



Industrial Media Converters 200M-1S.0.1-BOX

LAN-RING



Mounting to flat a surface



Mounting to DIN35

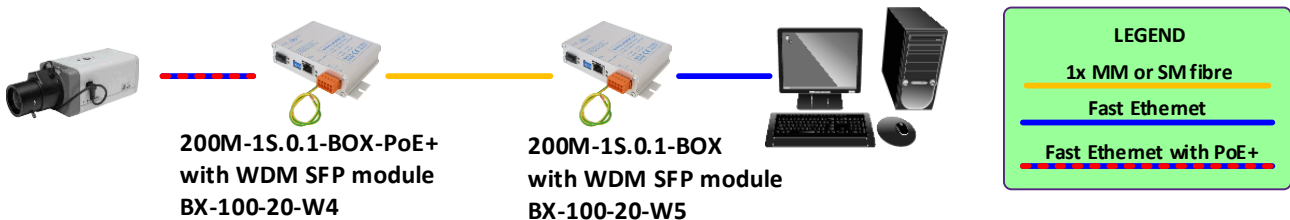


Mounting in Outdoor Switchgear OH3215

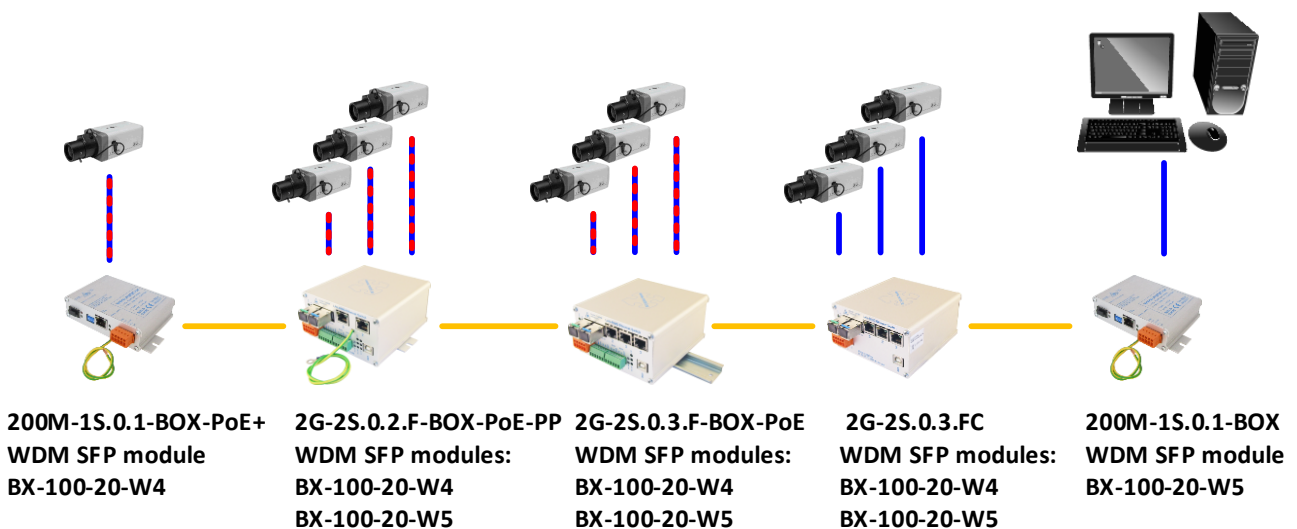
- SFP slot with 100BASE-X support
- Fast Ethernet port with PoE+ (30W)
- Supports of JUMBO packets
- Supports remote restart PoE
- Detection of disconnect IP device
- 2 independent power supply inputs
- Overvoltage protections 1000A [8/20µs]
- EMC in accordance with EN 61000 - level 4-5
- Working temperatures from -40°C do +70°C

ORDERING NAME	CODE	SUPPLY
200M-1S.0.1-BOX	1-770-220	10-60VDC/10-30VAC
200M-1S.0.1-BOX-PoE+	1-769-220	10-60VDC/10-30VAC
Accessories		
BX-100-20-W4-L	4-101-020	SFP Tx:1310 / Rx:1550 nm
BX-100-20-W5-L	4-101-010	SFP Tx:1550 / Rx:1310 nm
Supply without PoE 10-60VDC/10-30VAC, supply with PoE 48-57VDC.		
Supply with PoE+ 52-57VDC (15.4 ... 30W).		

