Design and Evaluation of a Security and Privacy Nutrition Label for IoT Devices

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S3D
Software and Societal Systems Department

CyLab
Carnegie Mellon University
Security and Privacy Institute

Product information

Technical Details

Manufacturer	Wyze
Part Number	WYZEC3CP3
Item Weight	8.1 ounces
Product Dimensions	2.51 x 2.24 x 3.93 inches
Country of Origin	China
Item model number	WYZEC3CP3
Size	1 Count (Pack of 1)
Color	White
Style	Wyze Cam v3
Material	Cam
Pattern	With Cam Plus
Shape	Wyze Cam v3 + Cam Plus
Power Source	Corded Electric
Item Package Quantity	1
Mounting Type	Wall Mount
Special Features	Night Vision, Motion Sensor
Included Components	Wyze Cam v3 x1, 3 Month Auto Activation Subscription to Cam Plus
Batteries Required?	No
Warranty Description	1 Year Manufacturer

Additional Information

ASIN	B09Q4T8Y76
Customer Reviews	★★★★½ ⌄ 1,092 ratings 4.4 out of 5 stars
Best Sellers Rank	#31 in Tools & Home Improvement (See Top 100 in Tools & Home Improvement) #2 in Flood Lights #2 in Bullet Surveillance Cameras #3 in Home Security & Surveillance Systems
Date First Available	January 27, 2022

Warranty & Support

If you'd like a copy of the manufacturer's warranty for a product found on Amazon.com, you can contact the manufacturer directly or visit their website for more information. Manufacturer's warranties may not apply in all cases, depending on factors like the use of the product, where the product was purchased, or who you purchased the product from. Please review the warranty carefully, and contact the manufacturer if you have any questions.

Feedback

Would you like to **tell us about a lower price?** ⌄

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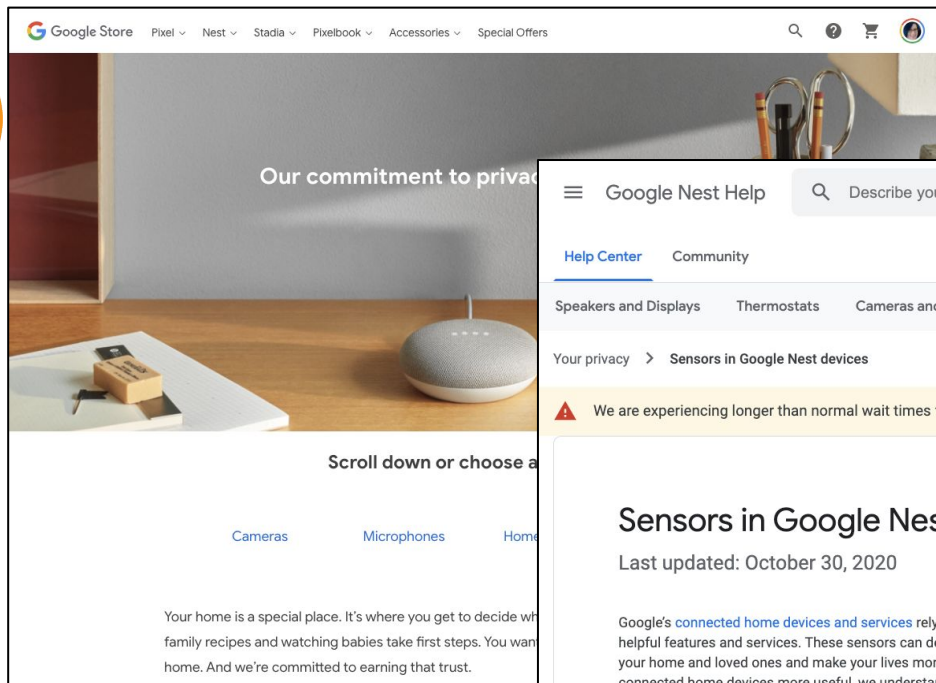|	
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No information about privacy or security

Pattern	With Cam Plus
Shape	Wyze Cam v3 + Cam Plus
Power Source	Corded Electric
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Google Store
Pixel | Nest | Stadia | Pixelbook | Accessories | Special Offers

Our commitment to priva[cy]

Scroll down or choose a[...]

Your home is a special place. It's where you get to decide wh[...] family recipes and watching babies take first steps. You wan[...] home. And we're committed to earning that trust.

Google Nest Help

Describe your issue

Help Center   Community   Google Nest

Speakers and Displays   Thermostats   Cameras and Doorbell   Alarm System   Lock   Smoke Alarm   Wi-Fi

Your privacy > Sensors in Google Nest devices

⚠ We are experiencing longer than normal wait times for support. We appreciate your patience and understa[...]

