1. main connector
2. protection film
3. laser window
4. USB cap
5. LED display
6. cover
7. cover lock
8. cable passage
9. LCD screen
10. keypad
11. tilt angle adjustment screw (1)
12. parallel angle adjustment screw (2)
13. lateral angle lock screw (1)
14. mounting bracket
It is recommended to clean the optical parts at least once a year or more if required due to environmental conditions. Do not use aggressive products to clean the optical parts.

Avoid extreme vibrations. Do not cover the sensor. Avoid moving objects and light sources in the detection field. Avoid exposure to sudden and extreme temperature changes.

Keep the protection film during the mounting of the sensor. Remove it before launching a teach-in. Do not use aggressive products to clean the optical parts. Avoid direct exposure to high-pressure cleaning.

The device contains IR and visible laser diodes. IR laser: wavelength 905nm; max. output pulse power 75W (Class 1 according to IEC 60825-1) Visible laser: wavelength 650nm; max. output CW power 3mW (Class 3R according to IEC 60825-1)

The visible laser beams are inactive during normal functioning. The installer can activate the visible lasers if needed.

CAUTION! Use of controls, adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Do not look directly into the laser emitter or the visible red laser beams. The door control unit and the header cover profile must be correctly grounded. Only trained and qualified personnel are recommended to install and set up the sensor. Following installation, always test for proper operation before leaving the premises. The warranty is invalid if unauthorized repairs are made or attempted by unauthorized personnel.
There are 3 main functions that create **3 overlapping detection fields**, each with certain detection characteristics:

- **MOTION**
  - SENSOR DETECTS IF:
    - motion in motion field
    - certain object type
    - certain direction

- **PRESENCE**
  - SENSOR DETECTS IF:
    - presence in presence field
    - certain object type

- **SAFETY**
  - SENSOR DETECTS IF:
    - presence in safety field

There are 4 additional opening functions. All detection functions can be combined to trigger a specific output.

- **Motion +**: detection of other moving object type in motion field
- **Pull-cord**: detection of object in learned, pull-cord zone
- **Speed**: detection of object with a minimum speed
- **Height**: detection of object with a minimum height

The sensor carries out a 3D object analysis and detects depending on height, width, depth, direction, and speed.
Before opening the sensor, make sure the cover is not locked (red cover lock).

1. Pull the two legs on top in order to open the cover.
2. Remove the cover completely before installing the sensor.

Lock the sensor position by firmly fastening the angle lock screw.

1. Recip the sensor cover horizontally and close it as indicated.
2. Lock the cover by turning the lock screw clockwise.
Mounting height: **as high as possible (max. 19’6”).**

The size of the detection field depends on the mounting height.

Mounting position: **center of door or left corner.**

Mounting on the right side of the door should be avoided.

1. Verify that the angle lock screw is positioned as indicated. Unscrew slightly if necessary.

2. Remove the mounting bracket from the sensor and secure it to the wall. You can also install the sensor directly without using the mounting bracket.

3. Position the sensor horizontally (as shown) and secure the sensor to the mounting bracket.

4. Plug in the connector and pass the cable (PN 20.5399) through the cable passage without making a loop.

5. Connect the wires accordingly.

*output status powered during non-detection with factory values

The output functions can be configured if necessary (see page 10).
2 POSITIONING OF DETECTION FIELD

Remove the blue protection film from the laser window.

Activate the 2 visible laser spots by pressing OK twice or pressing on the remote control.

Make sure the curtain is parallel to the door by adjusting one or both screws on the side.

Position the curtain closer to or farther away from the door by turning the screw at the top.

When the safety function is required, the red spots should be as close to the door as possible.
Negative angles reduce the depth of the detection fields.

Launch the POSITION WIZARD to position the detection field correctly in front of the door.

1. Push and hold OK to launch the POSITION WIZARD.
2. Rotate the sensor in order to align the center of the red spots with the center of the door. Push OK.
3. Rotate the sensor until the LCD screen validates the position. Push OK to exit.

Lock the sensor position by tightening the angle lock screw (see page 4).
HOW TO ADJUST THE SENSOR BY REMOTE CONTROL

After unlocking, the red LED flashes and the sensor can be adjusted by remote control.

If the red LED flashes quickly after unlocking, enter an access code from 1 to 4 digits. If you do not know the access code, cycle power.

