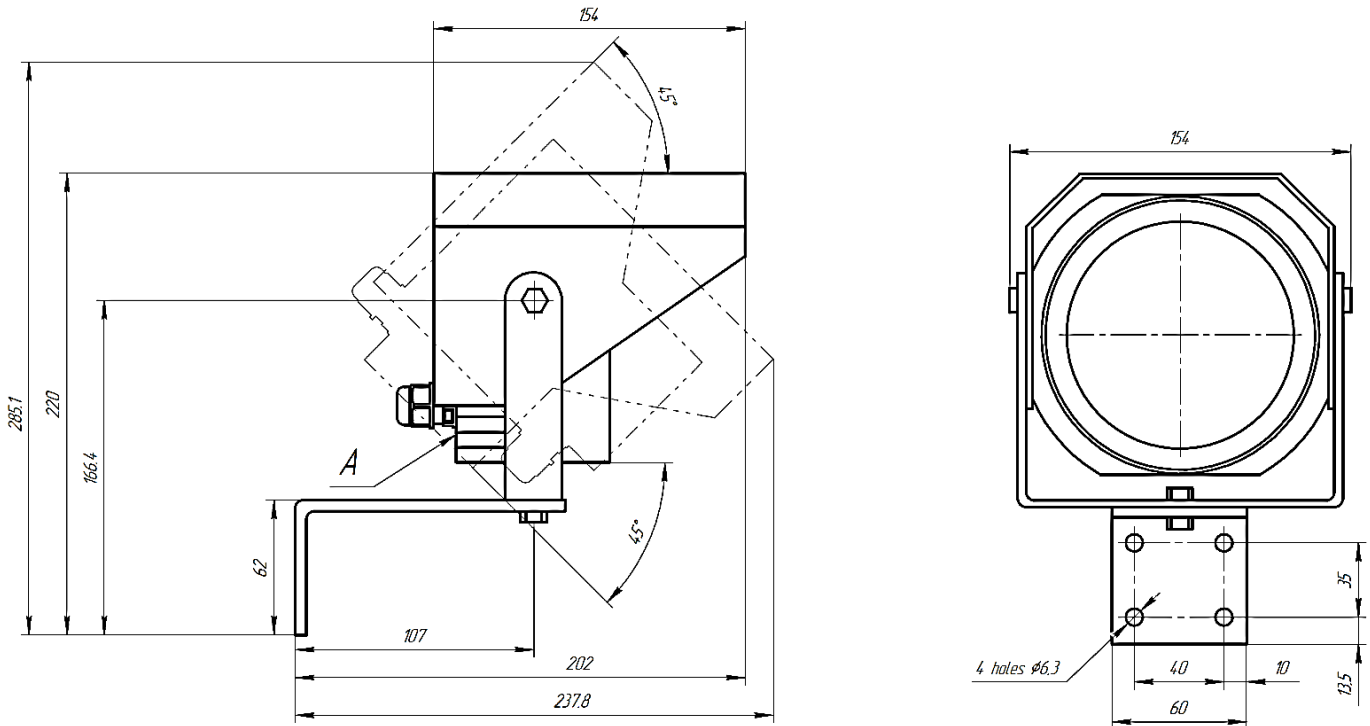
Parameter	IS-70 (IS DVS 1-2003/1)	IS-100 (IS DVS 2-2003/1)	IS-240 (IS DVS 3-2003/1)	IS-300-A-IR (IS DVS 1-2003/2)	IS-300-S-IR (IS DVS 1-2003/3)
	Value				
Emission angle	60°	30°	12°	60°	
Range, m	50	100	150	60	
Emission wane length, nm	850				
Input voltage, VDC	11...27			12...36	
Power consumption, W	33			6	
Weight, kg	2.3			2.7	5.4
Operating temperature, °C	−40...+55			−60...+60	
Protection degree	IP66			IP68	
Mounting type	wall				
Note – These values are for a camera with a lens of F=20 mm, with a 1/3" sensor with a sensitivity of 0.003 lux.					

Connection diagram



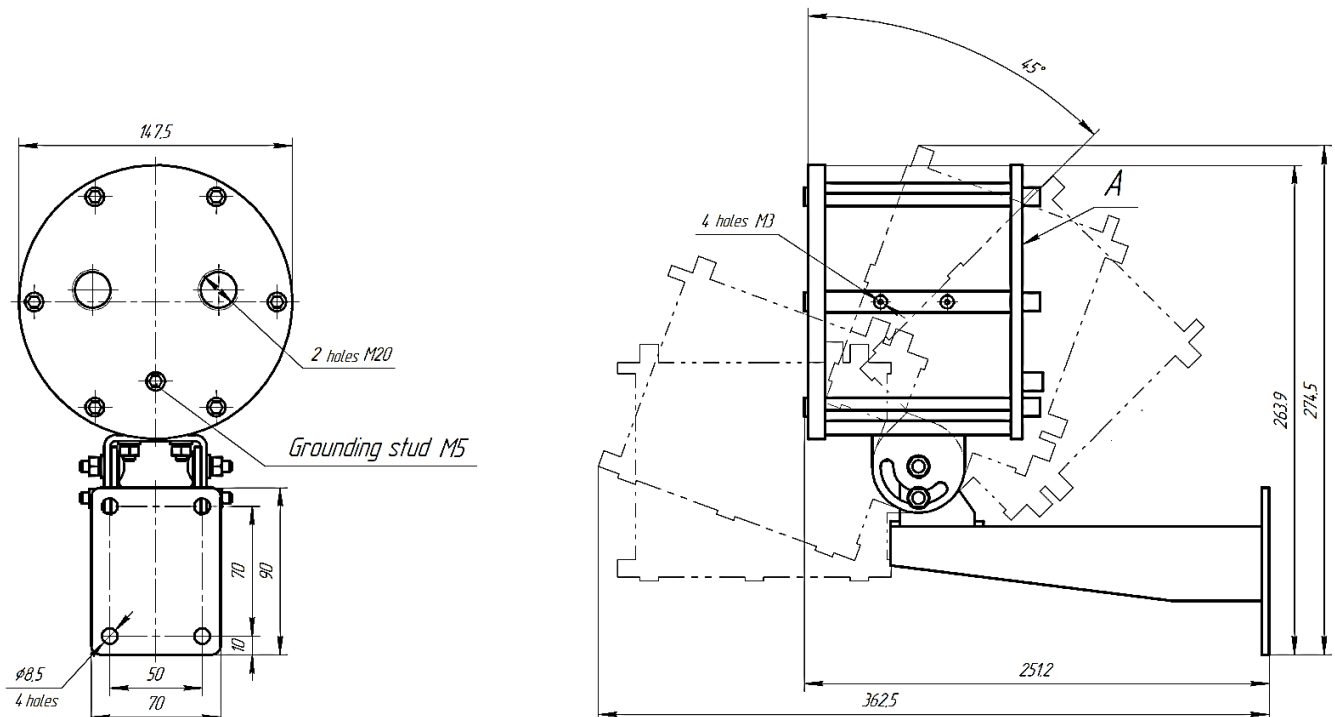
Dimensions

IS-70 (IS DVS-1-2003/1), IS-100 (IS DVS-2-2003/1), IS-240 (IS DVS 3-2003/1)



Note – When installing provide a free space 120 mm from the surface A for connecting the product.

IS-300-A-IR (IS DVS 1-2003/2), IS-300-S-IR (IS DVS 1-2003/3)



Note – When installing provide a free space 120 mm from the surface A for connecting the product.

TRACKBALL (PANEL-MOUNTED) TB-1-50LF (TB-1-50LF DVS 2003/1)



Description

The trackball TB-1-50LF is designed for cursor positioning.

Features:

- compliant with PC and USB interfaces;
- long life.

Registry of Shipping's certificate

№18.10558.120 (Electrical equipment)

Registry of Shipping's certificate

№ 19.02296.120 (Radioequipment)



Certificate of conformity

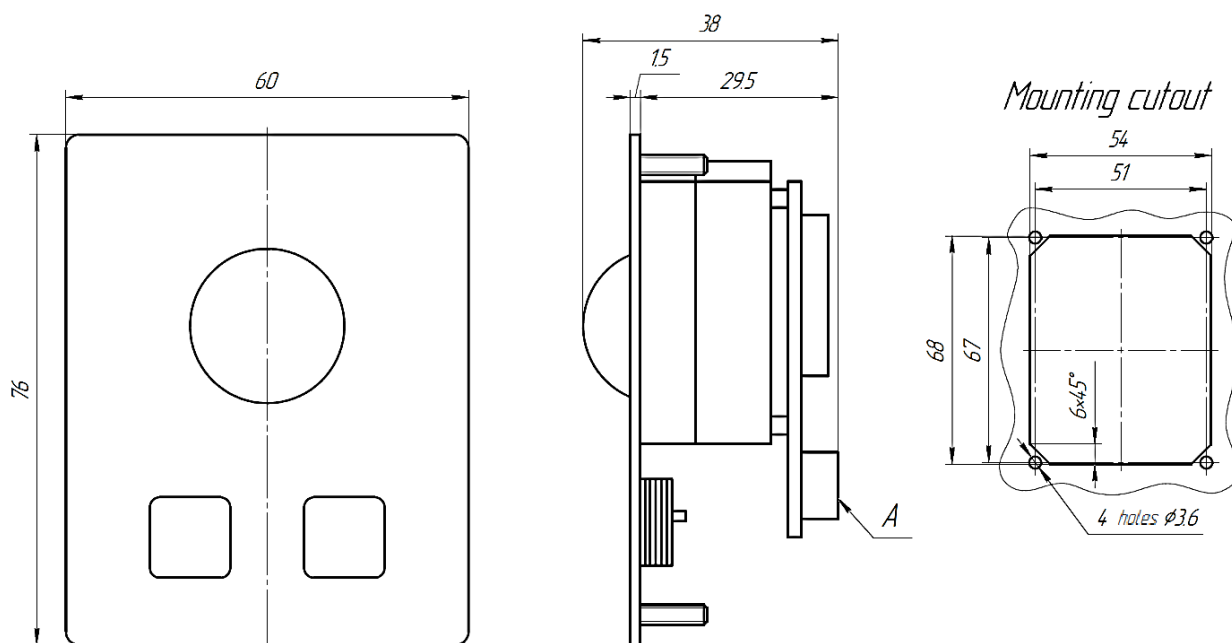
№MBД РФ.03.000606



Technical specifications

Parameter	Value
Mechanical wear resistance	1·10 ⁶
Time between failure, hours	80000
Input voltage	from PS/2 or USB
Power consumption, W	2
Weight, kg	0.15
Operating temperature, °C	–40...+55
Protection degree	IP56 (front side), IP22 (back side)
Mounting type	console

Dimensions



Note – When installing provide a free space 90 mm from the surface A for connecting the product.

PTZ CAMERAS CONTROL CONSOLE PCD-1C (PCD-1C DVS-2003/1)



Description

The unit ensures remote control of PTZ cameras and pan / tilt platforms.

Features:

- simultaneous control with Onvif and Pelco D protocols if the camera operates via Ethernet, and pan / tilt platform – by RS-485;
- the display allows to monitor operator's activity and selected devices;
- control by buttons or joystick.



