

B101 & B401

04/2026



The **B101** and **B401** process **RTSP/H.264 camera streams** directly at the **edge** and provide **structured events** for **parking**, **ANPR**, and other adaptive applications.

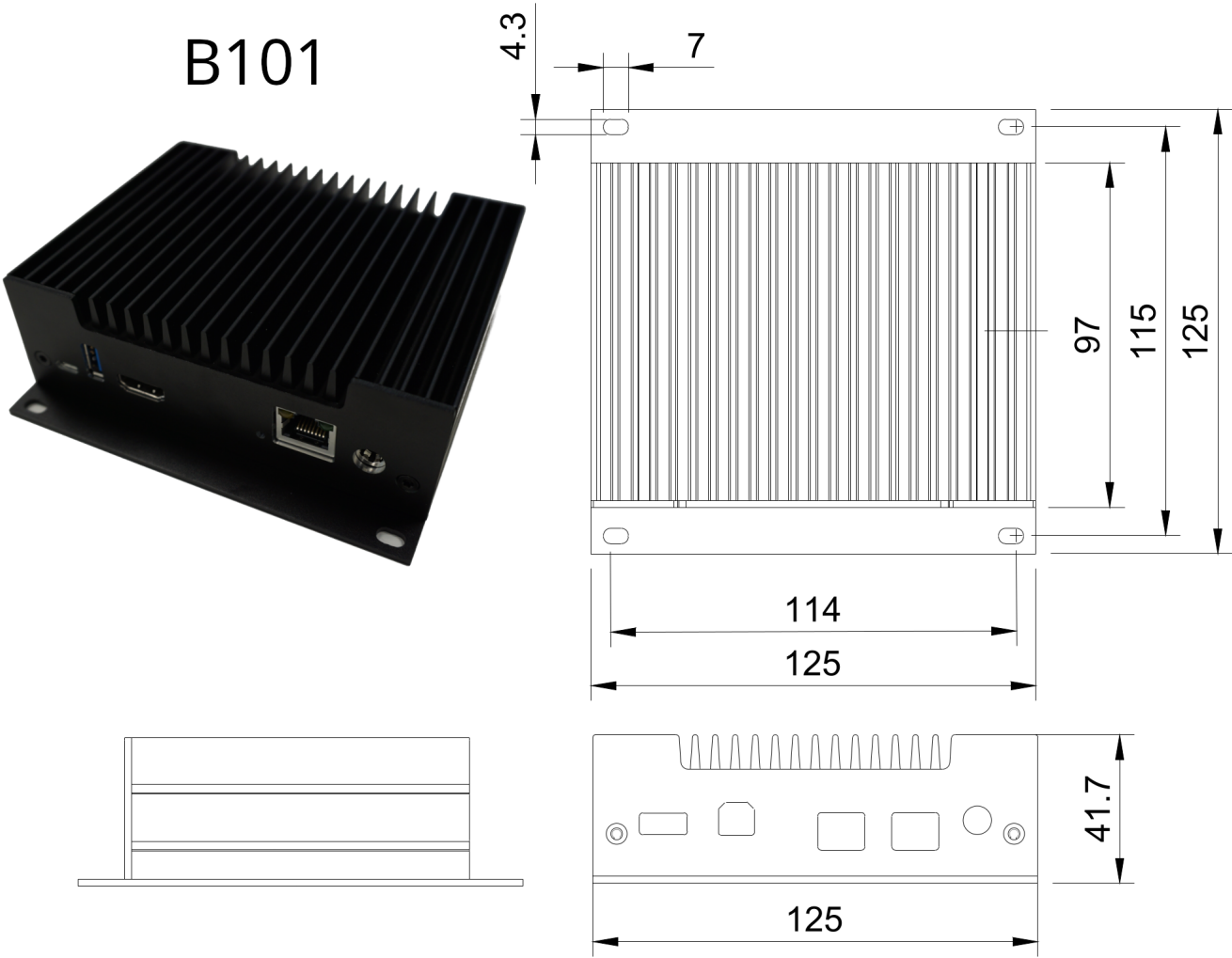
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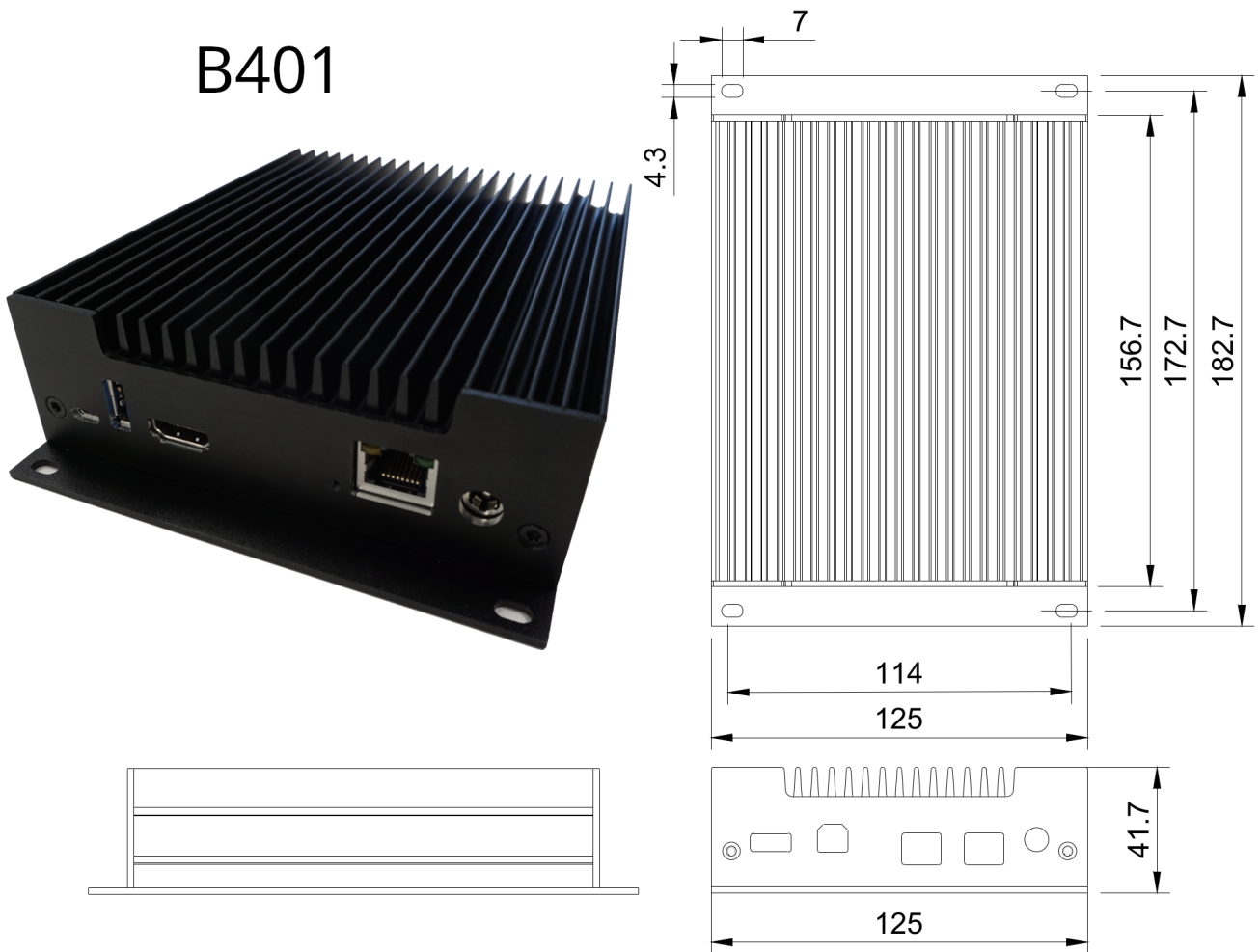
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Data sheet