Google's connected home devices and services rely on cameras, microphones and other sensors to provide helpful features and services. These sensors can detect things like motion, sound and temperature to protect your home and loved ones and make your lives more convenient and comfortable. And while they make our connected home devices more useful, we understand that you, your family and your friends need to trust that we'll handle your data responsibly.

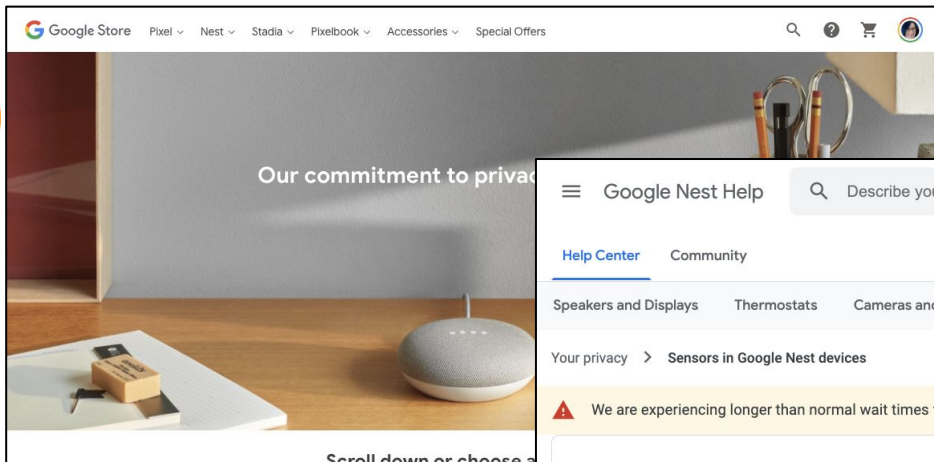We've published our commitment to privacy in the home ⧉ where we've committed to the following:

• When our connected home devices include cameras, microphones, or environmental or activity sensors tha[...] detect information about your home environment, we'll list these hardware features in the device's technica[...] specifications — whether or not they're enabled.

• We'll also more clearly explain what types of information these sensors send to Google, as well as example[...]

Types of sensors, what they measure, and examples of uses

Type of Sensor	What it Measures	Examples of Uses*
		Cameras and Microphones
	identify a specific person.	Aware subscription, the camera can be used to identify a face you've told it to recognize and send an alert when it recognizes someone you know or a stranger.
		Nest Hub Max
		In addition to offering the built-in Nest Cam features described above, Nest Hub Max also uses the camera to enable video calling and video messages, personalization with Face Match, and Quick Gestures for easy device control. Additional features that use the camera may be added over time.
Microphone	Microphones detect sound waves and are used for a variety of purposes in Nest devices, including to capture speech, and as a sensor to detect specific sounds or to detect motion nearby.	**Nest Cam, Nest Cam IQ and Nest Hello** Hear what's happening near the camera. Also used to detect certain types of sounds so you can get an alert when a person or motion is detected near the camera. The microphone is also used for the Talk and Listen feature that lets you talk to anyone near the camera. Nest Cam IQ Indoor also allows you to talk to the Google Assistant (if you have enabled that feature). **Google Home, Google Home Mini, Google Home Max, Google Nest Hub, Google Nest Hub Max,**
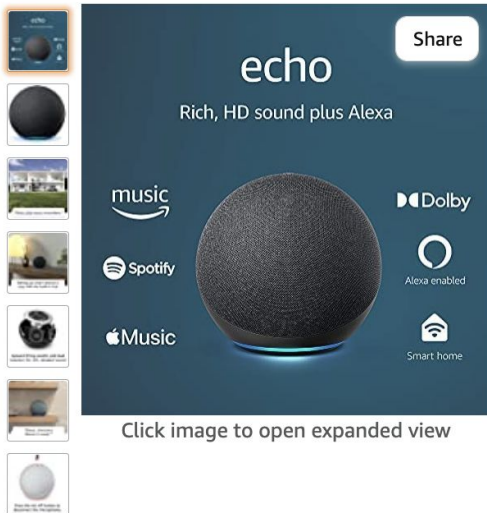
Larger manufacturers better, still not easy to find

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Security and Privacy Institute

