



# Nymi Band 3.0

User Guide

V1.0

2024-06-11



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# Revision History

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Date	Version	Revision History
June 11, 2024	1.0	Initial release

# Overview

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This document provides the general user and safety instruction documentation for the Nymi Band 3.0. It is a consolidation of several published technical documents of the Nymi Band 3.0. For the specific topics below, please refer to the relevant sections of the document, or external links provided.

1. Basic Technical, Storage, and Operating Information
  - a. [Nymi Band 3.0 Quick Start Guide](#)
  - b. [Nymi Band 3.0 Technical Specifications](#)
2. Safety information
  - a. [Safety Disclaimer](#)
  - b. [Nymi Band 3.0 Technical Specifications](#)
  - c. [Nymi Band Lifetime & Reliability](#)
3. Electrical Characteristics
  - a. [Nymi Band 3.0 Electrical Characteristics](#)
4. Cleaning Recommendations
  - a. [Nymi Band 3.0 Cleaning Recommendations v1.5](#) (external)
5. Charging and Storage Recommendations
  - a. [Nymi Band 3.0 Charging Recommendations Guide v1.7](#) (external)
6. EU (CE) Declaration of Conformity
  - a. [EU Declaration of Conformity](#)

# Nymi Band 3.0 Quick Start Guide (ML)



## nymi™ Nymi Band 3.0 | Quick Start Guide

快速安装指南 | クイックスタートガイド | Kurzanleitung

### 1. Setting up your Nymi Band



Put on your Nymi Band and ensure a snug fit by securing the strap on your wrist. Push the peg through the hole and secure it in place.

#### 1. 设置您的Nymi Band

佩戴您的Nymi Band时,调整腕带使其紧贴手腕。然后将搭扣嵌入扣眼内以扣紧腕带。

#### 1. Nymi Bandの設定方法

Nymi Band のストラップを手のまわりに隙間なく装着します。ペグを穴に押し込み、固定します。

#### 1. Einrichtung Ihres Nymi Band

Legen Sie Ihr Nymi Band an und sorgen Sie für einen festen Sitz des Armbands am Handgelenk. Stecken Sie den Stift durch das Loch und sichern Sie ihn.



Turn on your Nymi Band by pressing the top button, located on the right side of your Nymi Band.

按下位于Nymi Band右侧的上按钮打开您的Nymi Band。

本体右側の一番上のボタンを押して、Nymi Bandを起動します。

Schalten Sie Ihr Nymi Band ein, indem Sie den oberen Knopf drücken, der sich auf der rechten Seite Ihres Nymi Band befindet.



Enroll your fingerprint to your Nymi Band by opening the Nymi Band Application on your enrollment terminal and follow the instructions.

在注册终端上打开Nymi Band Application, 遵循程序的指示将您的指纹注册到您的Nymi Band。

登録用の端末でNymi Band-アプリを開き、指示に従ってNymi Bandに指紋を登録してください。

Registrieren Sie Ihren Fingerabdruck bei Ihrem Nymi Band, indem Sie die Anwendung des Nymi Band auf Ihrem Registrierungsterminal öffnen und den Anweisungen folgen.

#### Privacy by design

- During enrollment, your Nymi Band will convert your fingerprint into a fingerprint template.
- During the authentication process, your Nymi Band will compare your fingerprint to the fingerprint template.
- Your fingerprint template is never transmitted.
- During the authentication process, your Nymi Band detects your heartbeat, to ensure it is being worn by you, the authenticating user.
- Your heartbeat is never stored or transmitted.
- Your Nymi Band is in your control. You can delete your information at any time.

#### 隐私始于设计

- 您的Nymi Band在注册过程中将您的指纹数据转换成指纹模板。
- 您的Nymi Band在进行身份认证时将您的指纹与指纹模板进行比对。
- 您的Nymi Band绝对不会传输您的指纹模板。
- 您的Nymi Band在进行身份认证时能检测到您的心跳, 以确保它是由您所佩戴。
- 您的Nymi Band绝对不会储存或传输您的心跳信息。
- 您的Nymi Band在您的掌控之中, 您可以随时删除您的信息。

#### 設計に作りこまれたプライバシー

- 登録するとき、Nymi Bandはあなたの指紋を指紋テンプレートに変換します。
- 認証時、Nymi Bandはあなたの指紋を指紋テンプレートと比較します。
- 指紋テンプレートは外に漏れません。
- さらにNymi Bandはあなたの心臓の鼓動を検知し、バンドを装着している人が本当にあなたであることを確認した上で認証します。
- 心臓の鼓動に関するデータは保存されず、外に出ることもありません。
- Nymi Bandは完全にあなたの管理下にあるので、自分の情報をいつでも削除できます。