	B101	B401
Camera streams		
Traffic Survey / Adaptive Traffic Control / Barrier-free parking / Parking ANPR	1	4
Parking Single Space Detection	4	12
Video Stream	Max. 1080p @ 30 FPS (H264)	Max. 1080p @ 30 FPS (H264)
Stream protocol	IP/RTSP	IP/RTSP
Data output		
Message protocol	MQTT	MQTT
Data format	JSON	JSON
Data interface	MQTT; Data Center; Data Center API	MQTT; Data Center; Data Center API
Power supply		
Connector	2,5 / 5,5 mm DC-Jack	2,5 / 5,5 mm DC-Jack
Input voltage	12 - 48 V	12 - 48 V
Power consumption	20 W	60W
Recommended power supply	Mean Well MDR-60-12	Mean Well MDR-60-12
Network		
Connectivity	Gigabit Ethernet	Gigabit Ethernet
Network configuration	DHCP	DHCP
Mechanical		
Dimensions	125 x 125 x 42 mm	183 x 125 x 42 mm
Weight	0,6 kg	0,8 kg
Mounting	Surface mounting; DIN rail (optional)	Surface mounting; DIN rail (optional)
Environmental conditions		
Operating temperature	0°C to 50°C	0°C to 50°C
Operating humidity	≤ 95 % (at 25 °C)	≤ 95 % (at 25 °C)