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Share

echo
Rich, HD sound plus Alexa

music ▶Dolby
Spotify Alexa enabled
🍎Music Smart home

Click image to open expanded view

Echo (4th Gen) | With premium sound, smart home hub, and Alexa | Charcoal

Brand: Amazon

★★★★⯨ ﹀   129,439 ratings

| 1000+ answered questions

Amazon's Choice for "echo 4tl

🌿 Climate Pledge Friendly

$**99**⁹⁹

✓prime One-Day
FREE Returns ﹀
or 5 monthly payments ﹀ of $

Save 25% with Trade-In

Warranty and service	**1-year limited warranty and service included**. Optional 1-year, 2-year, and 3-year extended warranty available for U.S. customers sold separately. Use of Echo is subject to these terms.
Setup technology	Amazon wifi simple setup enables customers to connect smart devices to their wifi network in a few easy steps. Wifi simple setup is another way Alexa is always getting smarter. Learn more about wifi simple setup.
Included in the box	Echo (4th Gen), glacier white power adapter (30W), and Quick Start Guide.
Generation	Echo (4th Gen) - 2020 release
Privacy features	Wake word technology, streaming indicators, microphone off button, the ability to view and delete your voice recordings, and more. Visit the Alexa Privacy Hub to explore how Alexa and Echo devices are designed to protect your privacy.
Language	Alexa speaks English and Spanish
Alexa Skills & Features	Alexa makes your life easier, more meaningful, and more fun by letting you voice control your world. Alexa can help you get more out of the things you already love and discover new possibilities you've never imagined. Discover and learn what Alexa can do.
Software Security Updates	This device receives guaranteed software security updates until at least four years after the device is last available for purchase as a new unit on our websites. Learn more about these software security updates. If you already own an Amazon Echo, visit Manage Your Content and Devices for information specific to your device.

… custom UIs and terminology, no ability to compare

Echo (4th Gen) | With premium sound, smart home hub, and Alexa | Charcoal

Brand: Amazon

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| 1000+ answered questions

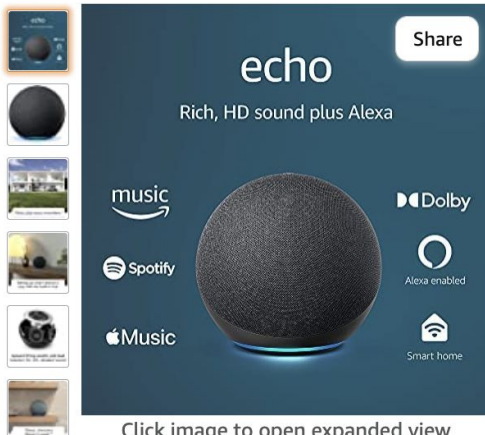Amazon's Choice   for "echo 4tl

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Privacy features	Wake word technology, streaming indicators, microphone off button, the ability to view and delete your voice recordings, and more. Visit the Alexa Privacy Hub to explore how Alexa and Echo devices are designed to protect your privacy.
Language	Alexa speaks English and Spanish
Alexa Skills & Features	Alexa makes your life easier, more meaningful, and more fun by letting you voice control your world. Alexa can help you get more out of the things you already love and discover new possibilities you've never imagined. Discover and learn what Alexa can do.
Software Security Updates	This device receives guaranteed software security updates until at least four years after the device is last available for purchase as a new unit on our websites. Learn more about these software security updates. If you already own an Amazon Echo, visit Manage Your Content and Devices for information specific to your device.

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SHREDDED BITE SIZE WHEATS

TRADER JOE'S

Nutrition Facts
Serving Size 1 cup (49 g)
Servings Per Container about 10

Amount Per Serving
Calories 180   Calories from Fat 10

% Daily Value*
Total Fat 1g   2%
  Saturated Fat 0g   0%
  Trans Fat 0g
Cholesterol 0mg   0%
Sodium 0mg   0%
Potassium 180mg   5%
Total Carbohydrate 38g   13%
  Dietary Fiber 5g   20%
  Sugars 0g
Protein 5g

Vitamin A 0% • Vitamin C 0%
Calcium 0% • Iron 8%
Thiamine 8% • Riboflavin 2%
Niacin 4% • Vitamin D 0%

INGREDIENTS: Whole Wheat,
Vitamin E (to preserve freshness).