Converters 100-BASE-FX in POINT TO POINT Topology Versatility



Converters 100-BASE-FX in BUS Topology Versatility



SFP slots are compatible with all MiniGBIC 100 BASE-X modules that are compatible with SFP-MSA.



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SFP slot with 100BASE-X support

Compatibility

Media converter is equipped with one SFP slot. Into the SFP slot, is possible to insert SFP modules METEL or other manufacturers supporting 100BASE-X standard.

1x Fast Ethernet port with PoE+ 30W support

Compatibility

Fast Ethernet ports support standards for 100BASE-TX / full duplex and PoE/PoE+ in accordance with standards IEEE 802.3af(at).

Support of JUMBO packets

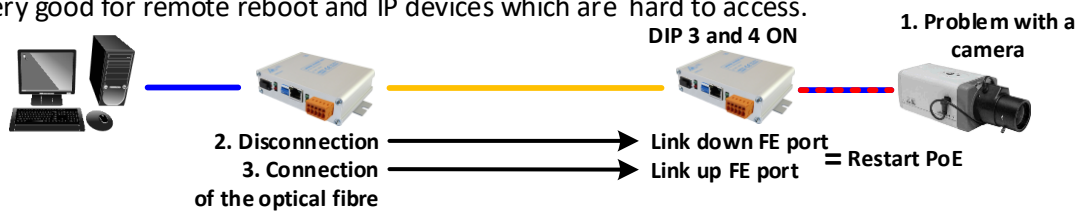
Compatibility

Media converters support the forwarding of JUMBO packets of a size of up to 10K Bytes.

Support remote restart PoE

Compatibility

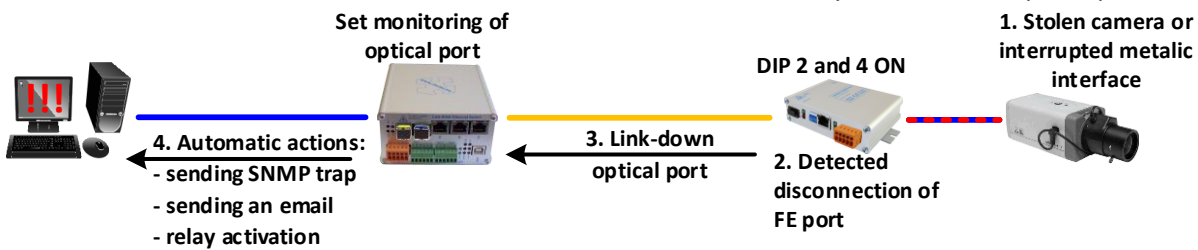
The media converter can be set to separate the monitoring of activity on the optical port. It will disconnect the optical signal, media-converter and automatically turn off the FE port including the PoE supply. This function is very good for remote reboot and IP devices which are hard to access.



Detection of disconnect IP device

Durability



Another feature that can be set with DIP switches on the cover of the media converter is an automatic detection of the disconnection of the IP device from the FE port. This application is to protect against theft. In the case, of disconnection, the media converter automatically turns off the optical port.

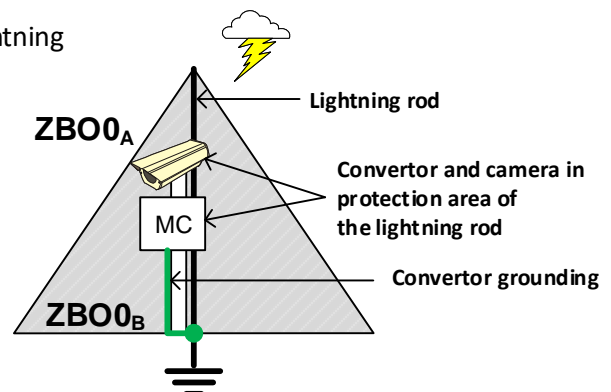


Overvoltage protections 1kA on FE port

Durability

Integrate overvoltage protections guarantee reliable operation even in outdoor installations. The optimum placement of the converter, devices and cables connected to the converter is in a protected area with the use of a lightning rod, i.e. ZBO0B zzzzone acc. to IEC 62305-4. The ports are protected in two ways:

-  - two-level class D protections consisting of lightning arresters, separating impedances and transils,
-  - fine class D protection consisting of transils.