Registry of Shipping's certificate
 №18.10558.120 (Electrical
 equipment)

Registry of Shipping's certificate
 № 19.02296.120 (Radioequipment)

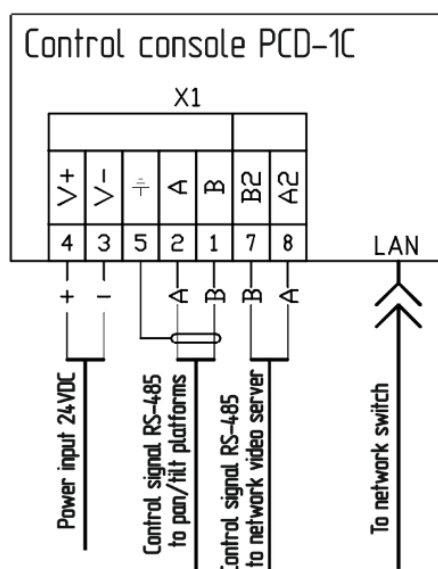


Certificate of conformity
 №МВД РФ.03.000606

Technical specifications

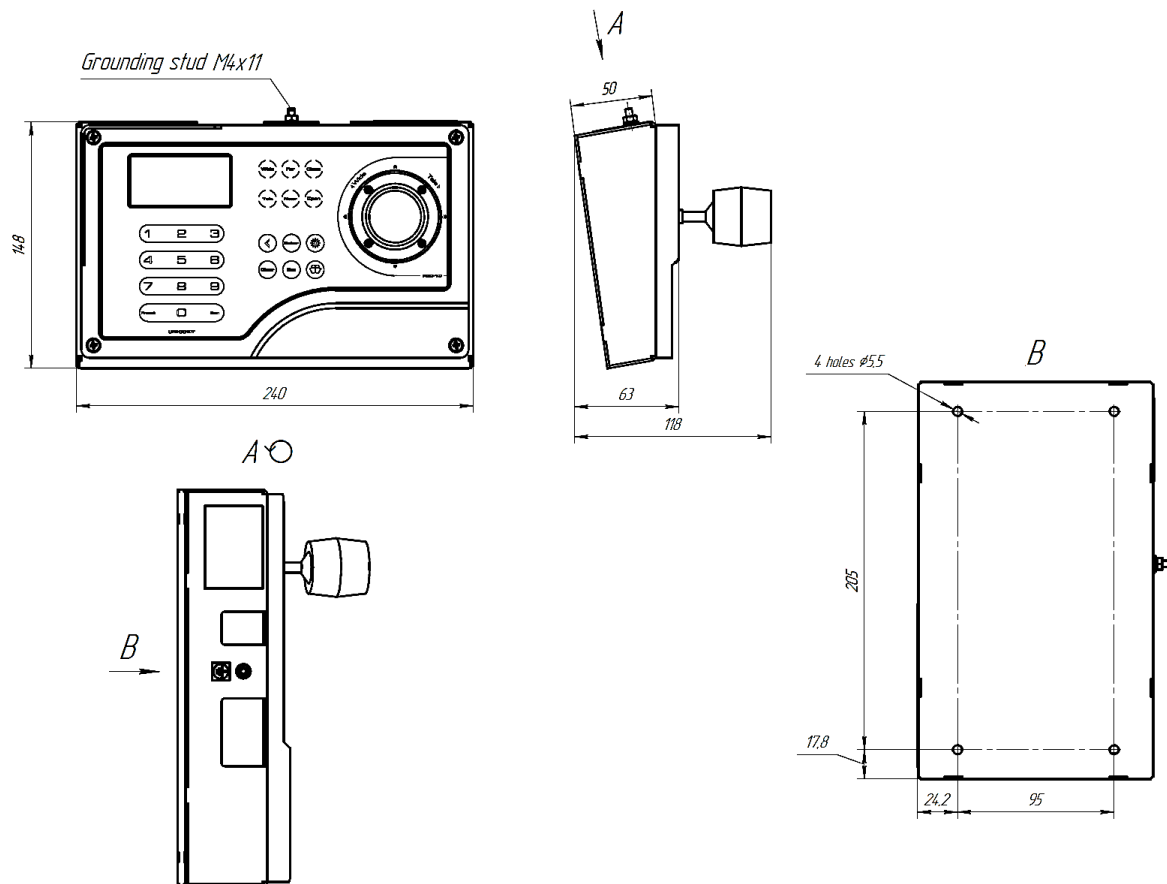
Parameter	Value	
Input voltage, VDC	18...36	
Power consumption, W	10	
Operating temperature, °C	-15...+55	
Protection degree	IP22	
Mounting type	desk-top	console
Weight, kg	2.64	1.84
Interface	RS-485	

Connection diagram

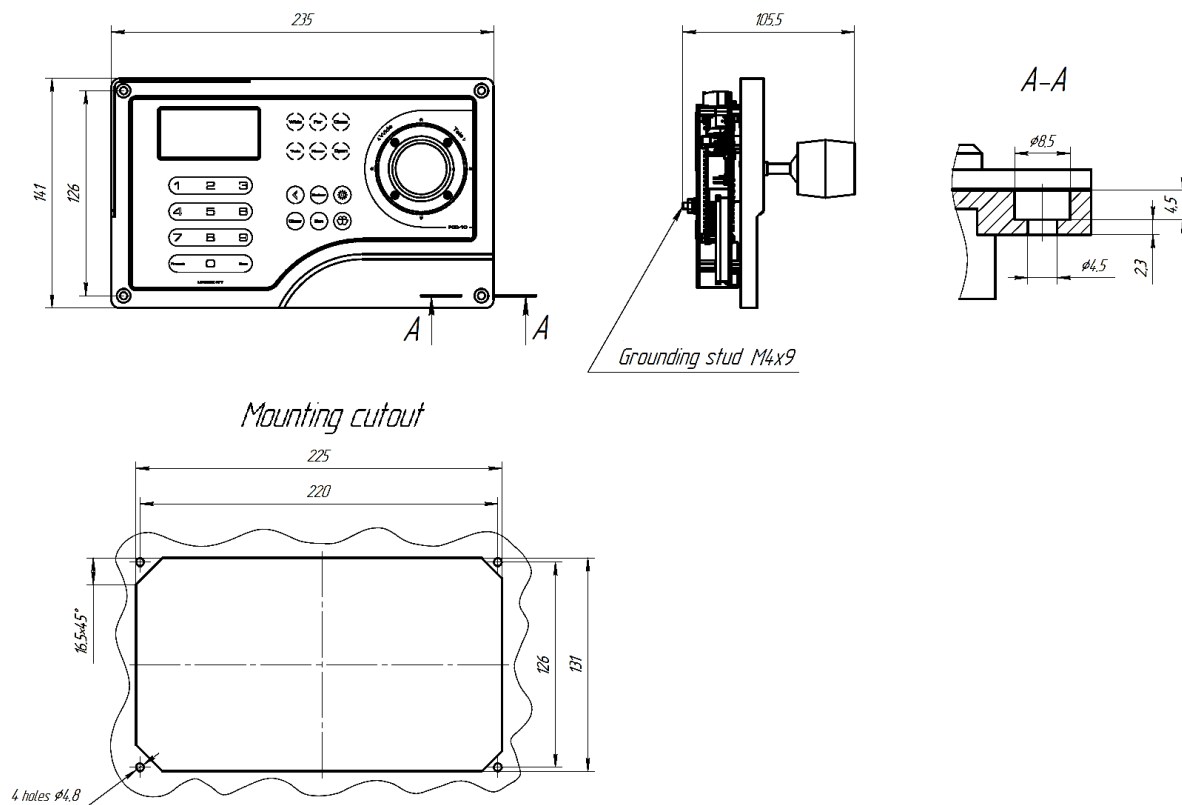


Dimensions

Desk-top mounting



Console mounting



COMBINED MOTION SENSOR PD-1 (PD-1 DVS-2003/1)



Description

The sensor detects motion within the secured areas. Combined type of detection (IR and microwave emission) reduces the number of false alarms.

Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)
Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)



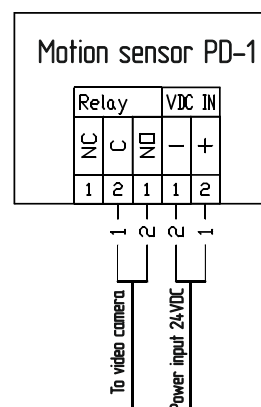
Certificate of conformity
№MBД PΦ.03.000606



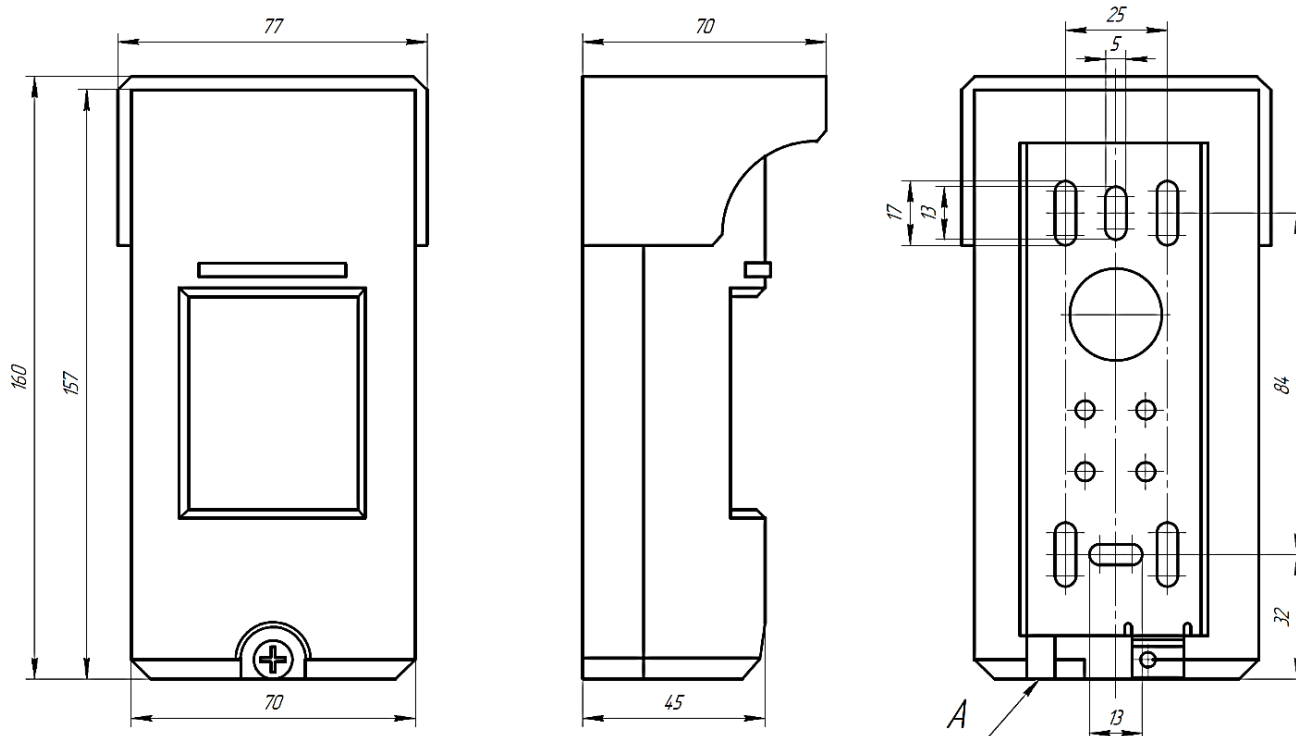
Technical specifications

Parameter	Value
Mounting height, m	1.8...2.4
Detection	IR + microwave
Range, m	15
Input voltage, VDC	9.6...16
Power consumption, W	3
Weight, kg	0.21
Operating temperature, °C	-40...+55
Protection degree	IP66
Mounting type	wall

Connection diagram



Dimensions



Note – When installing provide a free space 60 mm from the surface A for connecting the product.