Dist. & Sold Exclusively By:
Trader Joe's,
Monrovia, CA 91016

This product is sold by weight not volume. Some settling of contents

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BARBARA'S BAKERY
Shredded Spoonfuls
Multigrain

Nutrition Facts
Serving Size 3/4 Cup (30g)
Servings Per Container About 21

Amount Per Serving
Calories 120   160

% Daily Value**
Total Fat 1.5g   2% 2%
  Saturated Fat 0g   0% 0%
  Trans Fat 0g
Cholesterol 0mg   0% 1%
Sodium 200mg   8% 11%
Potassium 125mg   4% 9%
Total Carbohydrate 24g   8% 10%
  Dietary Fiber 4g   15% 15%
  Soluble Fiber 1g
  Insoluble Fiber 3g
  Sugars 5g
Protein 4g

Vitamin A   0% 4%
Vitamin C   8% 10%
Calcium   2% 15%
Iron   4% 4%
Vitamin E   4% 4%

INGREDIENTS: Whole Oat Flour (With Added Oat Bran), Yellow Corn Flour, Wheat Bran, Unsulfured Molasses, Whole Grain Barley Flour, Salt, Baking Soda, Natural Flavor.

TRADER JOE'S
Very Berry Clusters
CEREAL

Nutrition Facts
Serving Size 1 cup (55 g)
Servings Per Container About 7

Amount Per Serving
Calories 230   Calories from Fat 50

% Daily Value**
Total Fat 5g   8%
  Saturated Fat 0.5g   3%
  Trans Fat 0g
Cholesterol 0mg   0%
Sodium 140mg   6%
Total Carbohydrate 42g   14%
  Dietary Fiber 3g   11%
  Sugars 12g
Protein 4g

Vitamin A 0% • Vitamin C 0%
Calcium 2% • Iron 8%

INGREDIENTS: WHOLE ROLLED OATS, MILLED CANE SUGAR, CORN FLOUR, RICE FLOUR, VEGETABLE OIL (CANOLA AND/OR SAFFLOWER AND/OR SUNFLOWER OIL), WHOLE WHEAT FLOUR, BROWN RICE, CORN STARCH, HONEY, SALT, BARLEY MALT SYRUP, FREEZE DRIED BLUEBERRIES, FREEZE DRIED STRAWBERRIES, NATURAL FLAVOR, ANNATTO (FOR COLOR), TURMERIC (FOR COLOR), PURPLE CARROT JUICE (FOR COLOR), CARDAMOM SEED, FENNEL.

DISTRIBUTED BY: SMALL PLANET FOODS, INC. SEDRO-WOOLLEY, WA 98284 USA

PRODUCT OF CANADA

CERTIFIED ORGANIC

Nutrition Facts
Serving Size 1/2 cup (30g)
Servings Per Container about 12

	Multi Grain Squares	with 1/2 cup skim milk
Amount Per Serving		
Calories	110	150
Calories from Fat	5	10

% Daily Value**
Total Fat 0.5g   1% 1%
  Saturated Fat 0g   0% 0%
  Trans Fat 0g
  Polyunsaturated Fat 0g
  Monounsaturated Fat 0g
Cholesterol 0mg   0% 1%
Sodium 125mg   5% 8%
Potassium 100mg   2% 8%
Total Carbohydrate 25g   8% 10%
  Dietary Fiber 2g   8% 8%
  Sugars 6g
  Other Carbohydrate 19g
Protein 3g

Vitamin A   0% 4%
Vitamin C   0% 2%
Calcium   0% 15%
Iron   25% 25%
Vitamin D   0% 10%
Thiamin   25% 30%
Niacin   25% 25%
Vitamin B6   25% 25%
Folic Acid   25% 25%
Phosphorus   8% 20%
Magnesium   8% 10%
Zinc   25% 30%

Shredded Oats
Original

Nutrition Facts
Serving Size 1-1/4 Cup (2 oz/55g)
Servings Per Container About 12

	Cereal	with 1/2 cup skim milk
Amount per Serving		
Calories	220	260
Calories from Fat	25	25

% Daily Value**
Total Fat 2.5g*   4% 4%
  Saturated Fat 0.5g   2% 2%
  Trans Fat 0g
Cholesterol 0mg   0% 1%
Sodium 250mg   10% 12%
Potassium 180mg   5% 11%
Total Carbohydrate 42g   14% 16%
  Dietary Fiber 5g   20% 20%
  Soluble Fiber 2g
  Insoluble Fiber 3g
  Sugars 11g
Protein 6g

Vitamin A   0% 6%
Vitamin C   35% 35%
Calcium   2% 15%
Iron   10% 10%
Vitamin E   0% 0%
Thiamin   10% 10%
Riboflavin   4% 10%
Niacin   0% 0%
Phosphorus   10% 30%
Magnesium   15% 20%
Zinc   10% 15%
Copper   10% 15%

INGREDIENTS: Whole Oat Flour, Whole Wheat Flour, Unsulphured Molasses, Malted Barley Extract, Baking Soda, Salt, Natural Flavor.