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Technical parameters

Compatibility

	Parameter	Value	Unit	Note
LAN (UTP)	Supported formats	FE UTP port: 100BaseTX	full duplex	
	Overvoltage protection	1000	A	8/20us
	Connector	RJ45		
SFP slot	Supported formats	100 BASE-X		compatible with MSA
Power supply	Without PoE	10-60 / 10-30	VDC/AC	
	With PoE	48-57	VDC	
	Power consumption	Max. 2,5	W	
	Protections	Overvoltage / current	1000A (8/20µs)	
Environment	Operational range	-40...+70	°C	temp. of the environment
	Storage range	-40...+85	°C	
	Humidity	Max. 95%		non-condensing
Mechanic	Dimension	Page 4		
	Weight	0,22	kg	
The producer retains the right to change any technical parameters without prior written notification.				

Electromagnetic compatibility

Standard	Testing level - Criteria
EN 55024 – Immunity characteristics	
EN 61000-4-2 – Contact Discharge	Level 4 - Criteria B
EN 61000-4-2 – Air Discharge	Level 4 - Criteria B
EN 61000-4-4 – Bursty	Level 4 - Criteria B
EN 61000-4-5 – Surge Immunity	Level 4 - Criteria B
EN 61000-4-8 – Magnetic Field 50 Hz	Level 5 - Criteria A
EN 61000-4-9 – Pulse Magnetic Field	Level 5 - Criteria A
EN 55022 – Radiated Emission	Class A

These modern design convertors meet the demanding requirements for electromagnetic compatibility, the intergrated overvoltage protections on all ports allow for the use of these convertors in industrial use, including use in outdoor environments:

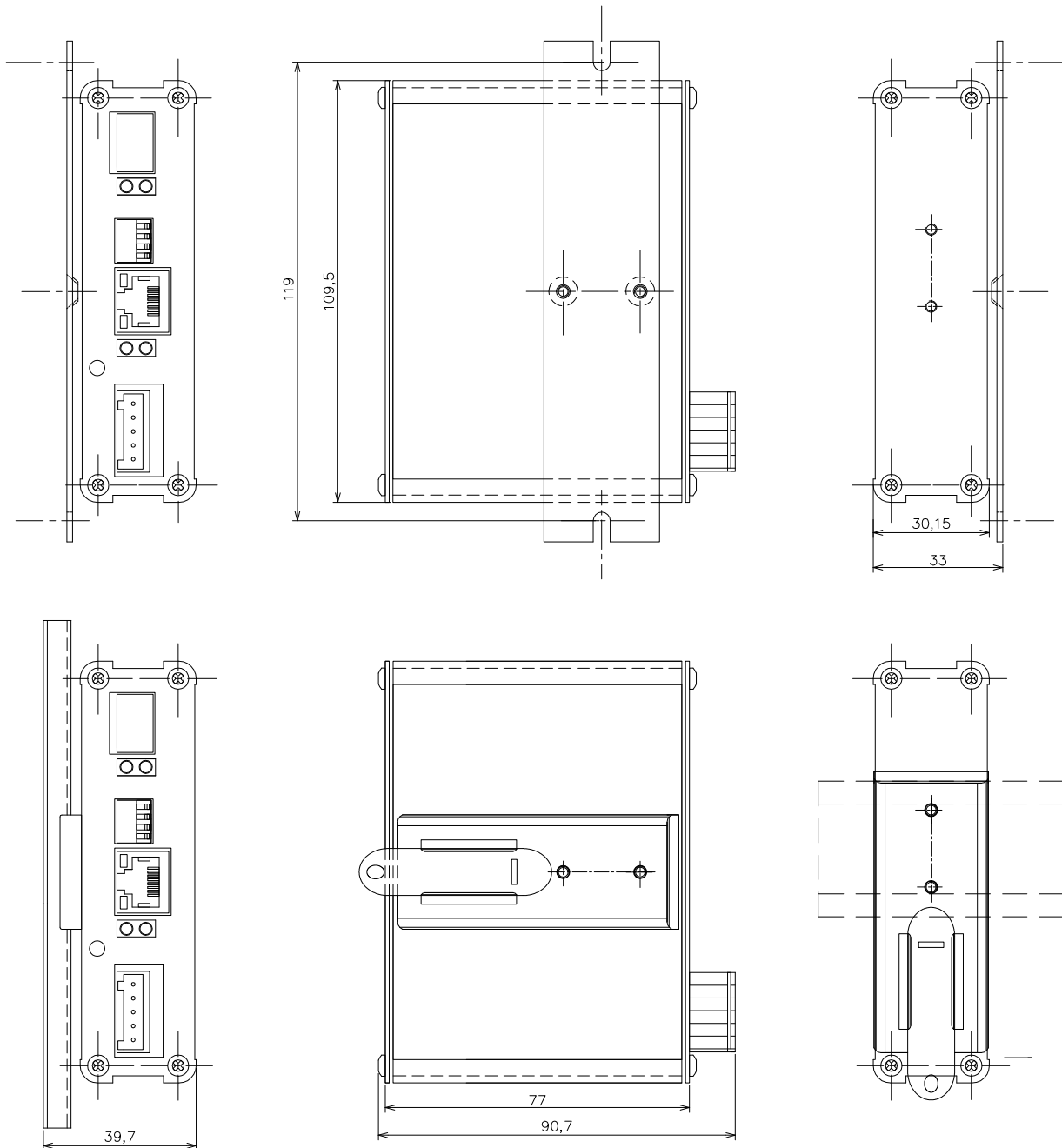
- low influence ecologically,
- low levels of radiation,
- little warming even at maximum power.