POE-INJECTOR POE-INJ (POE-INJ DVS-2003/1)



Description

The PoE injector-repeater expands Ethernet line for 100 m.

Features:

- power and data transmitting for max 100m with repeater mode (data reception - transmitting);
- provides power to Ethernet line (PoE);
- «Power» LED.



Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)



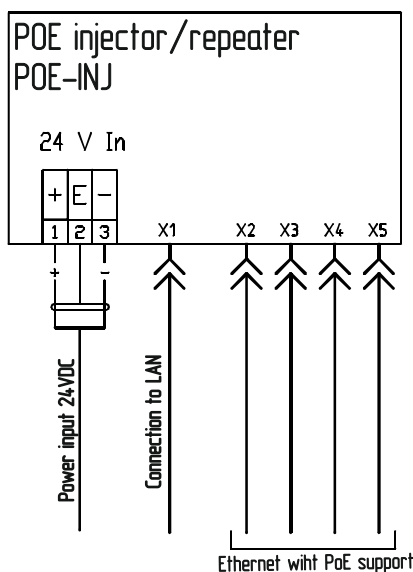
Certificate of conformity
№MBД PΦ.03.000606

Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

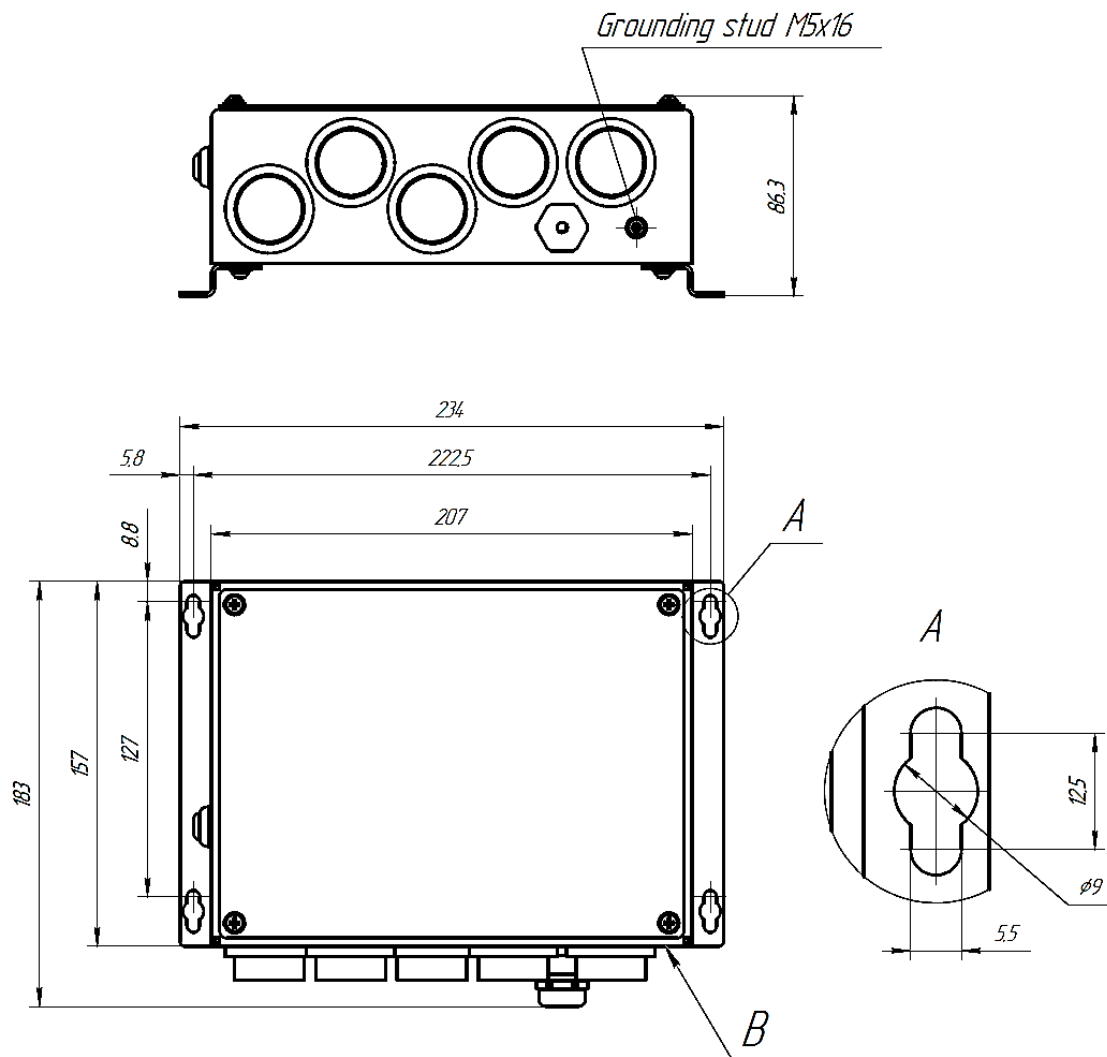
Technical specifications

Parameter	Value
Ports, pc.	4 x 10/100Base-TX (PoE support) 1 x 10/100Base-TX
Input voltage, VDC	24
Power per channel, W	15
Auxiliary power consumption, W	65
Weight, kg	2.2
Operating temperature, °C	−40...+55
Protection degree	IP65
Mounting type	wall
Material	stainless steel

Connection diagram



Dimensions



Note – When installing provide a free space 80 mm from the surface B for connecting the product.

PTZ PLATFORMS



RT-1



RT-2

Design

RT-1 (RT DVS 22-2003/1)

To install cameras:

CMS-100A, CMS-100, CMS-140Z

RT-2 (RT DVS 22-2003/2), RT-2 (RT DVS 22-2003/4)

To install cameras:

CMS-100A, CMS-100, CMS-140Z, CMS-140Z/LW,
TMA-130, CTMS-160/10,5/Z

RT-2 (RT DVS 22-2003/4) material - stainless steel

PTR-407Ex (PTR DVS-22-2003/3)

Explosion-proof degree: 1ExdllCT6XGb.

To install cameras:

CMA-130Ex, CMS-150Ex, CMA-130Z/Ex, CMS-150Z/Ex

Description

The unit changes tilt angle of the video camera, mounted on the bracket.



Registry of Shipping's certificate
№18.10558.120
(Electrical equipment) – for RT-1, RT-2



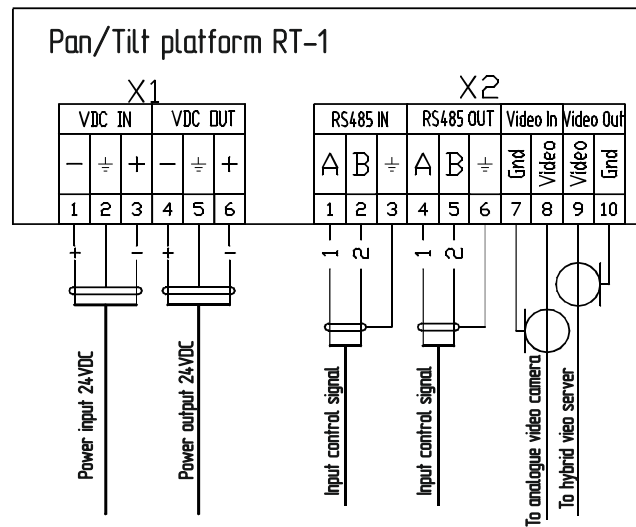
Certificate of conformity
№МБД ПФ.03.000606 – for
RT-1, RT-2, PTR-407Ex

Registry of Shipping's certificate
№ 19.02296.120
(Radioequipment) – for RT-1, RT-2,
PTR-407Ex

Technical specifications

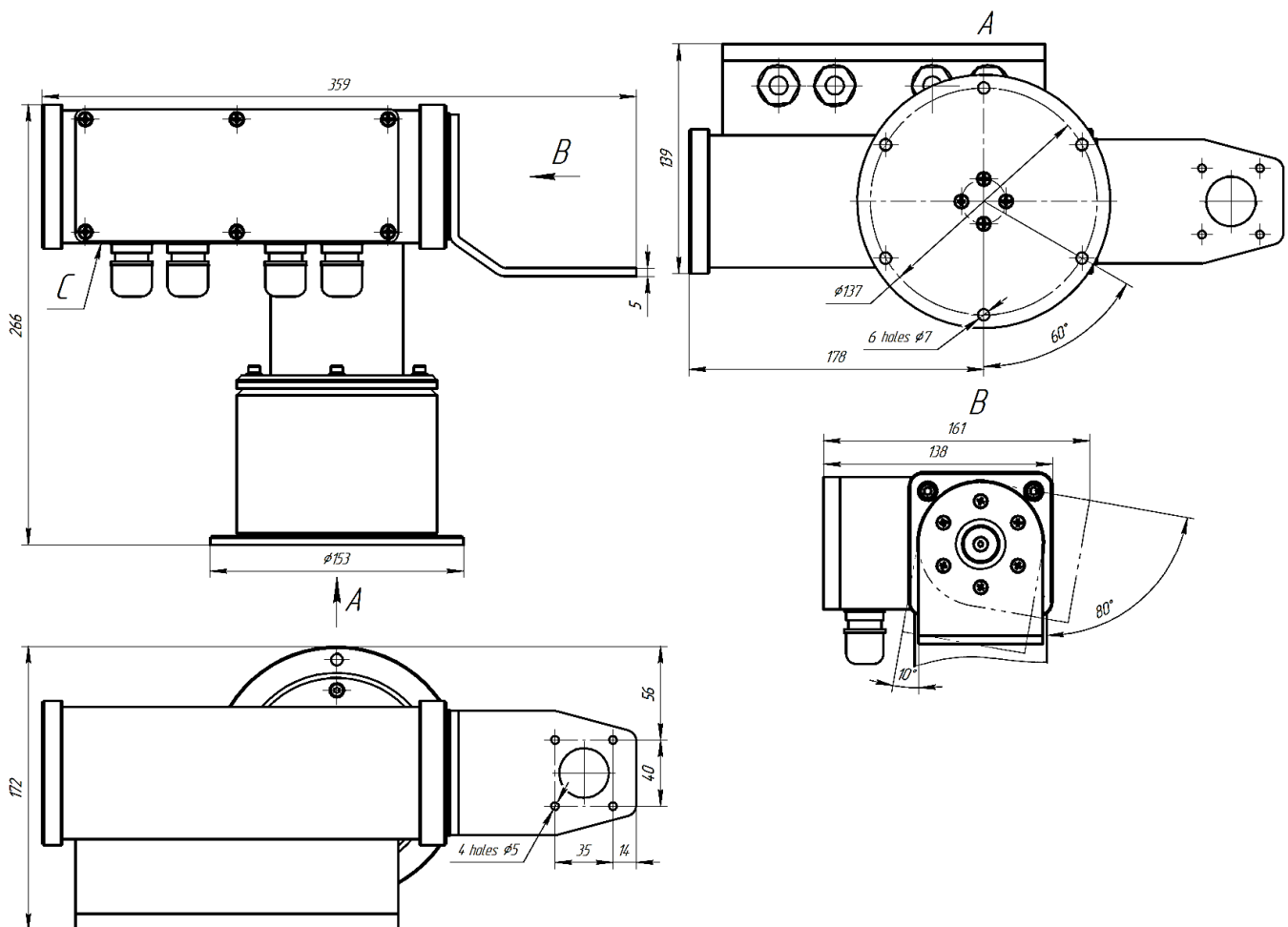
Parameter	RT-1 (RT DVS 22-2003/1)	RT-2 (RT DVS 22-2003/2)	PTR-407Ex (PTR DVS 22-2003/3)	RT-2 (RT DVS 22-2003/4)
	Value			
Number of scan planes	2			
Pan rotation angle	0°...355°	0°...360°	0°...360°	0°...360°
Tilt rotation angle	-10°...80°	-60°...60°	-90°...90°	-60°...+75°
Max pan speed, %/s	7.5	9	40	6.0
Max tilt speed, %/s	6	4	40	6.0
Load equivalent, kg	4	14	40	14
Input voltage, VDC	19...36		18...36	19...36
Power consumption, W	60	40	200	40
Protection degree	IP66			
Weight, kg	10.73	10.0	21.0	20.6
Operating temperature, °C	-40...+55		-60...+55	-40...+55
Mounting type	wall			