Dist. & Sold Exclusively By:
Trader Joe's, Monrovia, CA 91016

TRADER JOE'S
Organic HIGH FIBER O's

Nutrition Facts
Serving Size 1-1/4 cup (55g)
Servings per Container about 8

Amount Per Serving
Calories 190   Calories from Fat 10

% Daily Value*
Total Fat 1g   2%
  Saturated Fat 0g   0%
  Trans Fat 0g
Cholesterol 0mg   0%
Sodium 115mg   5%
Total Carbohydrate 44g   15%
  Dietary Fiber 9g   36%
  Soluble Fiber less than 1g
  Insoluble Fiber 8g
  Sugars 9g
Protein 6g   12%

Vitamin A 0% • Vitamin C 130%
Calcium 4% • Iron 30%
Thiamin 25% • Riboflavin 25%
Niacin 25% • Vitamin B6 25%
Folate 25% • Vitamin B12 25%
Zinc 15%

INGREDIENTS: Organic Whole Grain Wheat Flour, Organic Wheat Bran, Organic Evaporated Cane Juice, Organic Oat Fiber, Sea Salt, Organic Caramel Color, Natural Vitamin E. NUTRITION BLEND: Niacinamide, Vitamin C, Reduced Iron, Zinc Oxide, Vitamin B6, Riboflavin, Thiamin, Folate, Vitamin B12.

Our vendors follow Good Manufacturing Practices to segregate ingredients to avoid cross contact with allergens.

TRADER JOE'S
Organic Corn Flakes

Nutrition Facts
Serving Size 1 cup (30g)
Servings Per Container about 11

Amount Per Serving
Calories 110   Calories from Fat 0

% Daily Value*
Total Fat 0g   0%
  Saturated Fat 0g   0%
Cholesterol 0mg   0%
Sodium 280mg   12%
Total Carbohydrate 26g   9%
  Dietary Fiber less than 1g
  Sugars 2g
Protein 2g

Vitamin A 25% • Vitamin C 25%
Calcium 0% • Iron 45%
Vitamin D 25% • Thiamin 25%
Riboflavin 25% • Niacin 25%
Vitamin B6 25% • Folic Acid 50%
Vitamin B12 25% • Zinc 25%

INGREDIENTS: ORGANIC MILLED CORN, ORGANIC EVAPORATED CANE JUICE, SEA SALT, ORGANIC BARLEY MALT EXTRACT, SOY LECITHIN (AN EMULSIFIER), MIXED TOCOPHEROLS (VITAMIN E) ADDED TO PRESERVE FRESHNESS. VITAMINS & MINERALS: ZINC ORTHOPHOSPHATE (ZINC SOURCE), SODIUM ASCORBATE (VITAMIN C), VITAMIN A ACETATE, NIACINAMIDE (A B VITAMIN), NIACINAMIDE, ZINC OXIDE (ZINC SOURCE), FOLIC ACID (A B VITAMIN), CYANOCOBALAMIN (VITAMIN B12), CHOLECALCIFEROL (VITAMIN D), PYRIDOXINE HYDROCHLORIDE (VITAMIN B6), RIBOFLAVIN (VITAMIN B2), THIAMIN MONONITRATE (B1).

OUR VENDORS FOLLOW GOOD MANUFACTURING PRACTICES TO SEGREGATE INGREDIENTS WITH ALLERGENS. MADE ON SHARED EQUIPMENT SHARED WITH WHEAT AND SOY. FACILITY PROCESSES PEANUTS AND TREE NUTS.
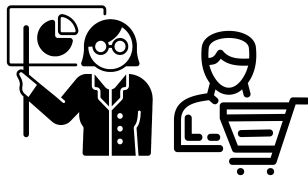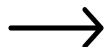
DISTRIBUTED BY: TRADER JOE'S, MONROVIA CA 91016

Our Multi-Step Path to Design and Evaluate Our IoT Label

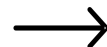**Do consumers want security and privacy information** before IoT purchase?
YES!
[CHI'19]

→

What should be included on an IoT security and privacy label?
47 factors on a layered label, recommended by experts
[IEEE S&P'20]

→

Is the label effective in conveying risk and informing consumer purchase behavior?
YES!
[IEEE S&P'21]

Will consumers pay more for better privacy and security?
YES!
[USENIX Security'23]

→

Are consumers interested in comparison tools for IoT security/privacy?
YES!
[work in progress]

* All Research Publications available on: www.iotsecurityprivacy.org

iotsecurityprivacy.org

Smart Video Doorbell NS200
Firmware version: 2.5.1 **- updated on:** 11/12/2020
The device was manufactured in: China

