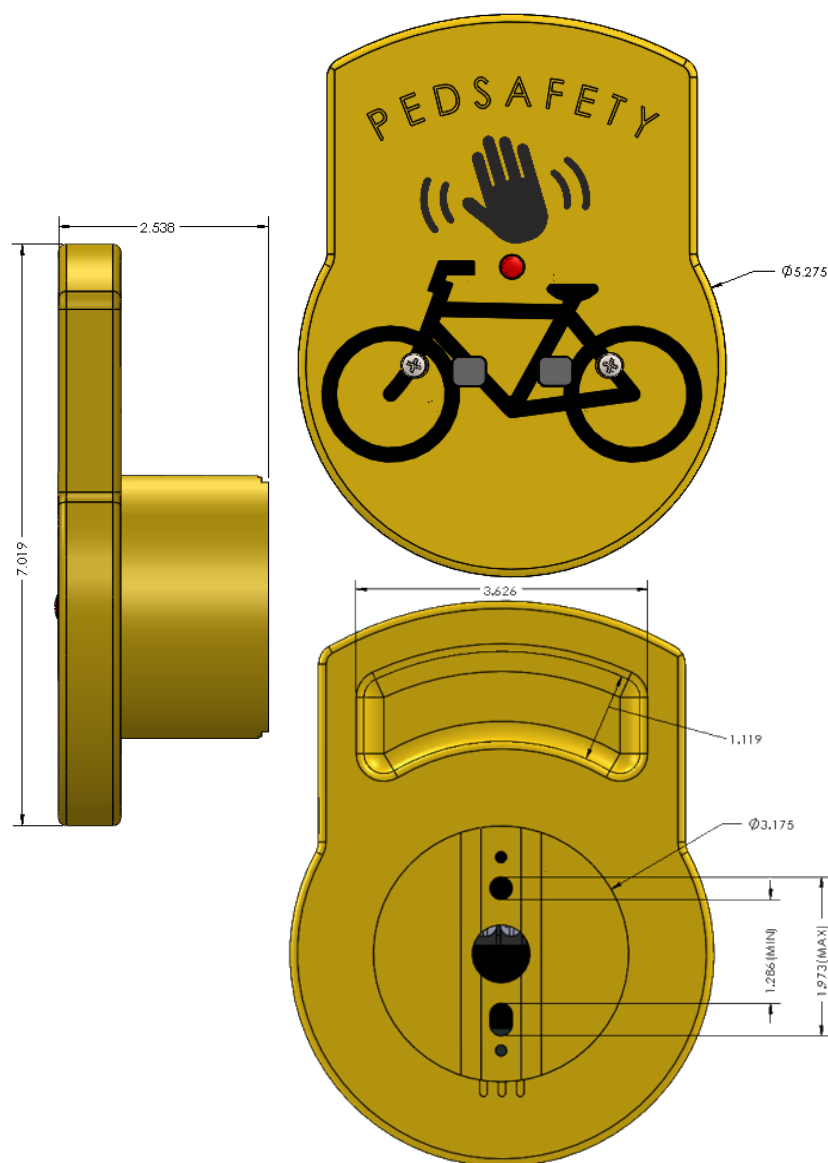




## nxtCycle Wave



Created specifically for cyclists, the **nxtCycle Wave** is a touchless cyclist push button digitally controlled using an active infrared sensor that is extremely robust and works in all weather conditions including rain, hail, and snow. Made from solid-stock aluminum, the button is both vandal and impact-resistant and placed directly in the bike lanes. The **nxtCycle Wave** was designed so the top of the station doubles as a handle grip, allowing the cyclists to steady themselves and balance without having to dismount their bikes while waiting for the crossing indication.

With a wave of the hand 1-6" from the sensor, a momentary LED indication and audible tone (dee-dah) are activated with the pedestrian call. The **nxtCycle Wave** can be purchased in momentary or latching LED modes (requires **PBIC** or **PBI-L** push button interface).

The button cup allows for simple installation across a wide range of pole sizes and the pole relief channel ensures a secure and snug fit while still being accessible.

### Specifications:

Idle Current: 125 $\mu$ A (microamps)

Clock Calibration Current: ~3mA (milliamps)

Operating Voltage DC: 12-36 VDC

Operating Voltage AC 12-24 VAC

### Feedback:

*Visual:* LED Super Bright Red (Luminous Intensity: 5000 mcd)

*Audible:* Dee 3900 Hz – Dah 3600 Hz

### LED Operating Modes:

*Momentary:* LED on for 0.025 seconds to correspond with audible dee-dah beep and circuit closure.