Connection diagram



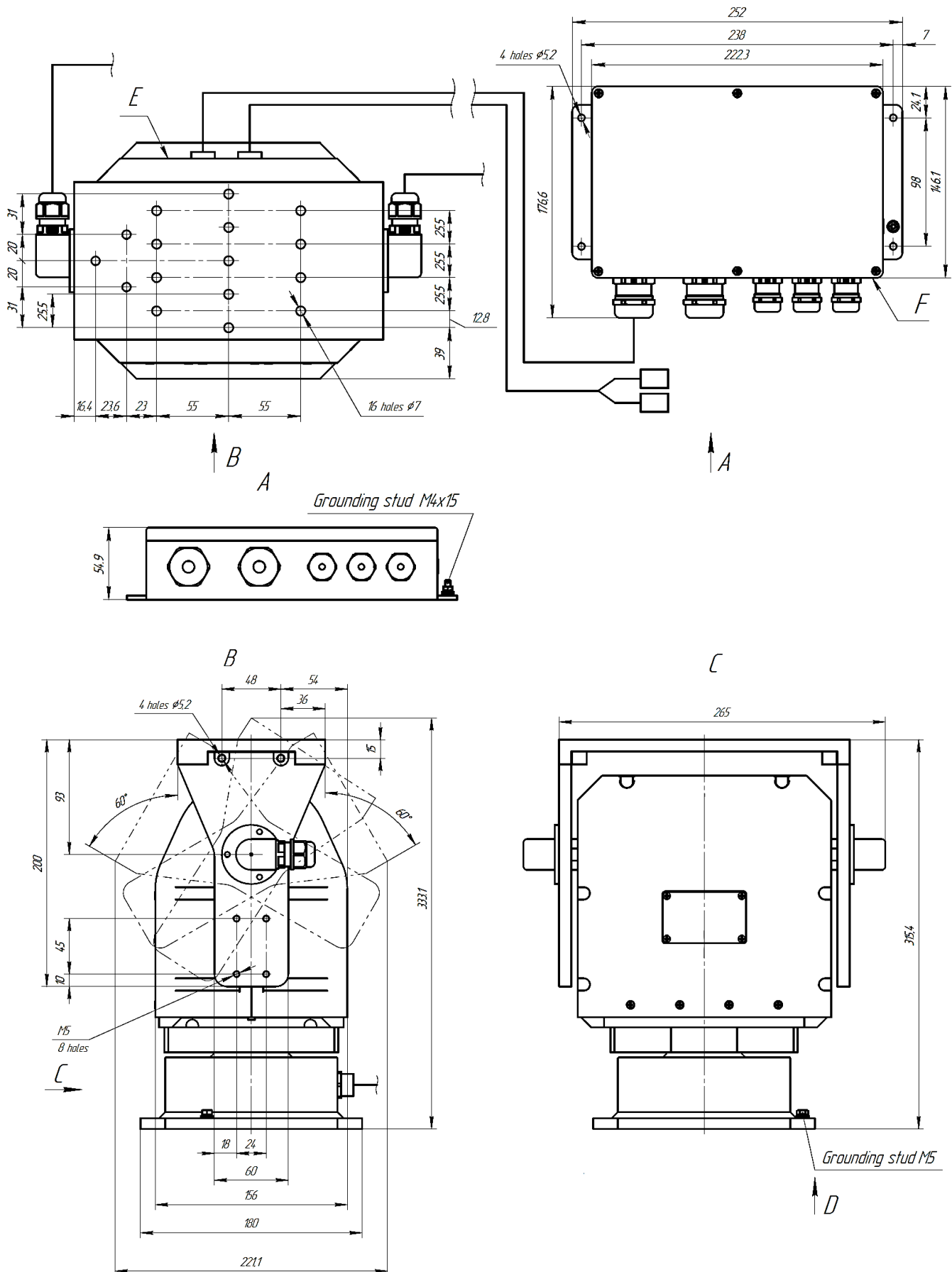
Dimensions

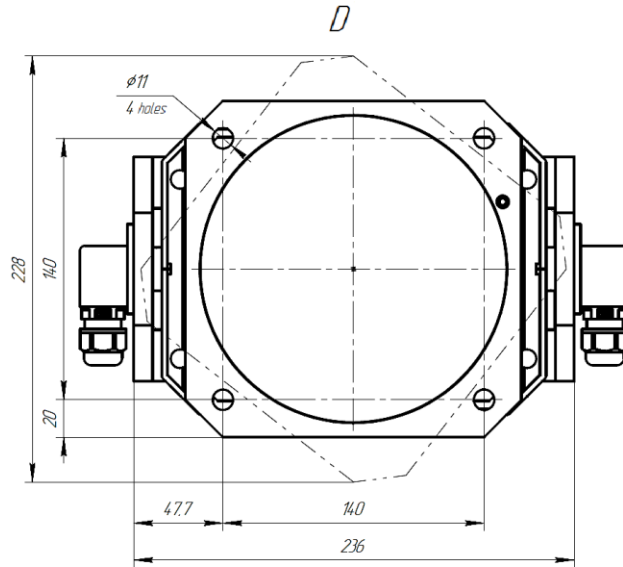
RT-1(RT DVS 22-2003/1)



Note – When installing provide a free space 120 mm from the surface C for connecting the product.

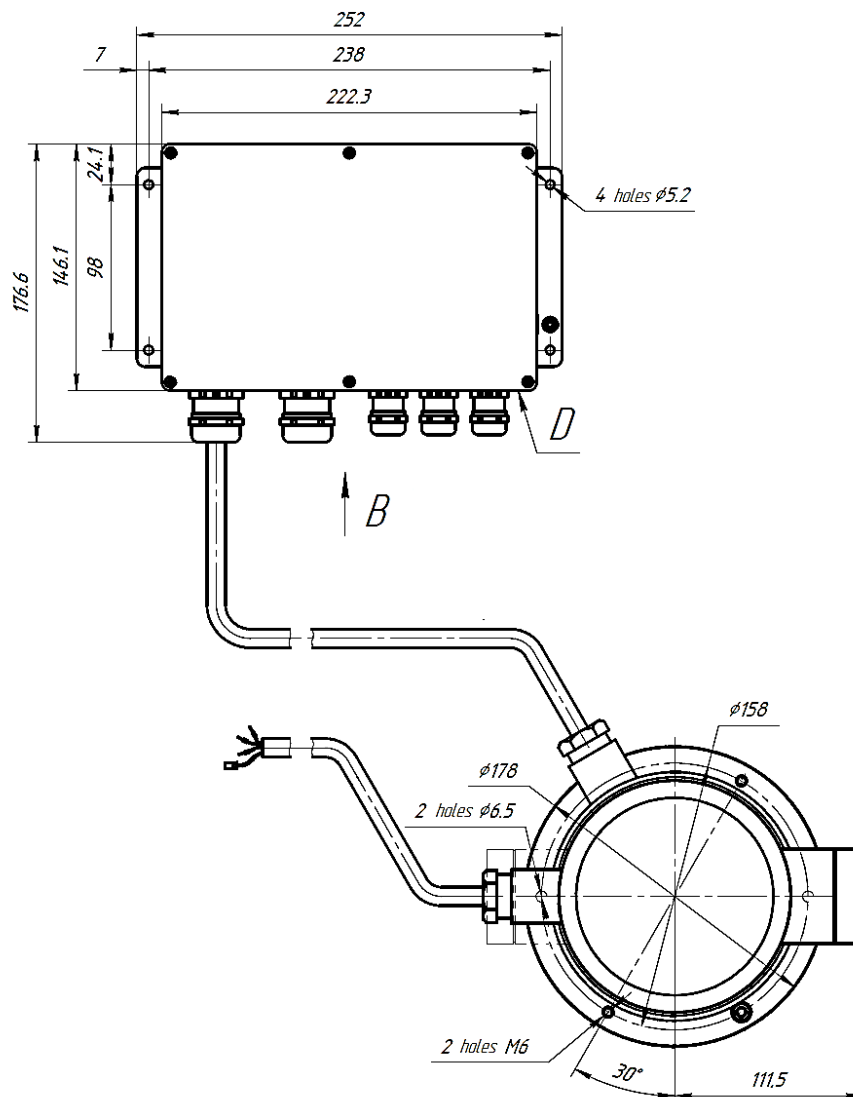
RT-2 (RT DVS 22-2003/2)