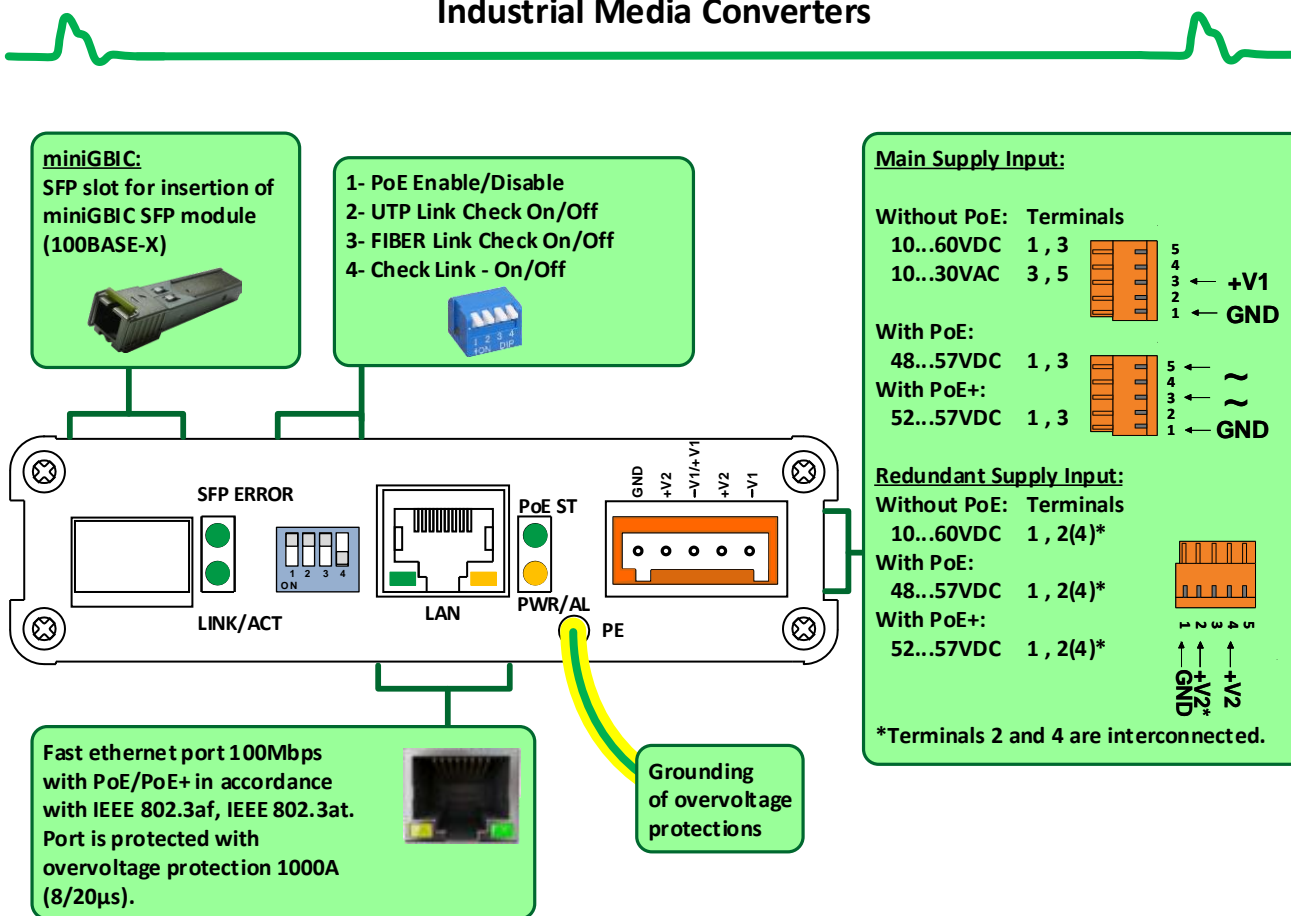
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Dimension 200M-1S.0.1-BOX (PoE)



REVISION: 201702 – Default
202104 – Change the speed on the RJ45 port



Installation

- 1. Mounting**
Mount the convertor to a flat surface or DIN35.
- 2. Connect supply**
Connect the power supply according to the instructions on the picture above. When the end device is powered via PoE / PoE+ it is necessary to supply power to the media converter with DC voltage in a range of 48 - 57VDC. The connected supply is indicated by LED PWR.

DIP switch functions description

- 1 – POE Enable/Disable On / Off** – Switch the ON position to switch on the PoE supply to the Fast Ethernet port.
- 2 – UTP Link Check On / Off** – Activation / deactivation of the monitoring of the activity on Fast Ethernet port. If the device is disconnected from FE port (Link down), the optical port is automatically turned off. This state is displayed by a LED diode ALARM flashing (0.5sec). After the device is reconnected to the to Fast Ethernet port (Link up), the optical port is turned on.
- 3 – FIBER Link Check On/Off** – Activation / deactivation of the monitoring of activity on the optical port.. If the device is disconnected from the optical port (Link down), the fast ethernet port is automatically turned off including PoE. This state is displayed by a LED diode ALARM flashing (0.5sec). After the device is reconnected to the optical port port (Link up), the fast ethernet port is turned on.
- 4 – Check link On/Off** – Activation / deactivation of function monitoring port activity.

- 3. Ground overvoltage protections**
Overvoltage protections must be grounded using the green-yellow wire. When grounding follow these rules:
 - ground resistance must be below 10Ω.
 - keep the length of the cable to the grounding point as short as possible.
- 4. Insert optical module**

Any SFP module complying with MSA requirements (In accordance with SFP modules manufacturers) can be inserted into the SFP slot. For modules with duplex transmission over one fiber (wavelength multiplex) we must ensure that the optical modules are connected correctly to each other. This means that e.g. for WDM modules METEL we can interconnect W4 with W5. We cannot interconnect W4 with W4 or W5 with W5.