B101



B401

Data protection and security

The B101/B401 processes personal data only vaguely, without storing it and only for the purpose of anonymization. This is done on the basis of Art. 6 para. 1 f) GDPR, namely in the legitimate interest of the operator. Only the anonymous data is then used to carry out traffic management. The BMA complies with the Low Voltage Directive 2014/35/EU and the Electromagnetic Compatibility Directive 2014/30/EU. This resulting CE certification is attached to the bottom of the device.

Disclaimer

NOTE

The supplier assumes no liability for compliance with local requirements or additional certifications that may be required in certain regions or markets. It is the responsibility of the purchaser or user to ensure that the product complies with local regulations and specific requirements that may go beyond the specified certifications. The supplier disclaims all liability for any damage or loss that may result from non-compliance with such additional requirements.

Scope of delivery

- 1 x B101 / B401
- 1 x Cable with 2,5 / 5,5 mm DC-Jack

Installation

Requirements

- DC power supply unit with 12 to 48 V output voltage and at least 20 W (B101) or 60 W (B401) output power.

WARNING

If other devices are connected to the power supply unit, the output power of the power supply unit must correspond to the required total peak power of all connected devices.

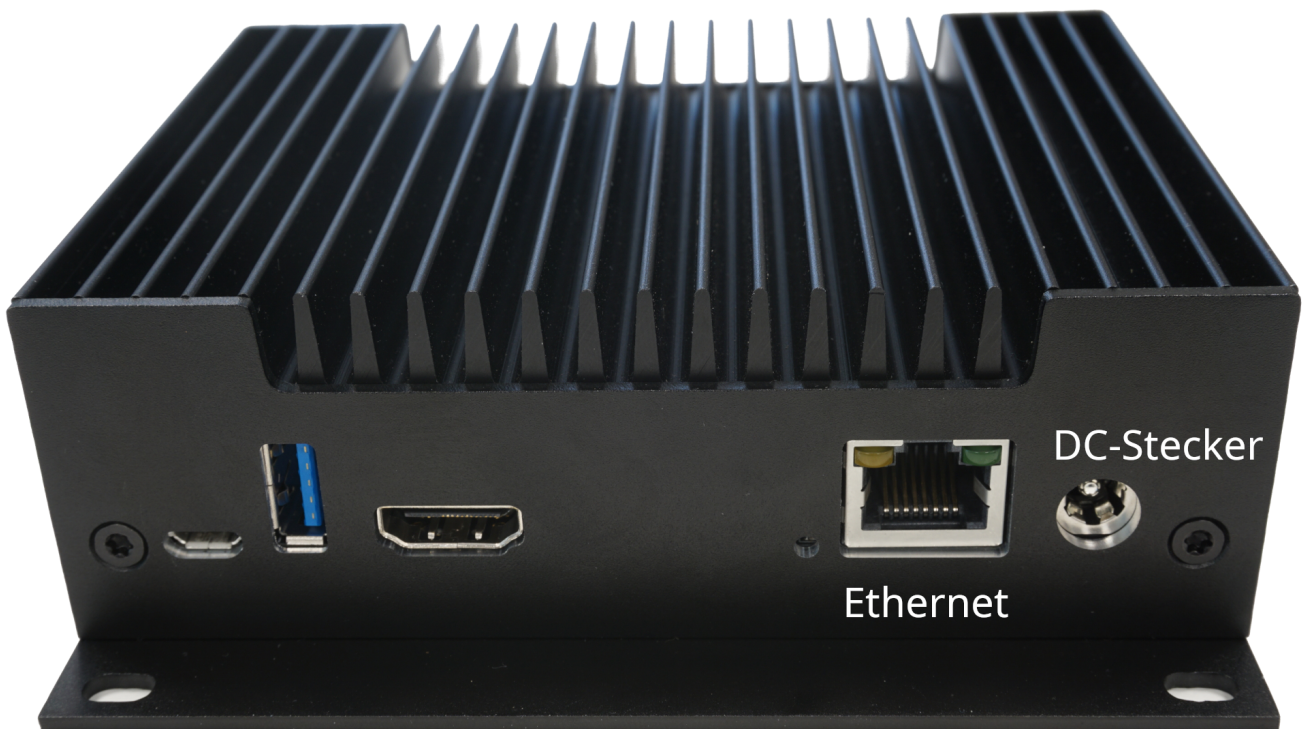
- Ethernet network connection (at least 100 Mbit/s) with DHCP server and Internet access (at least 1 Mbit/s down/up). IPv4 - a private IPv4 address is sufficient.