#### Datenschutz durch Design

- Während der Anmeldung wandelt Ihr Nymi Band Ihren Fingerabdruck in eine Fingerabdruckvorlage um.
- Während des Authentifizierungsprozesses vergleicht Ihr Nymi Band Ihren Fingerabdruck mit der Fingerabdruckvorlage.
- Ihre Fingerabdruckvorlage wird niemals übertragen.
- Während des Authentifizierungsprozesses erkennt Ihr Nymi Band den Herzschlag, um sicherzustellen, dass es von Ihnen, dem authentifizierenden Benutzer, getragen wird.
- Ihr Herzschlag wird niemals gespeichert oder übertragen.
- Ihr Nymi Band ist unter Ihrer Kontrolle. Sie können Ihre Informationen jederzeit löschen.



# nyimi™ Nymi Band 3.0 | Quick Start Guide

快速安装指南 | クイックスタートガイド | Kurzanleitung

## 2. Using your Nymi Band



Authenticate your Nymi Band by wearing it on your wrist. Place your enrolled finger on the fingerprint sensor when you see the fingerprint icon on the screen.

### 2. 使用您的Nymi Band

戴上您的Nymi Band，屏幕显示指纹图标，将已注册的手指放在指纹传感器上进行身份认证。

### 2. Nymi Bandの使い方

手首にNymi Bandを装着して認証します。画面に指紋のアイコンが表示されたら指紋登録をした指を指紋センサーに触れてください。

### 2. Verwendung Ihres Nymi Band

Authentifizieren Sie sich durch Ihr Nymi Band, indem Sie es am Handgelenk tragen. Legen Sie Ihren registrierten Finger auf den Fingerabdrucksensor, wenn Sie das Fingerabdrucksymbol auf dem Bildschirm sehen.



After authentication, use your Nymi Band to complete secure activities quickly.

身份验证成功之后，您即可快速安全地使用您的Nymi Band完成工作。

認証が済んだら、Nymi Bandを用いてセキュアな作業を素早くこなすことができます。

Verwenden Sie nach der Authentifizierung Ihr Nymi Band, um gesicherte Aktivitäten schnell abzuschließen.



Charge your Nymi Band by placing it on the charger. When you correctly put your Nymi Band on the charger, the screen will turn on and a blue light will appear on the side of the charger.

将您的Nymi Band放在充电器上为其充电。当Nymi Band屏幕和充电器侧面的蓝色指示灯均点亮时，就表示Nymi Band已连接上了充电器。

Nymi Bandを充電するときは、チャージャーの上に置いてください。正しく置くことで画面が起動し、チャージャーの側面に青い光が点灯します。

Laden Sie Ihr Nymi Band auf, indem Sie es auf das Ladegerät legen. Wenn Sie Ihr Nymi Band korrekt auf das Ladegerät legen, schaltet sich der Bildschirm ein und ein blaues Licht erscheint an der Seite des Ladegeräts.

## Screens



By default, the Nymi Logo appears when your Nymi Band is not authenticated. Your Band Label will appear if the option is enabled in the policy.

### 屏幕图标

在默认情况下，未经身份认证时，您的Nymi Band会显示Nymi标识。如果启用了相关政策选项，您的Nymi Band则会显示您的手环标签。

### アイコン

デフォルトとして、Nymi Bandが認証されていないときにはNymiロゴが表示されます。ポリシーの中でオプションが有効になっているときはバンド・ラベルが表示されます。

### Bildschirme

Standardmäßig erscheint das Nymi Logo, wenn Ihr Nymi Band nicht authentifiziert ist. Ihr Band-Kennschild erscheint, wenn die Einstellung der Gruppenrichtlinie aktiviert ist.



The fingerprint icon appears when your Nymi Band is on your wrist and not authenticated. Place your enrolled finger on the fingerprint sensor to start the authentication process.

您未经身份认证的Nymi Band被佩戴在手腕上时会显示指纹图标。将您已注册的手指放在指纹传感器上以开始身份认证。

Nymi Bandが手首に装着され、認証がまだ行われていないときは指紋アイコンが表示されます。登録した指を指紋センサーに触れ、認証を行ってください。

Das Fingerabdruck-Symbol erscheint, wenn Ihr Nymi Band am Handgelenk angebracht und nicht authentifiziert ist. Legen Sie Ihren registrierten Finger auf den Fingerabdrucksensor, um den Authentifizierungsprozess zu starten.



The Success icon will appear after you successfully authenticate your Nymi Band.

身份验证成功后，您的Nymi Band会显示成功图标。

Nymi Bandの認証が正常に終了すると成功のアイコンが表示されます。

Das Symbol für Erfolg erscheint, wenn Sie sich durch Ihr Nymi Band erfolgreich authentifiziert haben.