To end an adjustment session, always lock the sensor.

If necessary, select the corresponding detection field before selecting the parameter and changing the value. The second LED indicates the detection field.

How to adjust the sensor by remote control:

- **Motion**
- **Pull-cord**
- **Presence**
- **Safety**

HOW TO ADJUST THE SENSOR BY LCD

Enter the LCD menu. Select a folder, parameter, or value. Confirm a value and exit edit mode.

Activate red spots on floor.

To end an adjustment session, always lock the sensor.

Select your **Language** before entering the first LCD menu. Within the first 30 seconds of power-on of the sensor or later in the diagnostics menu.

Access advanced adjustments.

Enter a **Password** if necessary.

Go to the **Diagnostics** menu.

Displayed value = Factory value

Displayed value = Saved value
## 3 PROGRAMMING THE SENSOR

### TEACH-IN: INSTALL

- The teach-in zone (i.e. square in front of the 2 visible spots) must be completely clear.
- This teach-in must be launched each time a sensor angle has been changed.
- Make sure the blue protection film and cover are removed!

1. Launch a teach-in by remote control. It starts after 5 seconds.
2. Wait while the position, angle, and height are learned and the background is analyzed.
3. The teach-in ends successfully. If not, refer to Troubleshooting on page 15.

### PRE SETTINGS

Choose one of the following presettings. They adjust parameters automatically according to your application. If necessary, you can also adjust a parameter independently via remote control (see page 10).

<table>
<thead>
<tr>
<th>STANDARD</th>
<th>CORRIDOR</th>
<th>CORNER</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="3" /></td>
<td><img src="image" alt="4" /></td>
<td><img src="image" alt="5" /></td>
</tr>
</tbody>
</table>

- **SETT INGS**
  - width: max, depth: max
  - object type: vehicle
  - direction: uni 100%

- **SET T INGS**
  - width: max, depth: 6'6"
  - object type: vehicle
  - max presence time: 30 min

- **SET T INGS**
  - width: max, depth: 1'3"
  - max presence time: infinite
  - uncovered zone: 5 ¼"

- **OUT1** - Motion / Pull-Cord
- **OUT2** - Safety
- **REL** - Motion+ and Height Trigger

- **SETT ING S**
  - width: max, depth: max
  - object type: vehicle
  - direction: uni 100%

- **SET T INGS**
  - width: max, depth: 6'6"
  - object type: vehicle
  - max presence time: infinite

- **SET T INGS**
  - width: max, depth: 1'3"
  - max presence time: 10 min
  - uncovered zone: 5 ¼"

- **OUT1** - Motion / Pull-Cord / Safety
- **OUT2** - Safety
- **REL** - Motion+ and Speed Trigger

- **SETT ING S**
  - width: max, depth: max
  - object type: vehicle
  - direction: uni

- **SET T INGS**
  - width: max, depth: 6'6"
  - object type: vehicle
  - max presence time: 30 min

- **SET T INGS**
  - width: max, depth: 1'3"
  - max presence time: 10 min
  - uncovered zone: 5 ¼"

- **OUT1** - Motion / Pull-Cord / Presence
- **OUT2** - Safety
- **REL** - Motion+ and Height Trigger

---

75.5916.04 LZR-WIDESCAN 20190913
### OPTIONAL REMOTE CONTROL SETTINGS

<table>
<thead>
<tr>
<th>Teach-in</th>
<th>Presettings</th>
<th>Service Mode</th>
<th>Factory Reset</th>
<th>Red Spots</th>
</tr>
</thead>
<tbody>
<tr>
<td>icon</td>
<td>icon</td>
<td><strong>The service mode deactivates the presence and safety detection during 15 minutes and can be useful during an installation, a mechanical teach-in of the door or maintenance work. Exit the service mode by using the same sequence.</strong></td>
<td><strong>Pressing “magic wand” twice activates the 2 laser spots, enabling angle adjustments and sensor positioning.</strong></td>
<td></td>
</tr>
</tbody>
</table>

