

# **Quick Installation**

### **Mx-NPAA-Box**

IEEE 802.3at (PoE+) Network Power Adapter (NPA) for power supply of MOBOTIX cameras by external power supply units and batteries from 12 to 57 V DC.

- Power supply for MOBOTIX cameras with up to 25 W
- Protection class IP66, -30 to 50 °C/-22 to 122 °F
- Complete set including mounting supplies



# **Scope of Delivery**

#### **Count Part Name**

1

Cable tie

Mx-NPAA-Box
 Order Code: Mx-F-NPAA
Stainless steel PZ head screws 4 x 40 mm
Stainless steel washers
Plastic dowels
Screwdriver, small, blue
Silicone rubber plugs, white



## **Installation Instructions**

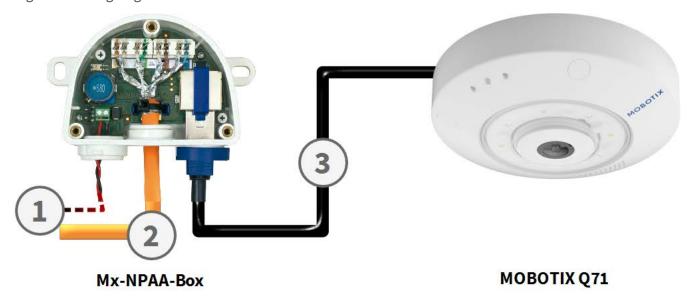
#### NOTE!

- The MOBOTIX Mx-NPAA-Box is to be used only as a stationary power supply of MOBOTIX cameras in IP66 environments. The device is only to be used with genuine MOBOTIX parts. Make sure that the power supply is properly protected against any electrical surges, transients, harmonic waves, etc.
- Make sure that you adhere to all relevant laws, regulations and that you fulfill all certification requirements for the intended use.
- Only one PoE end device (e.g. MOBOTIX camera) can be connected to the Mx-NPAA-Box.
- Make sure that the wires of the installation cable are properly twisted and shielded.
- If power is supplied from a battery, make sure to run the plus wire (+) of the power supply through a safety fuse (1.25 A).
- Torque for cover screws: 0.4 Nm.
- Torque for fastening screws: 0.4 Nm.
- Press the white cable plug (eight-wire plug or cable plug 3 to 5 mm or 5 to 7 mm) into the casing in such a way that the rims stick out equally on both sides.
- The status LED of the Mx-NPAA-Box shows the PoE class that is reached at the output (see LED Signals, p. 8).
- The maximum cable lengths between the power supply and Mx-NPAA-Box vary according to the output voltage of the power supply (see Additional Information, p. 8).

**CAUTION!** Only for MOBOTIX cameras! Using this product to power other devices will void the warranty!

## Standard scenario

In this scenario, the Mx-NPAA-Box supplies power to the MOBOTIX camera via a MOBOTIX patch cable with integrated sealing rings.



- 1. Power supply 12 to 57 V DC (power supply unit or battery with fuse 1.25 A).
- 2. Ethernet installation cable to router.
- 3. MOBOTIX patch cable to camera.

**NOTE!** Only use MOBOTIX patch cables with integrated sealing ring!

### Attach the box

Attach the Mx-NPAA-Box at the mounting position with the cable ports pointing downwards (max. torque 0.4 Nm). Next, remove the box cover (three screws).

**NOTE!** If you need a drilling template, please see Dimensions/Drilling Template, p. 9.

## Set up the connections

#### 1. Insert the cable tie

Feed the supplied cable tie through the two slots on the circuit

#### 2. Prepare the installation cable

- Cut the installation cable to size.
- Push the installation cable through the suitable cable plug (5 to 7 mm).
- Strip the cable for at least 35 mm and separate the individual wires of the cable into twisted pairs with 20 mm shielding.
- Wrap the shield mesh 10 mm wide around the cable so that it can rest on the contact plate of the board. The cable will be fastened with a cable tie later on.

