

# MIC-ALM-WAS-24 Interface box, alarm, washer pump, 24VAC

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- Provides alarm and washer interface connections for MIC7000 cameras
- Impact-resistant polycarbonate enclosure rated to IP67 and NEMA 4X
- Watertight cable glands included
- Push button to activate/test connected washer pump

The MIC Alarm/Washer Interface unit consists of a weatherproof enclosure that houses surge-protected interface connections for alarm inputs, alarm outputs, washer relay, power connection, and serial data link to MIC7000 cameras. The unit is equipped with removal screw terminal blocks to simplify attachment of electrical connections to external cabling. Board mounted LED indicators provide status and diagnostic feedback.

## Certifications and approvals

### Electromagnetic Compatibility (EMC)

Complies with FCC Part 15, ICES-003, and CE regulations, including latest versions of EN 50130-4, EN 55022:2006 inc. AL:2007, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, and EN 50121-4 (Railway applications)

### Product Safety

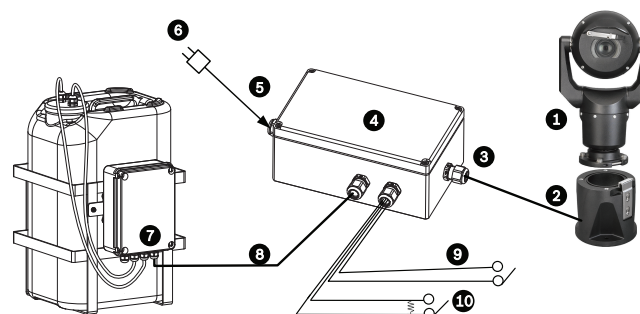
Complies with UL, CE, CSA, EN, and IEC Standards 60950-1 & 22

IEC 61000-4-2 (ESD), IEC 61000-4-4 (EFT), IEC 61000-4-5 (surge)

Ingress Protection  
Rating/ Standard

IP67  
NEMA 4, 4X, 6, 12, 13

## Installation/configuration notes



### Typical configuration with MIC-ALM-WAS-24

- |                                             |                                                      |
|---------------------------------------------|------------------------------------------------------|
| 1 MIC7000 camera                            | 6 24 VAC Power pack, 1A, 50/60 Hz (user-supplied)    |
| 2 MIC Hinged DCA (MIC-DCA-Hx)               | 7 Washer pump accessory                              |
| 3 RS-485 cable, 3-conductor (user-supplied) | 8 Interface cable for washer control (user-supplied) |

- |                                                                 |                                                                        |
|-----------------------------------------------------------------|------------------------------------------------------------------------|
| 4 MIC-ALM-WAS-24 enclosure                                      | 9 Alarm input / output interface cables (user-supplied)                |
| 5 Interface cable for 24 VAC (user-supplied) for MIC-ALM-WAS-24 | 10 Monitored Normally Open switch for Supervised Alarm (user-supplied) |

### Parts included

| Quantity | Component                                                                                                                                |
|----------|------------------------------------------------------------------------------------------------------------------------------------------|
| 1        | MIC Alarm/Washer Interface (MIC-ALM-WAS-24) enclosure with three (3) watertight M16 cable glands and one (1) M16 blanking plug installed |
| 1        | Watertight M16 cable gland, uninstalled                                                                                                  |
| 4        | Pozidriv screws for lid                                                                                                                  |
| 4        | Screw caps to cover the lid screws                                                                                                       |
| 1        | Installation manual                                                                                                                      |

### Technical specifications

#### Electrical

|                   |                            |
|-------------------|----------------------------|
| Input voltage     | 24 VAC $\pm$ 10%, 50/60 Hz |
| Power consumption | 1.5 W                      |

#### Surge Suppression

|                                    |                                                       |
|------------------------------------|-------------------------------------------------------|
| Protection on RS-485               | Peak current 10 A, peak power 300 W (8/20 $\mu$ )     |
| Protection on Alarm Inputs         | Peak current 17 A, peak power 300 W (8/20 $\mu$ )     |
| Protection on Alarm Outputs        | Peak current 2 A, peak power 300 W (8/20 $\mu$ )      |
| Protection on Relay Outputs        | Peak current 7.3 A, peak power 600 W (10/1000 $\mu$ ) |
| Protection on Power Input (Camera) | Peak current 7.3 A, peak power 600 W (10/1000 $\mu$ ) |