### MOTION

<table>
<thead>
<tr>
<th>Width</th>
<th>Depth</th>
<th>Object type</th>
<th>Immunity</th>
<th>Door zone OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>icon</td>
<td>icon</td>
<td><strong>factory default: 240</strong></td>
<td><strong>2</strong></td>
<td><strong>factory default: 000</strong></td>
</tr>
<tr>
<td><strong>000 (min) – 240 (max)</strong></td>
<td><strong>000 (min) – 287 (max)</strong></td>
<td>[vehicle: only vehicles detected (all types)] [vehicle: all vehicles and pedestrians detected] [vehicle: any] [vehicle depth] [vehicle] [any]</td>
<td><strong>1</strong></td>
<td><strong>000 (min) – 287 (max)</strong></td>
</tr>
</tbody>
</table>

### PULL CORD

<table>
<thead>
<tr>
<th>Teach-in</th>
<th>Object type</th>
<th>Min. pres. time</th>
<th>Door zone OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong># 1</strong></td>
<td><strong># 2</strong></td>
<td><strong># 3</strong></td>
<td><strong>000 (min) – 287 (max)</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>factory default: 000</strong></td>
</tr>
</tbody>
</table>

### PRESENCE

<table>
<thead>
<tr>
<th>Width</th>
<th>Depth</th>
<th>Object type</th>
<th>Immunity</th>
<th>Door zone OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>icon</td>
<td>icon</td>
<td><strong>factory default: 240</strong></td>
<td><strong>2</strong></td>
<td><strong>factory default: 000</strong></td>
</tr>
<tr>
<td><strong>000 (min) – 240 (max)</strong></td>
<td><strong>000 (min) – 287 (max)</strong></td>
<td>[vehicle: only vehicles detected (all types)] [vehicle: all vehicles and pedestrians detected] [vehicle: any] [vehicle depth] [vehicle] [any]</td>
<td><strong>1</strong></td>
<td><strong>000 (min) – 287 (max)</strong></td>
</tr>
</tbody>
</table>

### SAFETY

<table>
<thead>
<tr>
<th>Width</th>
<th>Depth</th>
<th>Max. presence time</th>
<th>Immunity</th>
<th>Uncovered Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>icon</td>
<td>icon</td>
<td><strong>factory default: 016</strong></td>
<td><strong>2</strong></td>
<td><strong>2° – 6°</strong></td>
</tr>
<tr>
<td><strong>000 (min) – 240 (max)</strong></td>
<td><strong>000 (min) – 287 (max)</strong></td>
<td>[vehicle: only vehicles detected (all types)] [vehicle: all vehicles and pedestrians detected] [vehicle: any] [vehicle depth] [vehicle] [any]</td>
<td><strong>1</strong></td>
<td><strong>2° – 6°</strong></td>
</tr>
</tbody>
</table>

**Depending on mounting height, angles, and other installation factors, some immunities might exclude conformity with EN 12445.**

An object < 6” is not detected.

An object > 6” is detected during 10 min (adjustable).

An object > 1’6” is detected infinitely (not adjustable).
### OPTIONAL REMOTE CONTROL SETTINGS (cont.)

When programming each of the parameters listed below (function, logic, holdtime), you must always enter 3 digits for the given parameter (output 1, output 2, relay).

1st digit = Output 1  
2nd digit = Output 2  
3rd digit = Relay

**If you do not want to change the setting of an output, select 0.**

---

### First, assign the outputs.

#### F1

- **Out 1 Function**
  - no change
  - motion
  - motion or pull-cord

- **Out 2 Function**
  - no change
  - motion
  - motion or pull-cord

- **Relay Function**
  - no change
  - motion
  - motion or pull-cord

---

### Next, determine the desired states and hold times for each output chosen above.

#### Out 1 Logic

- passive
- active

#### Out 2 Logic

- passive
- active

**Output status during non-detection.**

#### Relay Logic

- passive
- active

#### Out 1 Holdtime

- 100 ms
- 1 s
- 3 s
- 5 s
- 10 s
- 30 s
- 1 min
- 5 min
- 10 min
- 20 min

#### Out 2 Holdtime

- 100 ms
- 1 s
- 3 s
- 5 s
- 10 s
- 30 s
- 1 min
- 5 min
- 10 min
- 20 min

#### Relay Holdtime

- 100 ms
- 1 s
- 3 s
- 5 s
- 10 s
- 30 s
- 1 min
- 5 min
- 10 min
- 20 min

---

### MOTION

- **Direction**
  - ANY
  - UNI 100%
  - UNI REV
  - UNI 100% +
  - UNIDIRECTIONAL