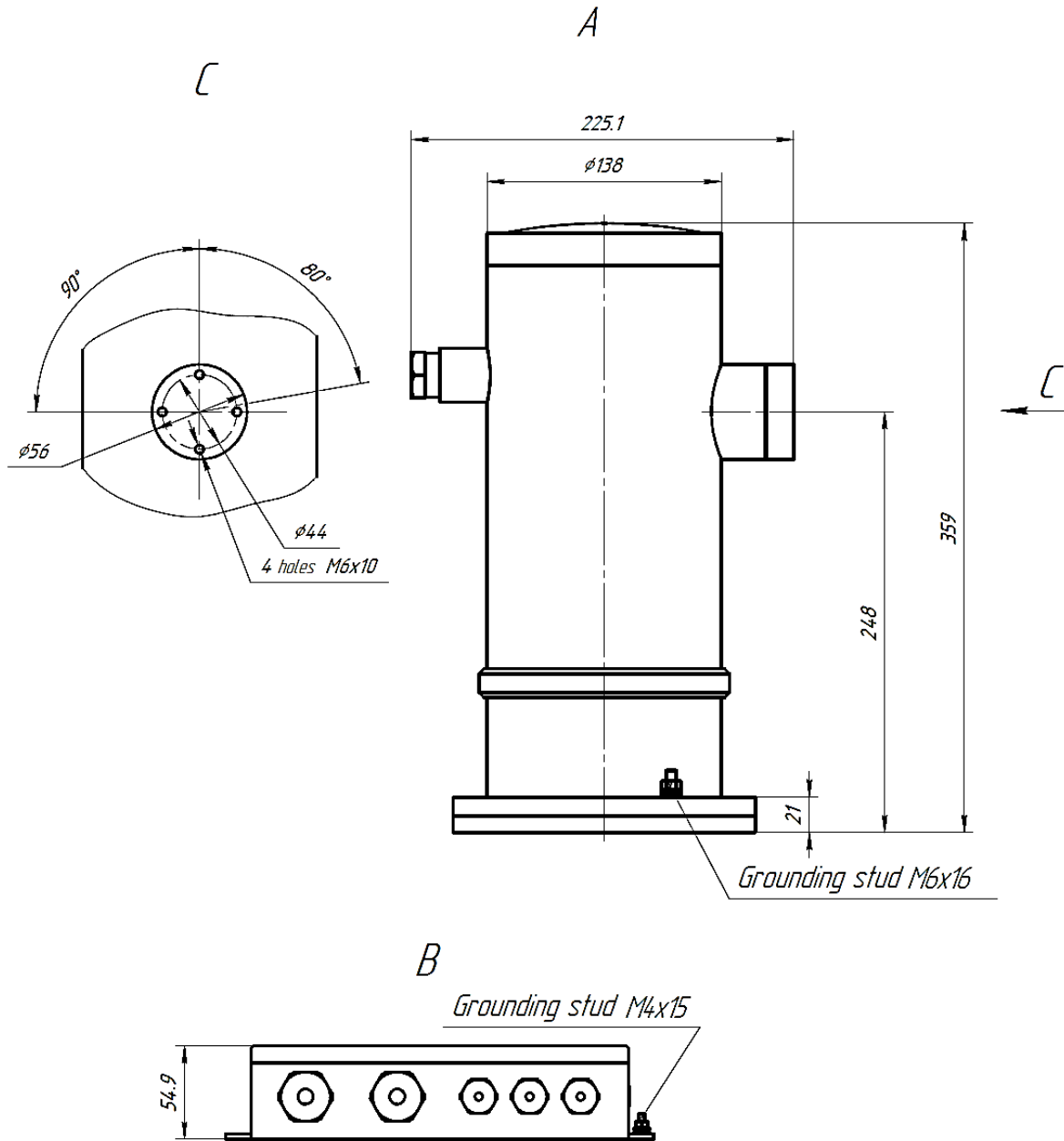




Note – When installing provide a free space 120 mm from the surfaces E and F for connecting the product.

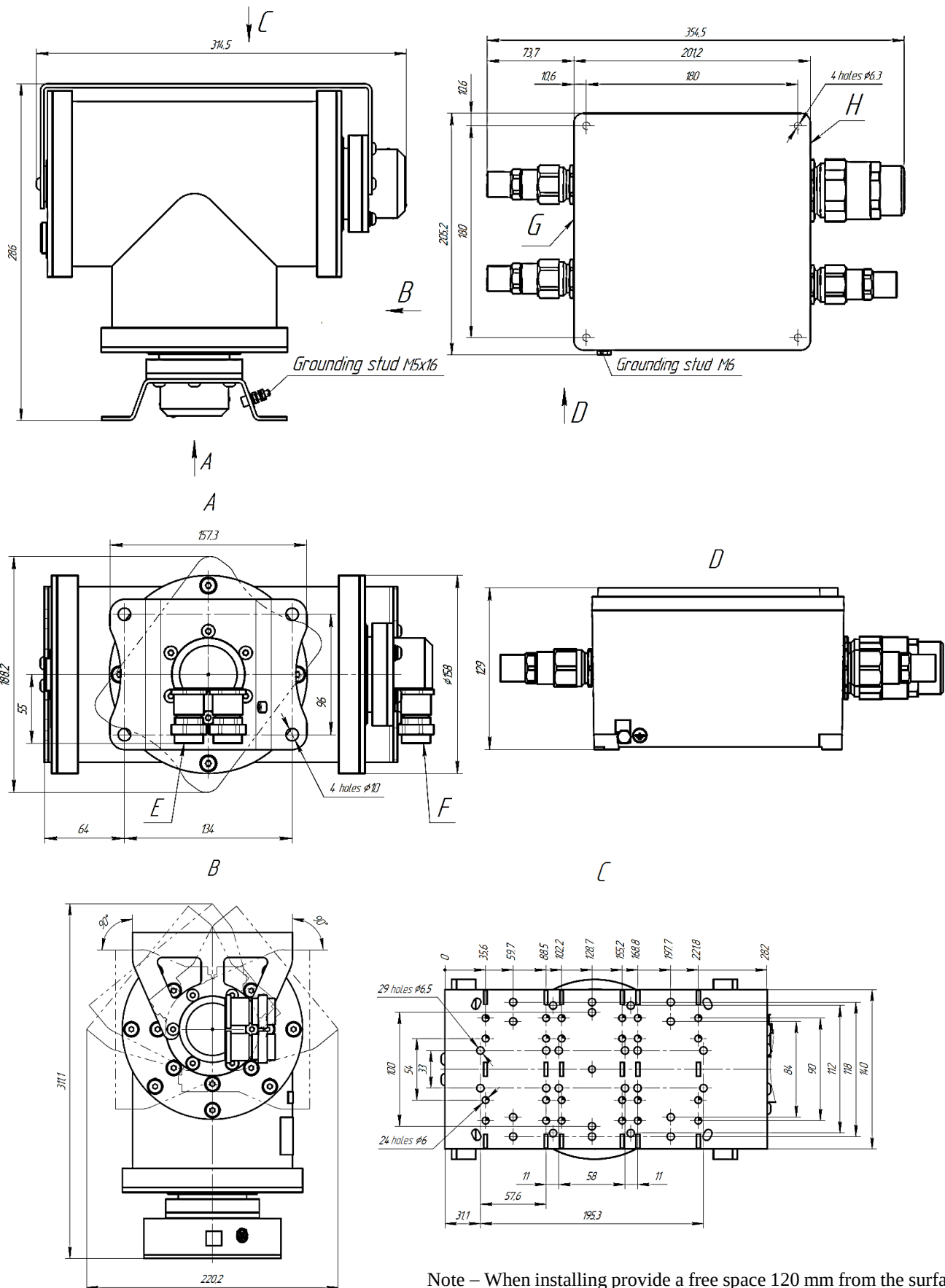
RT-2 (RT DVS 22-2003/4)





Note – When installing provide a free space 120 mm from the surface D for connecting the product.

(PTR DVS-22-2003/3)



Note – When installing provide a free space 120 mm from the surfaces E and F and 200 mm from the surfaces G and H for connecting the product.

SIGNAL SPLITTERS



Registry of Shipping's certificate
№18.10558.120
(Electrical equipment)



Registry of Shipping's certificate
№ 19.02296.120
(Radioequipment)

Certificate of conformity
№MBД РФ.03.000606



PC1-3

Design

CV-signal splitter CD1-3
(CD1-3 DVS-2003/1)

VGA-signal splitter VD1-2
(VD1-2 DVS-2003/1)

Description

The unit amplifies and splits CV signal into three outputs.

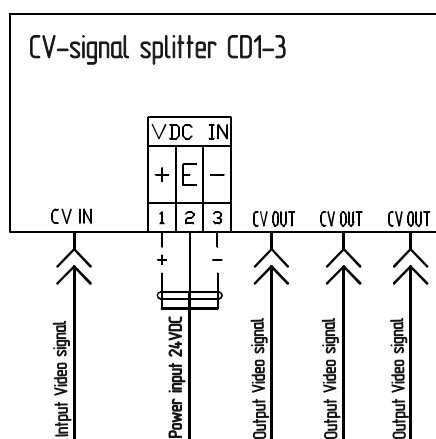
Amplifies and splits input VGA signal into two outputs.

Technical specifications

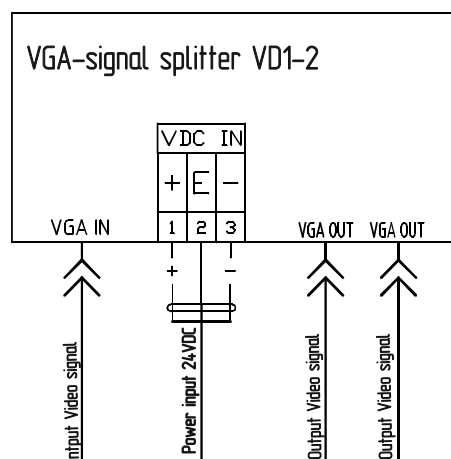
Parameter	CD1-3 (CD1-3 DVS-2003/1)	VD1-2 (VD1-2 DVS-2003/1)
	Value	
Input, pc.	1 x CV	1 x VGA
Output, pc.	3 x CV	2 x VGA
Bandwidth, MHz	400	
Max. resolution	1600×1200	
Input voltage, VDC	18...36	
Power consumption, W	19.73	
Protection degree	IP22	
Weight, kg	1.34	2.00
Operating temperature, °C	-15...+55	
Mounting type	wall	

Connection diagrams

CD1-3 (CD1-3 DVS-2003/1)

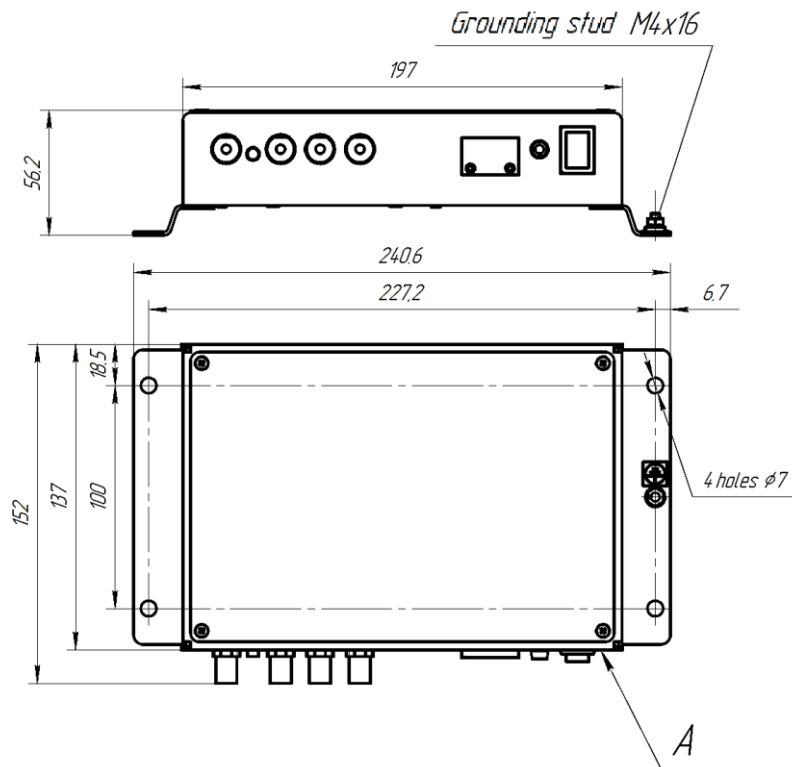


VD1-2 (VD1-2 DVS-2003/1)