WARNING

- IPv6 is not supported
 - DHCP addresses must not be within the range 172.17.0.0/16 (Docker default network).
-
- Network camera(s) with RTSP (H.264) stream (at least 1080p @ 25FPS). Camera(s) accessible via the network.
 - Cable with 2.5 / 5.5 mm DC plug (*included*).
 - RJ45 network cable (CAT 6)

Installation

- Unplug the power supply.
- Attach the device to the mounting surface or DIN-rail.
- Plug the network cable into the Gigabit Ethernet port of the device and connect the cable to the network switch / router.
- Connect the DC power-cable to the power supply and insert the DC-jack into the DC power (12-48V) connection on the device.
- Switch on the power supply to start the device.



Configuration

Network

Firewall setting: In order for the device to communicate with the Control Center, the following ports must be open for outgoing connections:

Port	Protocol	Richtung
80	IPv4 - TCP/UDP	Outgoing
123	IPv4 - UDP	Outgoing
443	IPv4 - TCP/UDP	Outgoing
1194	IPv4 - UDP	Outgoing
8883	IPv4 - TCP	Outgoing
5671	IPv4 - TCP	Outgoing

Static IP: Should the device be assigned a static IP address in the network (optional):

- Configure the static IP address in the IP/MAC binding of the router/DHCP server. The MAC address of the device can be found on the sticker on the underside of the device or in the data sheet supplied.

WARNING

It may be necessary to restart the device after changing the network settings by briefly disconnecting it from the power supply.

Control Center

As soon as the device is supplied with power and the network settings are configured correctly, the device should be displayed as online in the Control Center.

Select the corresponding device and add a new camera stream via “Add camera”:

⊗ 202409Z0001 ✎

Device ID: 778c76b9-6dd7-4286-9496-9deeb76c43d 📄

Configuration

Health

Schedule

Add camera

Metadata ✎

No Metadata

Setting up a camera stream in the Control Center

The next step is to configure the camera stream. To do this, select “RTSP” from the drop-down menu under “Camera Connection - Connection type” and fill in the parameters for the camera stream.

Configuration
Health
Schedule

Camera Info

Enabled
☒

Camera name

Camera coordinates

Latitude (between -90 and 90)

Longitude (between -180 and 180)

MQTT Connection

Configuration mode
☒ Data Center
☐ Data Analytics (legacy)
☐ Custom MQTT connection

IO Connection

☐ IO-device

Camera Connection

Connection type

Camera host*

Port

Path

Username

Password

Setting up Camera Connection in the Control Center

Depending on which data interface is required, the corresponding data interface can then be selected on the right-hand side under “MQTT Connection - Configuration mode”. If the events are to be sent directly to a self-hosted MQTT broker, “Custom MQTT connection” must be selected. The parameters of the MQTT broker can then be configured in the “Custom MQTT” field.

For the configuration of the event triggers and other settings, see configuration.

Troubleshooting

Problem	Possible cause	Solution
Device is offline in the Control Center	Power supply outside the specification. Voltage: 12 - 48V. Power: 20W (B101), 60W (B401). More power is required if other devices are connected to the same power supply!	Use of a suitable power supply.
	Incorrect network configuration.	Clarification with network administrator.
	Incorrect firewall settings; see above.	Clarification with network administrator.
	No internet connection over the network	Device has to be connected to a network with internet connectivity.
Device crashes frequently / is displayed as offline in the Control Center.	Power supply outside the specification. Voltage: 12 - 48V. Power: 20W (B101), 60W (B401). More power is required if other devices are connected to the same power supply!	Use of a suitable power supply.
No data in Data Center	Network port of the MQTT service not enabled.	Activation of port 8883 by the network administrator.
No data received via custom MQTT broker	Network port of the MQTT service not enabled.	Activation of the used port by the network administrator.