#### DEFAULT

- 1 ANY: detection in any direction
- 2 UNI 100% (default): unidirectional detection (approaching within the width of the max. field)
- 6 UNI REV: unidirectional detection reverse (going away)
- 7 UNI 100% +: unidirectional detection (approaching within the width of max. field + 1 m of bidirectional detection in front of door)
- 9 UNIDIRECTIONAL: unidirectional detection (approaching in any direction; distance between object and sensor decreases)
To delete the virtual "Pull-Cord" zone, simply relaunch a "Pull-Cord" teach-in without standing in the scanning zone. After 1 minute, the sensor flashes 5x orange. Push UNLOCK + LOCK (❖❖) to exit the adjustment mode.

1. Launch a "Pull-Cord" teach-in by remote control. You can create up to three different pull-cords.
2. Go to the position where you want to activate the door by a virtual pull-cord. Do not move.
3. The learning process starts. The sensor confirms that a person has been seen. Do not move until the LED stops flashing!

   If the sensor flashes orange, see TROUBLESHOOTING.

   When two people are standing in the field, the pull-cord will be created closest to the sensor.

4. The teach-in ends successfully. If not, refer to the TROUBLESHOOTING section on page 15.

NOTE: You can choose an object type and its minimum presence time using the remote control - see page 10.
HEIGHT TRIGGER

By default, all objects higher than the selected value will activate the Height Trigger. This function can also be used to partially open the door depending on the height of the object.
The Height Trigger function can be used for a door control which has a partial-open input.
   a. Assign Output 1, Output 2, or Relay to Motion + Height.
   b. Connect to the Full-Open input on the door control.
   c. Set the motion field to any object and assign the motion to an output.
   d. Connect to the Partial-Open input of the door control.

lower than 7’6”
The door opens partially. (motion detection)

higher than 7’6”
The door opens completely. (presence detection)

The factory default for this parameter is 7’6”, but additional parameters are available by accessing the «Height Limit» parameter in the «OTHERS» menu, via LCD only – customization of this parameter is unavailable via remote control. Follow the LCD menu path to make changes:

MAIN ⇒ OTHERS ⇒ HEIGHT LIMIT ⇒ 68.9, 78.7, 88.6, 98.4, 108.3, 118.1, 127.9, 137.3, 157.5
(factory default is bold/underlined)

NOTE: Each of these available parameters is higher than XX inches. I.e. If the parameter 108.4 is chosen, the sensor will detect objects with a MINIMUM height of 108.4 inches.

SPEED TRIGGER

By default, all objects that move slower than the selected value will activate the output.
This function helps to trigger the door open in the case of late / slow-moving objects in close proximity to the door, and is included in the Corridor presetting.

The factory default for this parameter is less than 3 mph, but additional parameters are available by accessing the «Speed Limit» parameter in the «OTHERS» menu, via LCD only – customization of this parameter is unavailable via remote control. Follow the LCD menu path to make changes:

MAIN ⇒ OTHERS ⇒ SPEED LIMIT ⇒ 3.1, 6.2, 9.3, 12.4, 15.5, 18.6, 21.7, 24.8, 28, 31,
(factory default is bold/underlined)

NOTE: Each of these available parameters is slower than XX mph. I.e. If the parameter 15.5 is chosen, the sensor will detect objects moving at speeds SLOWER than 15.5 mph.
TEACH-IN: WALK

You can also reshape one or more detection fields by walking around the requested field (steps 1 – 3). It is possible to cut into the existing field from the border or to extract a field within the detection field (step 4).

⚠️ Make sure the field is larger than desired.
The existing field size can be reduced and adapted, but cannot exceed the configured size.