Security Mechanisms

Security updates	Automatic - Available until at least 1/1/2022	
Access control	Password - Factory default - User changeable, Multi-factor authentication, Multiple user accounts are allowed	

Data Practices

Sensor data collection	Visual	Audio	Physiological	Location
Sensor type	Camera	Microphone		
Purpose	Providing device functions	Providing device functions, Research		
Data stored on device	Identified	No device storage		
Data stored on cloud	Identified	Identified - Option to delete		
Shared with	Manufacturer, Government	Manufacturer		
Sold to	Not disclosed	Not sold		

Other collected data: Motion, Account info, Payment info, Contact info, Device setup info, Device tech info, Device usage info

Privacy policy www.NS200.smartdeviceco.com/policy

Detailed Security & Privacy Label:
www.iotsecurityprivacy.org/labels

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Smart Video Doorbell NS200
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The device was manufactured in: China

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Security & Privacy Details

Smart Device Co.

Smart Video Doorbell NS200
Firmware version: 2.5.1 **- updated on:** 11/12/2020
The device was manufactured in: China

Security Mechanisms

Security updates	Automatic - Available until at least 1/1/2022	⊕
Access control	Password - Factory default - User changeable, Multi-factor authentication, Multiple user accounts are allowed	⊕
Security oversight	No security audits	⊕
Ports and protocols	www.NS200.smartdeviceco.com/ports	
Hardware safety	Not disclosed	
Software safety	www.NS200.smartdeviceco.com/sw_safety	
Personal safety	www.NS200.smartdeviceco.com/user_safety	
Vulnerability disclosure and management	www.NS200.smartdeviceco.com/vul_report	
Software and hardware composition list	www.NS200.smartdeviceco.com/BOM	
Encryption and key management	www.NS200.smartdeviceco.com/encryption	

	Visual	**Audio**	**Motion**
Sensor data collection			
Sensor type	Camera ⊕	Microphone ⊕	Motion sensor ⊕
Collection frequency	Continuous - Option to opt out	Continuous - Option to opt in	Continuous - Option to opt out

Data Practices		Visual	Audio	Motion
	Sensor data collection			
	Sensor type	Camera ⊕	Microphone ⊕	Motion sensor ⊕
	Collection frequency	Continuous - Option to opt out ⊕	Continuous - Option to opt in ⊕	Continuous - Option to opt out ⊕
	Purpose	Providing device functions ⊕	Providing device functions, Research ⊕	Providing device functions, Research ⊕
	Data stored on the device	Identified ⊕	No device storage ⊕	Pseudonymized ⊕
	Local data retention time	Up to a year ⊕	No retention ⊕	Up to a month ⊕
	Data stored in the cloud	Identified - Data subject access request ⊕	Identified - Option to delete ⊕	No cloud storage ⊕
	Cloud data retention time	Up to 10 years ⊕	Up to two months ⊕	No cloud storage ⊕
	Data shared with	Manufacturer, Government ⊕	Manufacturer ⊕	Manufacturer, Third parties ⊕
	Data sharing frequency	Periodic ⊕	Periodic - Adjustable ⊕	Periodic - Adjustable ⊕
	Data sold to	Not disclosed ⊕	Not sold ⊕	Third parties ⊕

	Other collected data	Account info, Payment info, Contact info, Device setup info, Device tech info, Device usage info ⊕

Data linkage	Data will not be linked with other data sources ⊕
What will be inferred from user's data	Not disclosed ⊕
Special data handling practices for children	No ⊕
In compliance with	GDPR ⊕
Privacy policy	www.NS200.smartdeviceco.com/policy

More Information		
Call Smart Device Co. with your questions at	1 000-000-0000 ⊕
Email Smart Device Co. with your questions at	info@smartdeviceco.com ⊕
Functionality when offline	Limited functionality on offline mode ⊕
Functionality with no data processing	Limited functionality on dumb mode ⊕
Physical actuations and triggers	Device blinks when motion is detected ⊕
Compatible platforms	Amazon Alexa ⊕

PUBLIC DOMAIN

17

Consumer Studies

- Does the label communicate risk to consumers? [IEEE S&P'21]

- Does the label impact consumers' willingness to purchase IoT devices? [IEEE S&P'21]

- How much more are consumers willing to pay for better security and privacy? [USENIX Security '23]