# Nymi Band 3.0 Technical Specifications (EN)

Please refer to the [Nymi Band Supporting Documents](#) for the most up-to-date technical specifications.

## Key Features

- Multi-factor biometric authentication
- On-body detection

## Outputs

- OLED monochrome display (48x64 px)
- Haptic feedback

## Connectivity

- Bluetooth Low Energy (BLE 4.2)
- Near-Field Communication (NFC)

## Sensors

- Fingerprint
- Accelerometer
- ECG
- Gyroscope
- Optical proximity sensor
- Capacitive sensor

## Device

- One-size-fits-all design
- Two-button navigation

## Secure Credentials

- FIDO2
- FIDO (U2F)
- Nymi PKI
- HID Seos for physical access
- Legic Advant

## Battery

- Built-in rechargeable Li-ion battery
- Typical 3-day battery life\*

## Charger

- USB powered magnetic charging cradle
- Power & charging indication

## Security

- AES and ECDSA for encryption and authentication
- On-device biometric matching
- Secure over-the-air firmware upgrades

## Environment

- IP66 & IP67 Ingress Protection
- 0° to 45° C

## Material

- Hypoallergenic
- Stainless steel ECG electrodes
- ISO 10993-1 biocompatible
- Polycarbonate body
- TPU strap and buttons

## Compliance

- FCC: USA
- IC: Canada
- CE: Europe
- MIC: Japan
- CMIIT: China
- IMDA: Singapore
- KC: Korea

## Sanitization

Recommended sanitization process: spray the Nymi Band with an isopropyl alcohol based solution and wipe down with a microfibre cloth

\*Based on 300 NFC taps over 10 hours

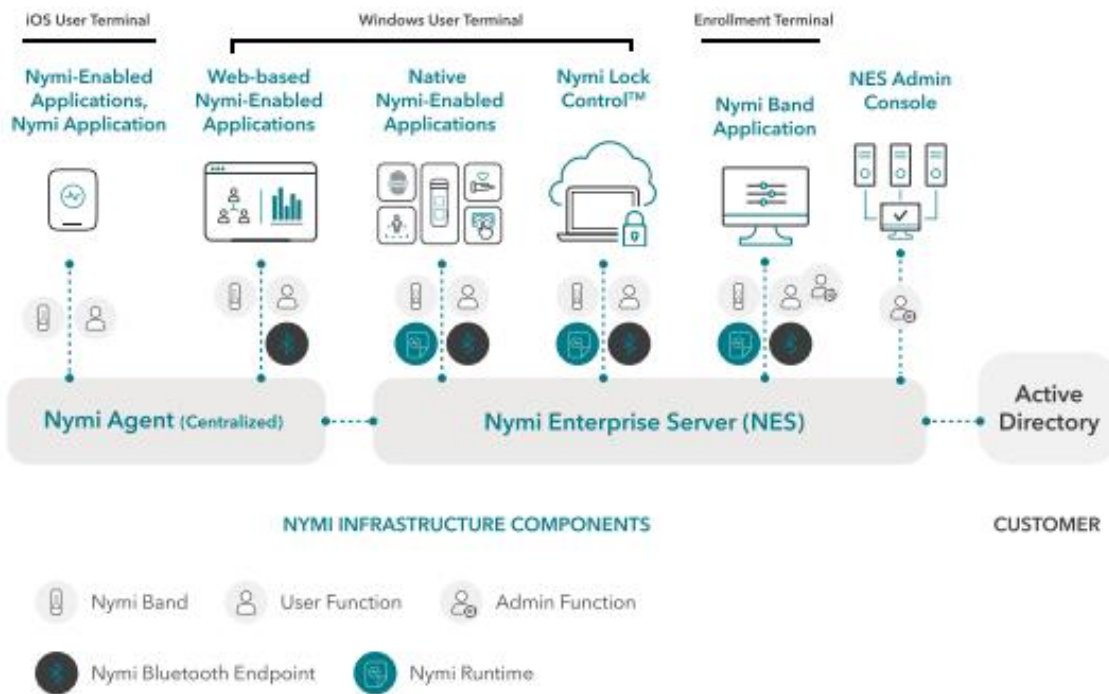
### Dimensions



Depth: 11mm    Width: 19mm  
 Weight: 25g    Length: 50mm



### System Overview





## Safety Disclaimer


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If the Nymi Band 3.0 appears physically damaged, broken, or is unresponsive, **do not wear or operate the device**. Contact your system administrator or Nymi Inc. for assistance.



# Nymi Band Lifetime & Reliability (EN)

Please refer to the [Nymi Band Reliability Specifications](#) for the most up-to-date specifications.



## Nymi Band Lifetime & Reliability

The Nymi Band has been designed to surpass an operational lifetime of 3 years. Accelerated lifetime testing is built into our design validation process, ensuring the Nymi Band will perform uninterrupted when it matters most.