1 LAUNCH A WALK TEACH-IN

Choose the desired field(s) by LCD or remote control:

<table>
<thead>
<tr>
<th>Option</th>
<th>LEFT LED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick Start &gt; TeachIn &gt; Walk All: Motion, Presence, and Safety field</td>
<td>1</td>
</tr>
<tr>
<td>Quick Start &gt; TeachIn &gt; Walk Motion: Motion field only</td>
<td></td>
</tr>
<tr>
<td>Quick Start &gt; TeachIn &gt; Walk Presence: Presence field only</td>
<td></td>
</tr>
<tr>
<td>Quick Start &gt; TeachIn &gt; Walk Safety: Safety field only</td>
<td></td>
</tr>
</tbody>
</table>

2 GO TO STARTING POINT

Step away from the detection field and remove any objects (ladder, tools etc).
Go to the starting position of your detection field (see 1st picture below).
The delay after which the teach-in is launched is 60 seconds by LCD (adjustable to 30 or 120 sec via Quick Start > More > TeachInDelay). The delay by remote control is 5 seconds.

3 DO NOT MOVE

The sensor learns its background as long as the LED flashes red-green.

4 START WALKING

When LED flashes green, hold one arm in the air and slowly start walking the trace of the desired field shape. Then, stop and wait until LED stops flashing.

The teach-in was either successful or not (see TROUBLESHOOTING).

ADD TRACE / INVERT FIELD:

Using the remote control, you can add a trace of the field shape to all fields or one in particular (1, above).
You can invert each detection field (i.e. make the inactive side of the walked trace active) via LCD (Motion/Presence/Safety > More > Field inversion) or remote control (see page 10). See image to right for inversion of the field pictured above (bottom right). This feature is only available after a walk teach-in; standard setting will not allow for field inversion.
Always verify the field dimensions via the Field Display option on the LCD screen (Diagnostics > FieldDisplay).
To delete a trace, simply relaunch a walk teach-in and clear the respective detection zone for 15 seconds.
**TROUBLESHOOTING**

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E1:</strong> CPU-XXX</td>
<td>The sensor encounters an internal problem</td>
<td>Replace sensor.</td>
</tr>
<tr>
<td><strong>E2:</strong> XXX PWR</td>
<td>The internal power supply is faulty</td>
<td>Replace sensor.</td>
</tr>
<tr>
<td><strong>E2:</strong> IN SUPPLY</td>
<td>The power supply is too low or too high</td>
<td>Verify power supply (Diagnostics &gt; LCD).</td>
</tr>
<tr>
<td><strong>E2:</strong> TEMP</td>
<td>The internal temperature is too low or too high</td>
<td>Verify the sensor temperature (Diagnostics &gt; LCD).</td>
</tr>
<tr>
<td><strong>E2:</strong> IN SUPPLY</td>
<td>The power supply is too low or too high</td>
<td>Verify power supply (Diagnostics &gt; LCD).</td>
</tr>
<tr>
<td><strong>E5:</strong> FLATNESS</td>
<td>Faulty teach-in</td>
<td>Make sure that the teach-in zone is clear of objects and then launch install teach-in.</td>
</tr>
<tr>
<td><strong>E5:</strong> TILT</td>
<td>Faulty teach-in due to tilt angle</td>
<td>Adjust tilt angle (max. 15° &gt; Diagnostics &gt; LCD). Launch install teach-in.</td>
</tr>
<tr>
<td><strong>E5:</strong> AZIMUTH</td>
<td>Faulty teach-in due to lateral angle</td>
<td>Adjust lateral angle (max. 45° &gt; Diagnostics &gt; LCD). Launch install teach-in.</td>
</tr>
<tr>
<td><strong>E5:</strong> HEIGHT</td>
<td>Faulty teach-in due to mounting height</td>
<td>Adjust mounting height (max. 19'6&quot;, min. 6'6&quot;). Launch install teach-in.</td>
</tr>
<tr>
<td><strong>E5:</strong> TIME-OUT</td>
<td>Faulty teach-in</td>
<td>Relaunch install teach-in. Make sure that there is no motion detection during at least 5 seconds when LED starts flashing red/green. Slightly change your position and relaunch an install teach-in.</td>
</tr>
<tr>
<td><strong>E6:</strong> FQ OUT</td>
<td>Faulty sensor output 1</td>
<td>Replace sensor.</td>
</tr>
<tr>
<td><strong>E8:</strong> ...</td>
<td>Faulty detection engine</td>
<td>If internal temperature is lower than 68 °F, wait until the heating process is completed. If temperature is higher than -4 °F, replace the sensor.</td>
</tr>
<tr>
<td><strong>ORANGE LED is on</strong></td>
<td>The sensor encounters a memory problem</td>
<td>Replace sensor.</td>
</tr>
<tr>
<td><strong>ORANGE LED is on during 3 sec. (masking)</strong></td>
<td>Sensor placed in a corner and perpendicular to a wall</td>
<td>Tilt sensor to shift detection field. Ignore warning: ☢ ☢</td>
</tr>
<tr>
<td><strong>ORANGE LED is on during 3 sec. (masking)</strong></td>
<td>Sensor placed in a corner and perpendicular to a wall</td>
<td>Tilt sensor to shift detection field. Ignore warning: ☢ ☢</td>
</tr>
<tr>
<td><strong>LED and LCD display are off</strong></td>
<td>Incorrect wiring</td>
<td>Check wiring.</td>
</tr>
<tr>
<td><strong>Door does not react</strong></td>
<td>Service mode is activated</td>
<td>Exit service mode (see page 10).</td>
</tr>
<tr>
<td><strong>Product does not react to remote control</strong></td>
<td>Sensor is password-protected</td>
<td>Enter correct password. If you forgot the code, cut and restore power supply in order to access the sensor without entering a password during 1 minute.</td>
</tr>
<tr>
<td><strong>Motion detection starts too late</strong></td>
<td>Negative angle is too large</td>
<td>Reduce angle of the sensor.</td>
</tr>
</tbody>
</table>