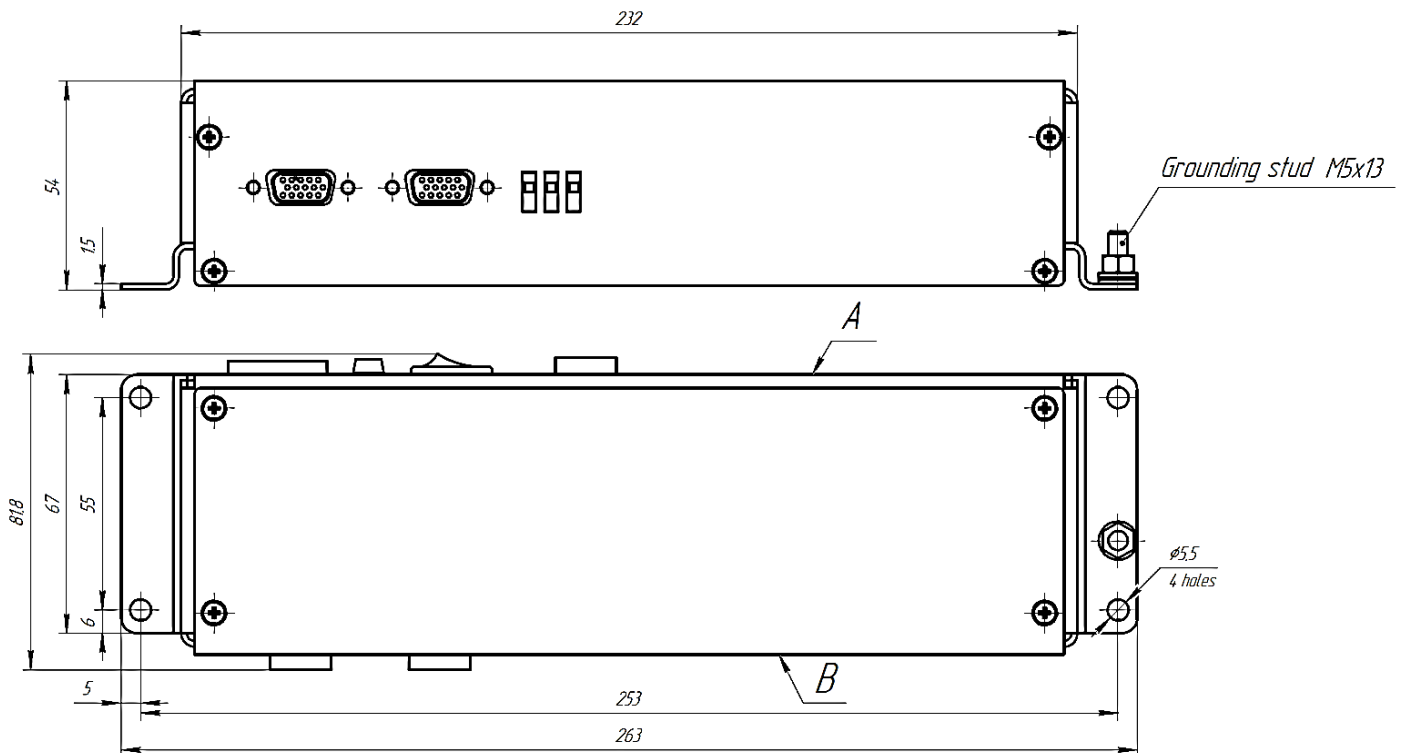
Dimensions

CD1-3 (CD1-3 DVS-2003/1)



Note – When installing provide a free space 100 mm from the surface A for connecting the product.

VD1-2 (VD1-2 DVS-2003/1)



Note – When installing provide a free space 140 mm from the surfaces A and B for connecting the product.

ETHERNET-TO-COAXIAL CONVERTERS



Registry of Shipping's certificate

№18.10558.120

(Electrical equipment)



Registry of Shipping's certificate

№ 19.02296.120 (Radioequipment)

Certificate of conformity

№МБД РФ.03.000606



Design

Ethernet-to-coaxial signal converter
SC-1 (SC1-1 DVS-2003/1)

Ethernet-to-coaxial signal converter
SC-1-S (SC1-1 DVS-2003/1)

Coaxial-to-Ethernet signal converter
SC-2 (SC1-2 DVS-2003/1)

Description

Single-channel transmitter ensures digital signal transmitting by coaxial cable. Operates together with SC-2.

Converts analogue signal to digital by coaxial cable.

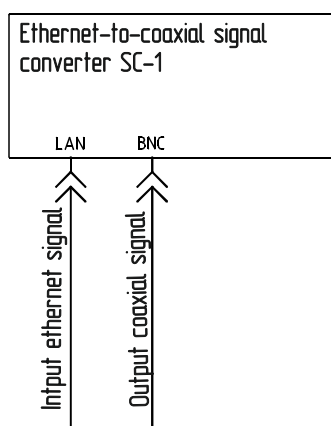
Ensures digital signal transmitting by coaxial cable. Operates together with SC-1.

Technical specifications

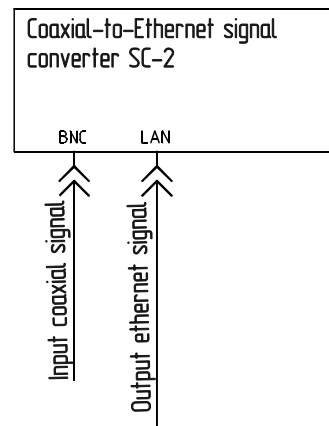
Parameter	SC-1 (SC1-1 DVS-2003/1)	SC-1-S (SC1-1 DVS-2003/1)	SC-2 (SC1-2 DVS-2003/1)
	Value		
Input voltage	48PoE		
Power consumption, W	3	5	3
Protection degree	IP56	IP22	IP56
Weight, kg	0.3	0.2	0.3
Operating temperature, °C	-40...+55	-15...+55	-40...+55
Mounting type	wall		

Connection diagram

SC-1 (SC1-1 DVS-2003/1)

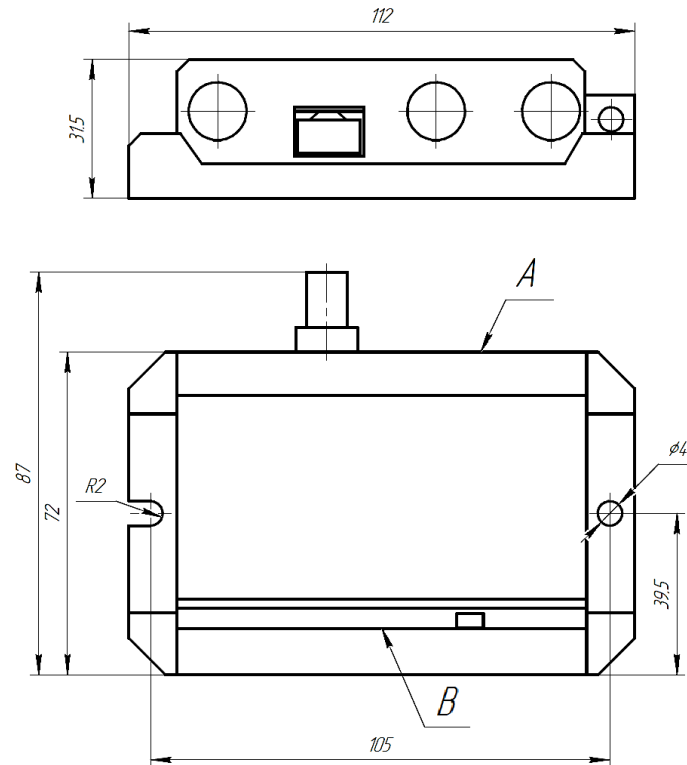


SC-2 (SC1-2 DVS-2003/1)



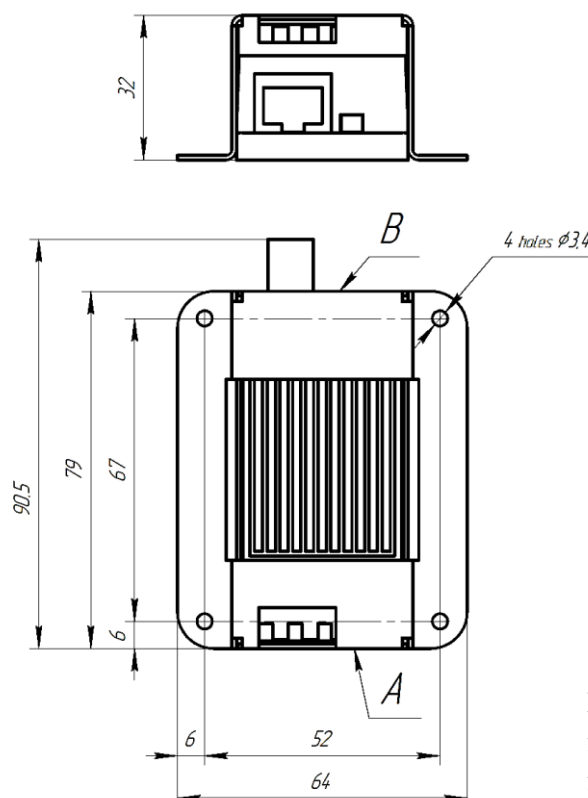
Dimensions

SC-1 (SC1-1 DVS-2003/1), SC-2 (SC1-2 DVS-2003/1)



Note – When installing provide a free space 100 mm from the surface A and 90 mm from the surface for connecting the product.

SC-1-S (SC1-1 DVS-2003/1)



Note – When installing provide a free space 90 mm from the surface A and 100 mm from the surface for connecting the product.

MICROPHONE (ACTIVE) MC-1 (MC-1122 DVS-2003/1)



Description

Converts sound waves into electrical signals.

Features:

- waterproof design;
- connection to the video camera.

Registry of Shipping's certificate
№18.10558.120
(Electrical equipment)

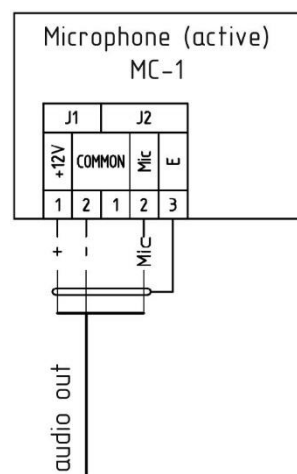


Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)

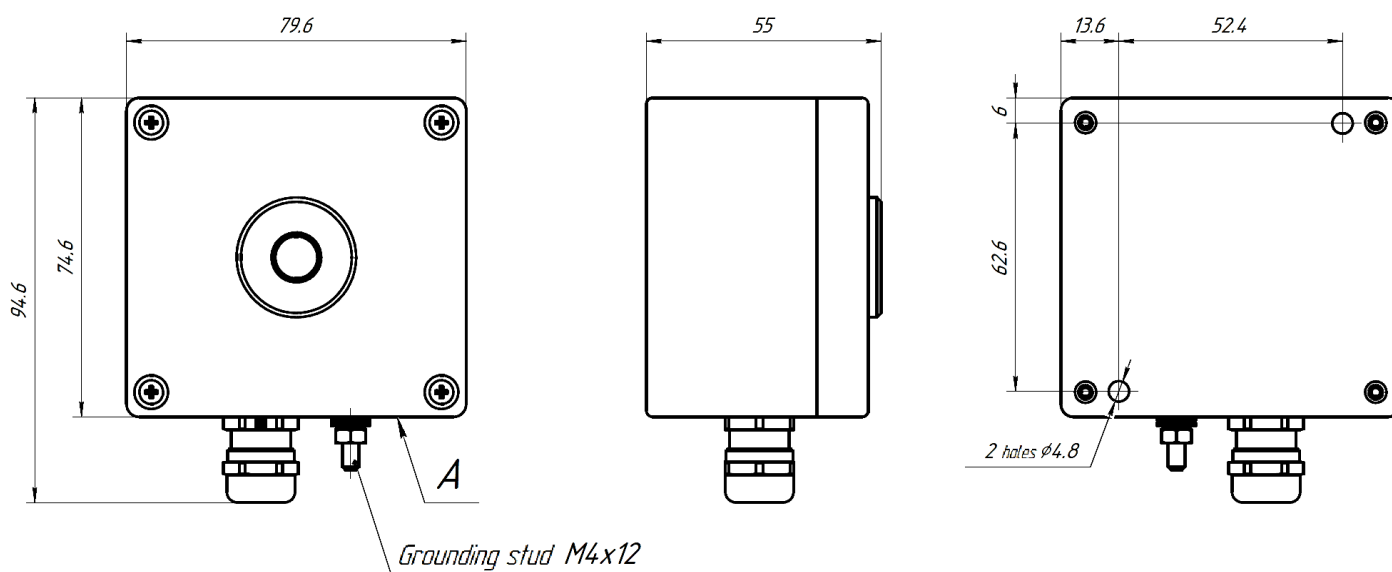
Technical specifications

Parameter	Value
Acoustic coverage area, m	7
Input voltage, VDC	12 (from camera)
Power consumption, W	0.5
Weight, kg	0.2
Operating temperature, °C	–40...+55
Protection degree	IP66
Mounting type	wall

Connection diagram



Dimensions



Note – When installing provide a free space 60 mm from the surface A for connecting the product.