Component	Requirement	Accelerated Testing Conditions
Battery	>80% capacity after 3yrs	500 charge/discharge cycles
Strap Clasp	Functional after 3yrs typical use	6000 clasping cycles
Strap Durability	Withstands repeated daily bending and pulling without deformation or failure	3000 +/-90 deg bend cycles 80N force for 60 sec. repeated 3 times
Drop Resilient	Withstands repeated drops from a height of 1.5m without cosmetic damage or failure	10 drops from 1.5m onto a concrete surface
Cleaning	Withstands daily wipe down Withstands daily scrub/rinse cycles	5000 wiping cycles with 70% isopropanol and lint free cloth 25000 brush cycles with soap and water rinse
Charger	Mechanically robust to daily charging	2200 mating cycles between Nymi Band and charger
Fingerprint Sensor	Withstands daily use without deterioration in appearance or performance	15N press applied 6000 times
Haptic Motor	Functional after 3yrs typical use	45000 cycles over 48 hrs
Buttons	Functional after 3yrs typical use	10000 cycles
External vibration	Robust to extended exposure to vibration	30min applied to each axis at the following frequencies - 5, 12, 20, 200, 500 Hz
Surface finish	Resistant to sweat, salt spray and hand lotion without degradation in material or appearance	Solutions applied and kept at 40deg C for 120hrs
UV Exposure	Withstands daily exposure to UV light without mechanical degradation or discolouration	340nm @ 1100 W/m <sup>2</sup> for 100hrs
Extreme temperature storage	Withstands low temperature storage without failure Withstands high temperature storage with failure	120hrs at -20deg C 120hrs at 60deg C @ 93% humidity
Biocompatibility	Safe for daily use	Tested to ISO 10993, NIOSH 9100 and ASTM 6661 standards
Breakaway Force	Average Pull Force of >100 N required to breakaway band from wrist	20 cycles on 5 bands Pull to Failure or up to 260 N

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## Nymi Band 3.0 Electrical Characteristics (EN)

This document provides some of the electrical characteristics of Nymi Band 3.0. This information may be useful when assessing if the Nymi Band is suitable for operation in a given environment.



*Nymi Band 3.0*

Characteristic	Value(s)
Voltage (Typical)	3.7 V
Voltage (Max)	4.2 V
Current Draw (Typical)	0.84 mA
Current Draw (Max)	50 mA <sup>1</sup>
Battery Current Limit	210 – 750 mA
Battery Temperature Limit <sup>2</sup>	150 °C
Battery Capacity	48 mA h
Battery Chemistry	Lithium-ion
Battery Safety Testing	UL1642, CE
Vibe Motor Type	Brushless DC
Bluetooth LE Frequency Range	2.402 GHz - 2.480 GHz
Bluetooth LE Max TX Power	4 dBm



NFC Frequency Range	13.56 MHz
NFC Max TX Power	N/A <sup>3</sup>
Electronics Enclosure	Polycarbonate Plastic

1. The Nymi Band can reach 50 mA when the vibration motor is active.
2. The battery can only reach this limit if it's shorted.
3. NFC is energized by an external field, so its emitted power is defined by the field source (i.e. NFC reader device).

# EU Declaration of Conformity

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## EU Declaration of Conformity

We,  
**Nymi Inc.**  
82 Peter Street, Suite 500,  
Toronto, Ontario, M5V 2G5  
Canada



declare under our sole responsibility that the product:

**Nymi Band**  
Model: Nymi Band 3.0

to which this declaration relates is in conformity with all the essential requirements of the European Directive 2014/53/EU (RED).

The conformity with the essential requirements of the European Directive 2014/53/EU has been demonstrated against the following harmonized standards:

RF Spectrum Efficiency (RED art. 3.2)      EN 300 328 v2.2.2, EN 300 330 v2.1.1

The product has also been verified against the following harmonized standards:

EMC (RED art. 3.1b)      EN 301 489-1 v2.2.3, EN 301 489-3 v2.1.1  
Draft EN 301 489-17 v3.2.2  
EN 55032: 2015, EN 55035: 2017  
EN 61000-3-3: 2013+A1: 2019  
EN IEC 61000-3-2: 2019

Safety (RED art 3.1a)      EN 62368-1:2014 + A11:2017  
EN 62479:2010

The conformity assessment procedure referred to in Article 17 and detailed in Annex III of Directive 2014/53/EU has been followed.

The technical documentation relevant to the above equipment will be held at:

**Nymi Inc.**  
82 Peter Street, Suite 500,  
Toronto, Ontario, M5V 2G5  
Canada

Date: **February 4, 2021**



Vice President, Manufacturing and  
Operations  
Don Simpson