*Latching:* LED activates after call is placed through non-walk phases and extinguishes at the beginning of the walk phase.

### Isolator Card Requirement:

To ensure consistent performance of the Wave sensor over time, the **nxtCycle Wave** must periodically calibrate its internal timer. Although its idle current is very low, the current draw during timer calibration is high enough to place a call on most cabinet FT lines. To ensure operation free from false calls, we recommend the **nxtCycle Wave** to be paired with a **PBIC** or **PBI-L** push button interface.



## Operating Specifications

| Parameter                   | Rating                              |
|-----------------------------|-------------------------------------|
| Operating Temperature Range | -34°C to +74°C -30 °F to +165°F     |
| Operating Life              | Greater than 100 million operations |
| Maximum Volume              | 70 dB @ 1 meter                     |

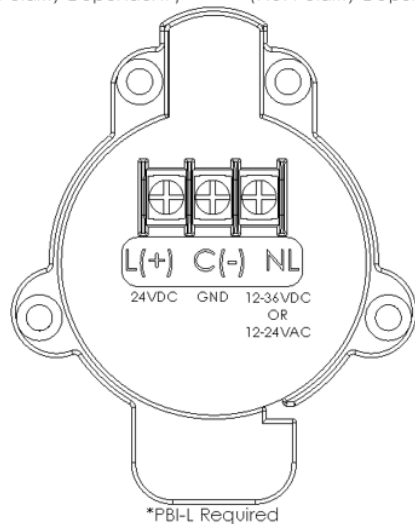
## Design Compliance

| Test Type                    | Compliance                   |
|------------------------------|------------------------------|
| Functionality                | MUTCD 2009 - 4E              |
| Transient Voltage Protection | IEC 61000-4-4, IEC 61000-4-5 |
| Electrical Reliability       | FCC Title 15 Subpart B       |

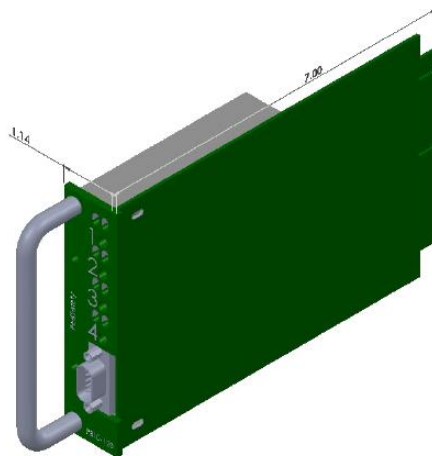
\*All certifications performed by certified independent testing laboratories.

## Terminal Configurations

Latching(L)\* Configuration (Polarity Dependent)    Non-Latching(NL) Configuration (Not Polarity Dependent)



Terminal Blocks



PBIC Isolator Card

### Notes:

- Applicable sections only of referenced standards
- All specifications are subject to change without notice
- All specifications are typical unless otherwise specified

## Part Number:

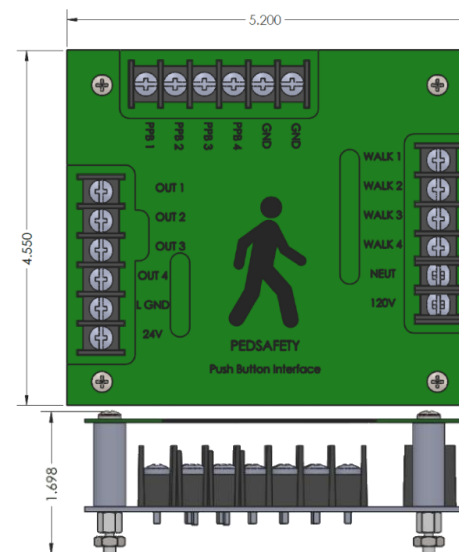
|               |          |
|---------------|----------|
| nxtCycle Wave | 502-0102 |
|---------------|----------|

## Interfaces: Required for latching or non-latching

|                            |           |
|----------------------------|-----------|
| PBI-L (wall mount)         | 501-0010  |
| PBIC-24 (card rack mount)  | 501-0005C |
| PBIC-120 (card rack mount) | 501-0014  |

## Please specify the following attributes:

| 1. Color          | 2. Screw Type     |
|-------------------|-------------------|
| Textured Black    | Standard Phillips |
| Federal Yellow    | Pinned Torx (T)   |
| Green             |                   |
| Unpainted/Natural |                   |



PBI-L Isolator