[IEEE S&P'21] "Which Privacy and Security Attributes Most Impact Consumers' Risk Perception and Willingness to Purchase IoT Devices?"
[USENIX Security '23] "Are Consumers Willing to Pay for Security and Privacy of IoT Devices?"
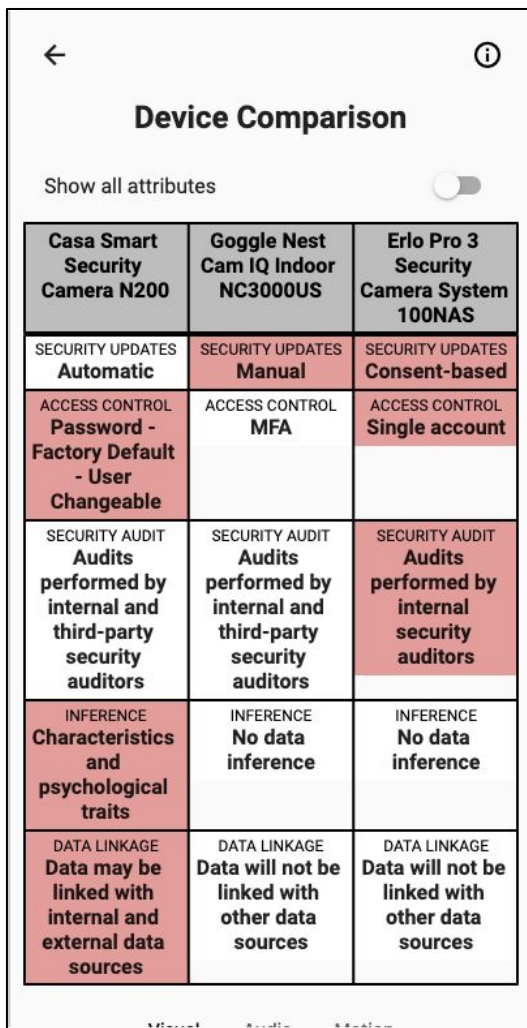
Consumers' Willingness to Pay for Products With…

- **Good** Security / Privacy Vs **Bad** Security / Privacy ⇒ Prefer Good!

- **Good** Security / Privacy Vs **Unknown** Security / Privacy ⇒ Prefer Good!

- **Bad** Security / Privacy Vs **Unknown** Security / Privacy ⇒ Prefer Unknown!?

Takeaways: (1) Consumers will pay for products with **Good** security/privacy
(2) Little incentive for bad actors to adopt labels voluntarily

[USENIX Security '23] "Are Consumers Willing to Pay for Security and Privacy of IoT Devices?"

Label Enables Useful Tools

- Standardized label with computer-readable meta-data allows for automation

- Search engines that can find products with desired security/privacy features

- Consumer shopping apps

Specification for an IoT Privacy and Security Label

(Last updated on 5/27/2020)

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Label Generator (beta)

This tool will generate an IoT Security & Privacy Label. Fill out the fields in the four sections below and scroll down to see the primary and secondary layers of your label. For best results, we recommend using Google Chrome or Firefox. If you have any questions or concerns, please email us.

Additional notes:

- All the URLs **have to** start with a protocol identifier (http or https), otherwise they will be specified as "Not disclosed" on the label.
- The label generator runs locally in your web browser and does not send information to our server.
- Use the print buttons to print it out or save the PDF (you may need to enable background graphics and scale down the labels to fit on the page in the print preview).
- Download the HTML to display the label as a stand-alone web page or embed it on your website.
- Save the JSON file so that you can upload it if you want to make any changes to your label.
- Embed the XML file on your website
- The ZIP download contains the HTML files for both layers of the label, the JSON, the XML, and the embed codes for both the layers.

Drop a **JSON** file or click here to work on a previously generated IoT label.

Device Information	Security Mechanisms	Data Practices	More Information

Device Information

Additional notes:

- By default, all the fields in this section are shown as "Not disclosed."

Manufacturer
Casa

Device name
Smart Security Camera

Firmware version
2.5.1

N200

Updated on

Manufactured in

Next >

All download options: XML JSON ZIP

Primary Layer

Security & Privacy Overview

Not disclosed

Not disclosed Not disclosed
Firmware version: Not disclosed **- updated on:** Not disclosed
The device was manufactured in: Not disclosed

Security Mechanisms	Security updates	Not disclosed
	Access control	Not disclosed

Data Practices	Sensor data collection	Visual	Audio	Physiological	Location
	Sensor type				
	Purpose				
	Data stored on the device				
	Data stored in the cloud				
	Data shared with				
	Data sold to				

We're partnering with Consumer Reports, an institution that's played an historic role in **public education campaigns** focused on sustained behavior change

CyLab **Carnegie Mellon University** Security and Privacy Institute

A National IoT Labeling Initiative Should be "Digital First"

Assertion → ← Query

Manufacturer self-attestation protocol

and/or **Third-party certifications**

Trusted database of product metadata and assertions
IoT product information registry
Programmatically generated, cryptographically verified labels on demand

APIs, design guidelines

Product lookup portal

Third-party applications
(embedded labels on storefronts, manufacturer product pages, comparison services…)

This proposed system provides the "digital public infrastructure" needed to ensure consistent and trustworthy delivery of label information across channels. It could be operated as a public-private partnership to educate consumers about the purpose and significance of the labels.