#### Miscellaneous

|                         |                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LEDs                    | Red LED (ON indicates power on)<br>Green LEDs (blinking indicates activation for each alarm input)<br>Yellow LED (blinking indicates active communication between the MIC-ALM-WAS-24 and the MIC7000 camera) |
| Communications Protocol | Proprietary half-duplex RS-485, 57600 baud                                                                                                                                                                   |

### User Connections

|              |                                                                                                                   |
|--------------|-------------------------------------------------------------------------------------------------------------------|
| Power        | 24 VAC                                                                                                            |
| Alarm Input  | 4 normal dry contacts (selectable N.O./N.C.)<br>2 monitored tamper alarm inputs, 2.2K ohm end-of-line termination |
| Alarm Output | 3 open collector outputs, 32 VDC, 150 mA                                                                          |
| Relay Output | 1 dry contact relay, 24VAC/VDC, 5 A (for washer pump)                                                             |
| Alarm/Data   | 3-wire RS-485 (to external alarm/washer accessory unit) up to 100 m                                               |

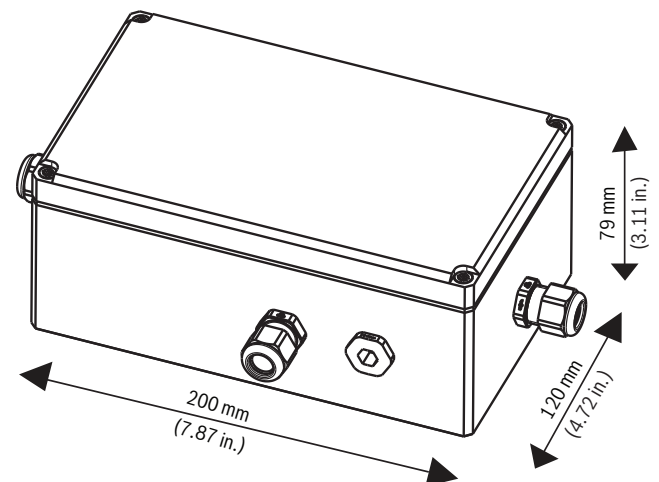
### Environmental

|                                     |                                                                 |
|-------------------------------------|-----------------------------------------------------------------|
| Ingress Protection Rating/ Standard | IP67<br>NEMA 4, 4X, 6, 12, 13                                   |
| Operating Temperature               | -40 °C to +60 °C (-40 °F to +140 °F)                            |
| Cold Start-up Temperature           | -40 °C (-40 °F) (Requires 60 minute warm-up prior to operation) |
| Storage Temperature                 | -40 °C to +70 °C (-40 °F to +158 °F)                            |
| Humidity                            | 0-100%                                                          |

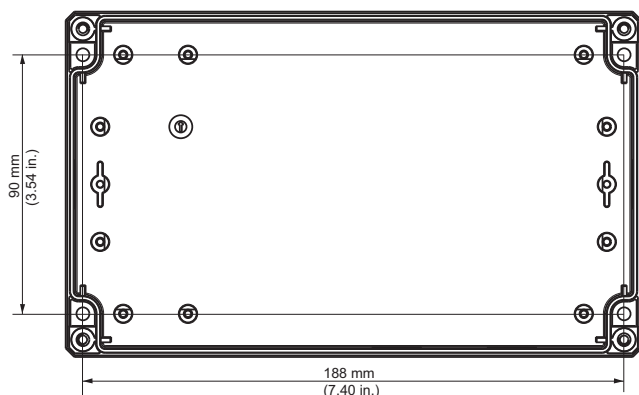
### Construction

|                        |                                                          |
|------------------------|----------------------------------------------------------|
| Dimensions (L x W x H) | 200 mm x 120 mm x 79 mm<br>(7.9 in. x 4.7 in. x 3.1 in.) |
| Weight                 | 0.6 kg (1.3 lb)                                          |
| Construction Material  | Polycarbonate                                            |
| Standard Color         | Grey (RAL 7035)                                          |
| Standard Finish        | sand finish                                              |

### Dimensional Drawings



Dimensional drawing, MIC-ALM-WAS-24



Dimensions, mounting holes, MIC-ALM-WAS-24

#### Ordering information

##### **MIC-ALM-WAS-24 Interface box, alarm, washer pump, 24VAC**

Interface box for alarms and washer pump connections for MIC7000 and MIC IP fusion 9000i cameras. Requires user-supplied 24 VAC, 50/60 Hz input. Impact-resistant polycarbonate enclosure. IP67 and NEMA 4X rated ingress. Includes four (4) watertight glands. Grey (RAL 7035) enclosure color. Order number **MIC-ALM-WAS-24**

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