UNIVERSAL DATA CONVERTER MDC-145 (MDC-145 DVS-2003/1)



Registry of Shipping's certificate
№18.10558.120 (Electrical equipment)
Registry of Shipping's certificate
№ 19.02296.120 (Radioequipment)



Certificate of conformity
№МБД РФ.03.000606

Description

The unit MDC-145 is designed to couple two devices of different data types, formats, repetition rate, etc.

Technical specifications

Design 1 with wall mounting

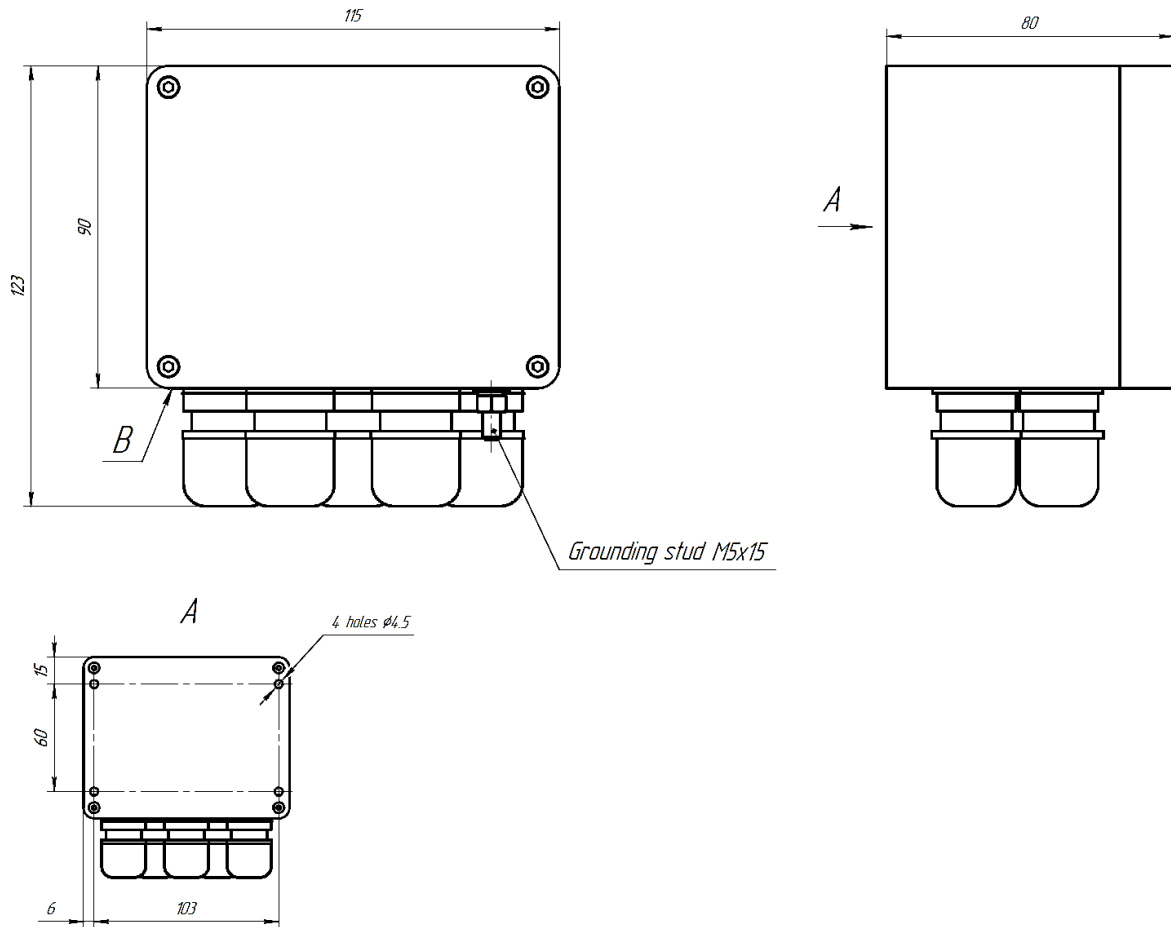
Parameter	Value
Ports, pc.	2 x Ethernet, 2 x DOUT
Input voltage, VDC	19...36
Power consumption, W	5.3
Weight, kg	0.72
Operating temperature, °C	-15...+55
Protection degree	IP44
Mounting type	wall

Design 2 with DIN rail mounting

Parameter	Value
Input voltage, VDC	19...36
Consumption current, mA	min. 100
Transmission mode	half-duplex
Max. data transfer rate, bit/s	57600
Communication line	twisted pair with return wire
Communication range under speed 19200 bit/s, m	2000
Voltage of galvanic isolation of port «Line 2» from port «Line 1» and «Power supply», V	1500
Operating temperature, °C	-15...+55
Protection degree	IP20
Mounting type	DIN rail

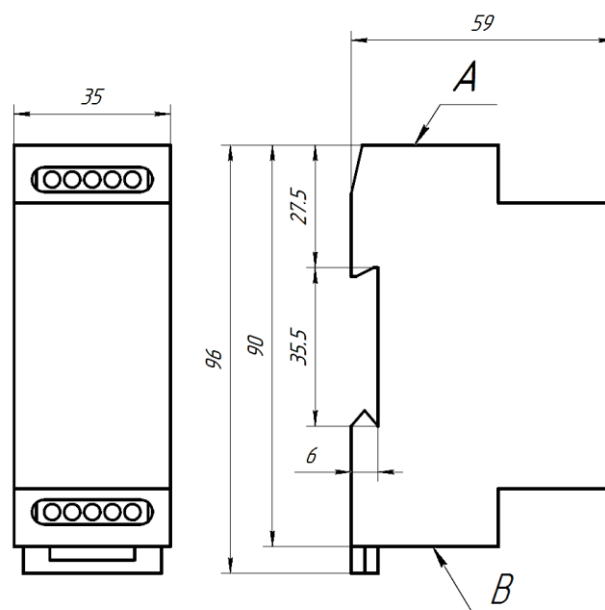
Dimensions

MDC-145 (MDC-145 DVS-2003/1), design 1



Note – When installing provide a free space 80 mm from the surface B for connecting the product.

MDC-145 (MDC-145 DVS-2003/1), design 2



Note – When installing provide a free space 50 mm from the surfaces A, B for connecting the product.

DISTRIBUTION BOXES



Registry of Shipping's certificate

№18.10558.120

(Electrical equipment)



Registry of Shipping's certificate

№ 19.02296.120 (Radioequipment)

Certificate of conformity

№МБД РФ.03.000606



Design

Distribution box KP-124V
(KP-124VF DVS-2003/1)
Distribution box KP-124VF
(KP-124VF DVS-2003/1)

Distribution box KP-2 (KP-2 DVS-2003/2)

Distribution box KP-6 (KP-6 DVS-2003/3)

Description

The unit is designed to split cables laid among marine equipment (navigation system, vessel automation, etc.).

Features – KP-124VF is delivered with a filter.

The distribution box KP-2 connects 2 units to the power bus RS-485.

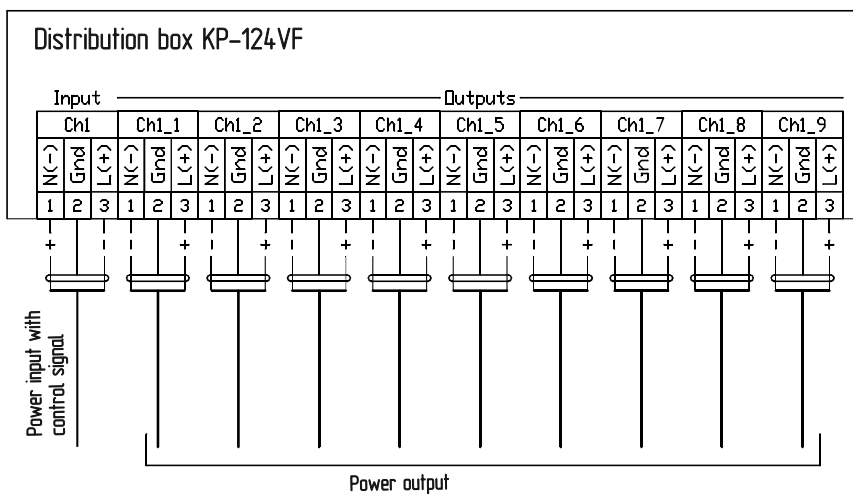
The distribution box KP-6 connects to the power bus RS-485 and supplies 6 units.