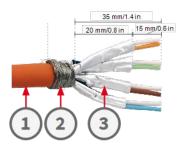
#### 3. Feed the cable into the box

- Replace the sealing plug in the middle of the Mx-NPAA-Box.
- Feed the installation cable through the opening and press the cable plug with the 5 to 7 mm opening into its seat. In order to prevent humidity entering the box, the rubber sleeve needs to be tight against the cable.
- Pull the cable tie tight around the cable shield to provide proper strain relief.

#### 4. Connect the cable wires

Use an LSA PLUS wire tool to insert the individual wires into the LSA terminal. Decide on using either the EIA/TIA-568A or B wiring standard as in the rest of the building. The color code sticker in front of the LSA terminal shows both standards.





- 1. Installation cable
- 2. Shield mesh
- 3. Pair shields





#### 5. Connect the power supply

- Guide the power supply cable through a suitable opening of the left rubber plug. Use the eight-wire plug for inserting single wires; use the appropriate cable plug 3 to 5 mm or 5 to 7 mm for inserting an insulated multi-wire cable.
- Strip 5 mm off of the insulation of the wires to the power supply unit or battery (12 to 57 V DC). Apply wire-end sleeves if using flexible wires.
- Attach to the power terminal according to polarity.

#### 6. Attach the patch cable

- Remove bayonet catch and the sealing plug of the right port.
- Insert a MOBOTIX patch cable into the right port and secure it using the bayonet catch.

NOTE! Only use MOBOTIX patch cables with integrated sealing ring!



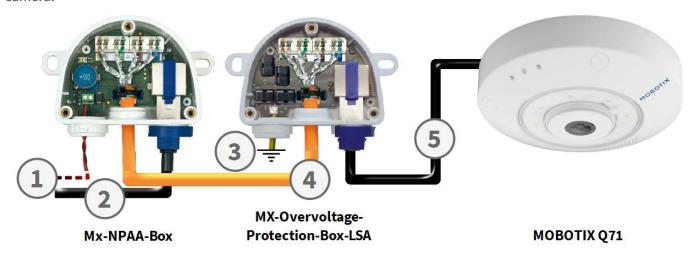


### Mount the cover

Mount the cover back onto the Mx-NPAA-Box and attach it using the cover screws (torque 0.4 Nm).

## Optional scenario with MX-Overvoltage-Protection-Box-LSA

The MX-Overvoltage-Protection-Box-LSA provides surge protection for MOBOTIX cameras in applications that are at risk of damages induced by thunderstorms or other power surge incidents. When mounting cameras on a pole, for example, the network/power connection can thus be supplied through the installation cable from the bottom of the pole Mx-NPAA-Box to the MX-Overvoltage-Protection-Box-LSA at the cable outlet near the camera.



- 1. Power supply 12 to 57 V DC (power supply unit or battery with fuse 1.25 A).
- 2. MOBOTIX patch cable to router.
- 3. Ground wire 1.5 to  $2.5 \text{ mm}^2$ .
- 4. Ethernet installation cable from Mx-NPAA-Box to MX-Overvoltage-Protection-Box-LSA.
- 5. MOBOTIX patch cable to camera.

For more information on the MX-Overvoltage-Protection-Box-LSA, please see <a href="https://www.mobotix.com">www.mobotix.com</a> <a href="https://www.mobotix.com">Support</a> > Download Center > Marketing & Documentation > Manuals and open the Accessories > Interface Boxes section.

## **Additional Information**

## **LED Signals**



# **Dimensions/Drilling Template**

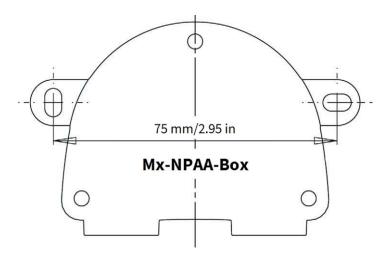


Fig. 1: Mx-NPAA-Box: All measurements in mm

**NOTE!** When printing this page at 100% of the original size (no scaling) you can use this page as drilling template.

# **Technical Specifications**

Order Code:	Mx-F-NPAA
Protection Class	IP66
Operating temperature	–30 to 50 °C/–22 to 122 °F
Dimensions (width x height x depth)	86 x 56 x 31 mm/3.39 x 2.20 x 1.22 in (without rubber plugs)
Weight	70 g