Can’t find your answer? Visit www.beainc.com or scan QR code for Frequently Asked Questions!
## TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th><strong>Technology</strong></th>
<th>LASER scanner, time-of-flight measurement (7 laser curtains)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Detection mode</strong></td>
<td>Motion and presence</td>
</tr>
</tbody>
</table>
| **Max. detection field** | Width: 1 x mounting height  
Depth: 1.2 x mounting height  
*adjustable, depending on user settings* |
| **Thickness of first curtain** | $\frac{3}{4}$ inch per 3 feet of mounting height |
| **Typ. mounting height** | 6'6" – 19'6" |
| **Min. reflectivity factor** | $> 2 \%$ (of floor and object) (measured at max. 19'6" in safety field) |
| **Typ. min. object size** | 6" @ 19'6" (in proportion to object distance) |
| **Testbody** | 27 $\frac{1}{4}$ x 11 $\frac{3}{4}$ x 7 $\frac{3}{4}$ |
| **Emission characteristics** | IR LASER: Wavelength 905 nm, max. output pulse power 25 W, Class 1  
Visible LASER: Wavelength 650 nm, max. output CW power 3 mW, Class 3R |
| **Supply voltage** | 12 – 24 VAC ±10%  
12 – 30 VDC ±10% @ sensor terminal |
| **Power consumption** | < 2.5 W (heating: off)  
< 15 W (heating: eco or auto) |
| **Response time** | Typ. 100 ms (max. 500 ms) |
| **Output** | 2 solid-state relays (galvanic isolation, polarity free)  
30 VDC (max. switching voltage) – 100 mA (max. switching current)  
- in switching mode: NO/NC  
- in frequency mode: pulsed signal (f= 100 Hz ±10%)  
1 electro-mechanic relay (galvanic isolation, polarity free)  
42 VAC (max. switching voltage) – 500 mA (max. switching current) |
| **Input** | 30 VDC (max. switching voltage)  
low < 1 V  
high > 10 V (voltage threshold) |
| **LED signals** | 2 tri-colored LED: Output status / remote control response / error signals |
| **Dimensions** | 7 $\frac{3}{4}$" (H) x 6" (W) x 4" (D) (approx.) |
| **Material / Color** | PC/ASA / Black |
| **Rotation angles on bracket** | 45° to the right, 15° to the left (lockable) |
| **Tilt angles on bracket** | -10 – 5° |
| **Protection degree** | NEMA 4 / IP65 |
| **Temperature range** | -22 – 140 °F |
| **Vibrations** | < 2 G |
| **Norm conformity** | IEC 61000-6-2  
IEC 61000-6-3  
IEC 60950-1  
IEC 60825-1  
ISO 13849-1 PI “d”/ CAT2  
IEC 62061 SIL 2  
IEC 61496-1 ESPE Type 2  
ISO 13849-1 Pl “d”/ CAT2  
IEC 62061 SIL 2  
IEC 61496-1 ESPE Type 2 |

*Specifications are subject to change without prior notice. All values measured in specific conditions.*