Technical specifications

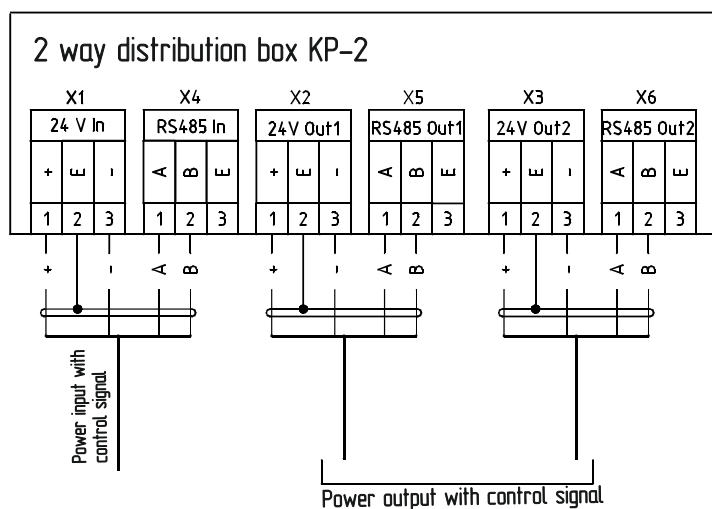
Parameter	KP-124V (KP-124VF DVS-2003/1)	KP-124VF (KP-124VF DVS-2003/1)	KP-2 (KP-2 DVS-2003/2)	KP-6 (KP-6 DVS-2003/3)
	Value			
Total number of terminals, pc.	10		3	7
Load terminals, pc.	9		2	6
Max. permissible voltage, V	250			
Max. permissible current), A	20		15 – power mains; 2 – signaling units' circuit	
Weight, kg	1.62	1.95	0.95	1.82
Protection degree	IP56			
Operating temperature, °C	–40...+55			
Mounting type	wall			

Connection diagram

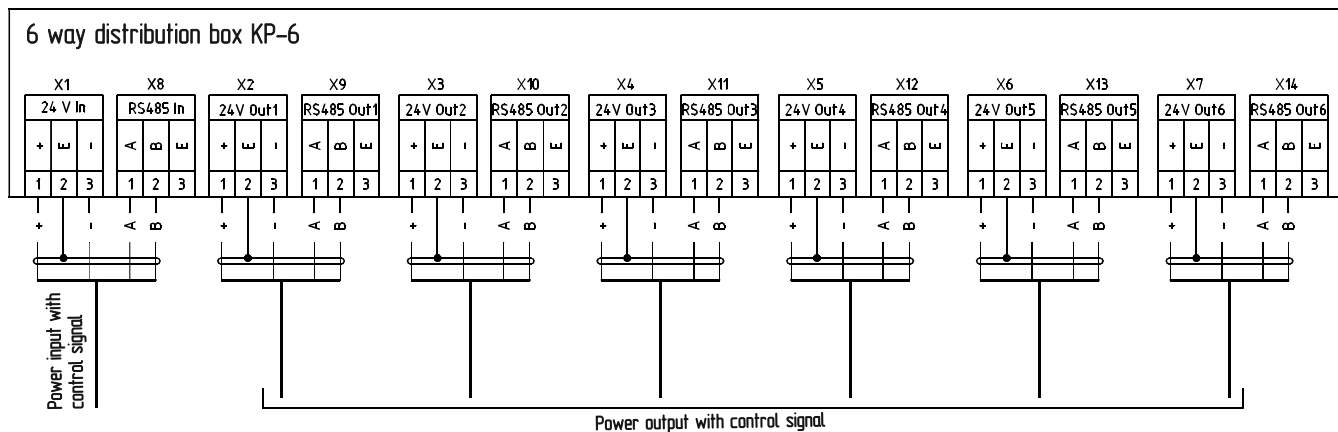
KP-124V, KP-124VF (KP-124VF DVS-2003/1)



KP-2 (KP-2 DVS-2003/2)

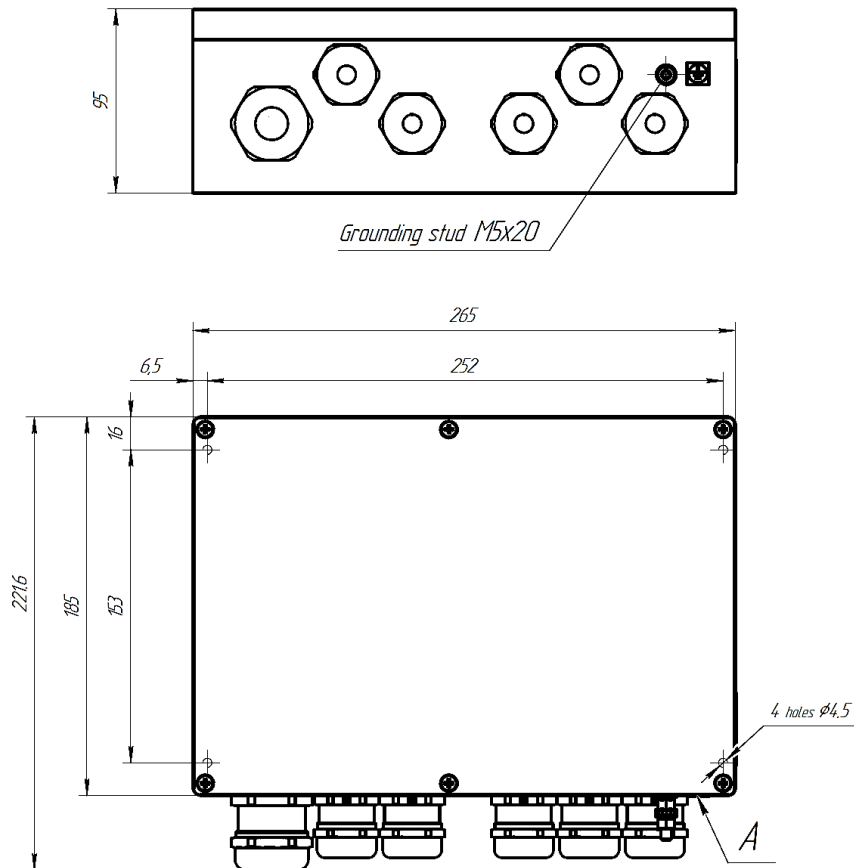


KP-6 (KP-6 DVS-2003/3)



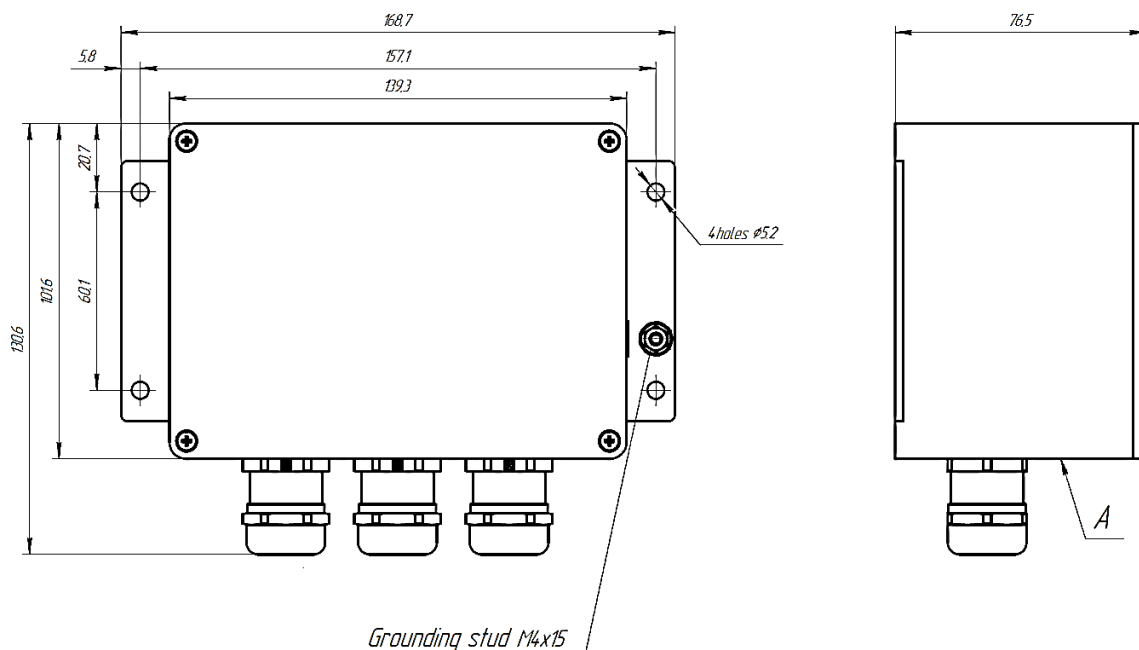
Dimensions

KP-124V (KP-124VF DVS-2003/1), KP-124VF (KP-124VF DVS-2003/1)



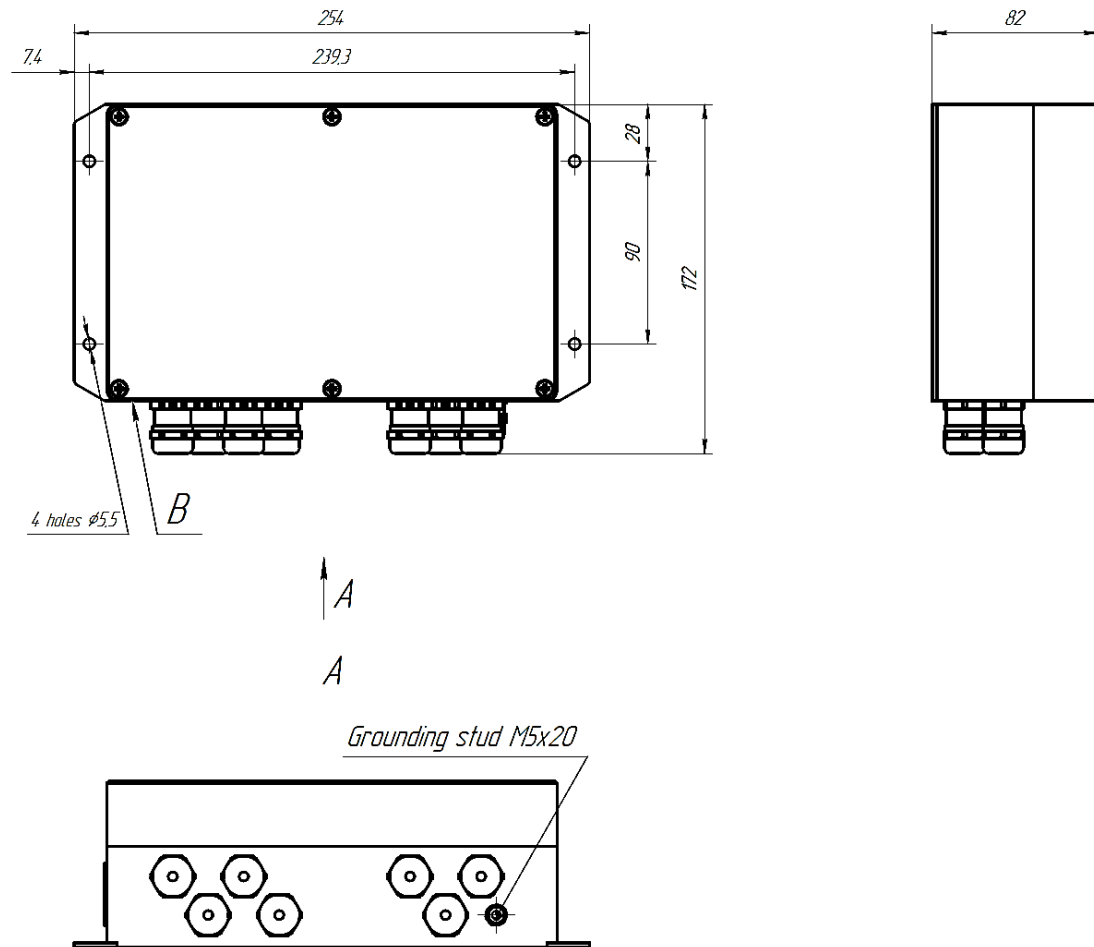
Note – When installing provide a free space 160 mm from the surface A for connecting the product.

KP-2 (KP-2 DVS-2003/2)



Note – When installing provide a free space 160 mm from the surface A for connecting the product.

KP-6 (KP-6 DVS-2003/3)



Note – When installing provide a free space 80 mm from the surface B for connecting the product.

PORTABLE AUDIO RECORDER PR-2 (PR-2 DVS-2003/1)



Description

The product provides monaural or stereo recording of audio information in complex acoustic environments.



Certificate of conformity
№МБД РФ.03.000606

Technical specifications

Parameter	Value
Input voltage, VDC	5
Built-in accumulator capacity, mA·h	1100
Accumulator charging time, hours	5
Built-in flash memory, GB	16
Port	USB 2.0
Weight, kg	0.07
Operating temperature, °C	-5...+40
Protection degree	IP22

Dimensions