CyLab Carnegie Mellon University
Security and Privacy Institute

iotsecurityprivacy.org

Mockup of compact label for packaging (not yet tested with users) – includes info on sensors, security level, and QR code that links to an overview label

Security & Privacy Facts

Smart Video Doorbell NS 200

Visual | Audio | Physiological | Location | LEVEL 1 | More info

Security & Privacy Overview

Smart Device Co.

Smart Video Doorbell NS200
Firmware version: 2.5.1 - updated on: 11/12/2020
The device was manufactured in: China

Security Mechanisms

Security updates	Automatic - Available until at least 1/1/2022
Access control	Password - Factory default - User changeable, Multi-factor authentication, Multiple user accounts are allowed

Data Practices

	Visual	Audio	Physiological	Location
Sensor data collection				
Sensor type	Camera	Microphone		
Purpose	Providing device functions	Providing device functions, Research		
Data stored on device	Identified	No device storage		
Data stored on cloud	Identified	Identified - Option to delete		
Shared with	Manufacturer, Government	Manufacturer		
Sold to	Not disclosed	Not sold		
Other collected data	Motion, Account info, Payment info, Contact info, Device setup info, Device tech info, Device usage info			
Privacy policy	www.NS200.smartdeviceco.com/policy			

More Information

Detailed Security & Privacy Label:
www.iotsecurityprivacy.org/labels

CMU IoT Security and Privacy Label **CISPL 1.0** iotsecurityprivacy.org   PUBLIC DOMAIN

Security & Privacy Details

Smart Device Co.

Smart Video Doorbell NS200
Firmware version: 2.5.1 - updated on: 11/12/2020
The device was manufactured in: China

Security Mechanisms

Security updates	Automatic - Available until at least 1/1/2022
Access control	Password - Factory default - User changeable, Multi-factor authentication, Multiple user accounts are allowed
Security oversight	No security audits
Ports and protocols	www.NS200.smartdeviceco.com/ports
Hardware safety	Not disclosed
Software safety	www.NS200.smartdeviceco.com/sw_safety
Personal safety	www.NS200.smartdeviceco.com/user_safety
Vulnerability disclosure and management	www.NS200.smartdeviceco.com/vul_report
Software and hardware composition list	www.NS200.smartdeviceco.com/BOM
Encryption and key management	www.NS200.smartdeviceco.com/encryption

Data Practices

	Visual	Audio	Motion
Sensor data collection			
Sensor type	Camera	Microphone	Motion sensor
Collection frequency	Continuous - Option to opt out	Continuous - Option to opt in	Continuous - Option to opt out
Purpose	Providing device functions	Providing device functions, Research	Providing device functions, Research
Data stored on the device	Identified	No device storage	Pseudonymized
Local data retention time	Up to a year	No retention	Up to a month
Data stored in the cloud	Identified - Data subject access request	Identified - Option to delete	No cloud storage
Cloud data retention time	Up to 10 years	Up to two months	No cloud storage
Data shared with	Manufacturer, Government	Manufacturer	Manufacturer, Third parties
Data sharing frequency	Periodic	Periodic - Adjustable	Periodic - Adjustable
Data sold to	Not disclosed	Not sold	Third parties
Other collected data	Account info, Payment info, Contact info, Device setup info, Device tech info, Device usage info		
Data linkage	Data will not be linked with other data sources		
What will be inferred from user's data	Not disclosed		
Special data handling practices for children	No		
In compliance with	GDPR		
Privacy policy	www.NS200.smartdeviceco.com/policy		

More Information

Call Smart Device Co. with your questions at	1 000-000-0000
Email Smart Device Co. with your questions at	info@smartdeviceco.com
Functionality when offline	Limited functionality on offline mode
Functionality with no data processing	Limited functionality on dumb mode
Physical actuations and triggers	Device blinks when motion is detected
Compatible platforms	Amazon Alexa

CMU IoT Security and Privacy Label **CISPL 1.0** iotsecurityprivacy.org   PUBLIC DOMAIN

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S3D Software and Societal Systems Department

CyLab Carnegie Mellon University Security and Privacy Institute

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