# Oframework

# Framework™ Laptop Online User Manual

**Model: FRANBPOOOO** 

**Product: Framework Laptop** 

May 4th, 2021 Revision 2



# **System Photos**

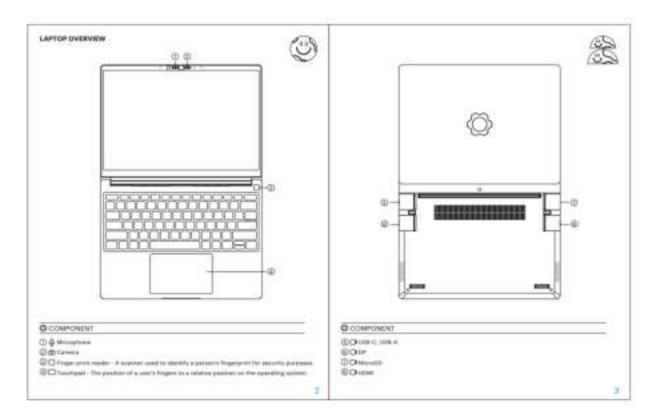








#### **Laptop Overview**



Note: 1. Microphone 2. Camera 3. Finger Print Reader - A scanner used to identify a person's fingerprint for security purposes. 4. Touchpad - The position of a user's fingers to a relative position 5. Type C - USB A 6. Type C - DP 7. Type C - Micro SD 8. Type C - HDMI

	Type C	
Data Transfer Rate	480Mbps, 3.1Gbps, 20Gbps, 40Gbps	
Display	Support Thunderbolt Display	
Resolution	Up to 8K, 60Hz	

When the laptop is in charging or discharging mode, one port is at 3A, while the other ports are 1.5/1.5/1.5A.

# Important Safety and Handling Information

This section of the User Manual contains safety, handling, disposal, recycling, and regulatory information, as well as the limited warranty for the Framework™ Laptop, including all current and future models of the FRANBP0000 series. Please read all safety information and operating instructions before using the Framework™ Laptop to avoid injury or harm. For a downloadable version of the Framework™ Laptop support guide please visit the following website.

## https://frame.work/support

#### **General Safety Guide**

Read the following safety, operating, and warning instructions before you use Framework™ Laptop. Failing to do so may cause injury.

#### **WARNING: Choking Hazards**

The Framework<sup>™</sup> Laptop has small parts which may present a choking hazard to small children and pets. Keep the Framework<sup>™</sup> Laptop and its accessories away from small children.

## WARNING: Rechargeable Lithium Ion Battery

Lithium polymer batteries are extremely hazardous and liable to cause serious injuries to persons or property. The user accepts liability for the use of a lithium polymer battery. As the manufacturer and the distributor Framework cannot ensure the battery is used correctly (charging, discharging, storage, etc.), Framework Computer Inc is not liable for damages caused to persons or property by improperly used batteries.

In the event of battery leakage, avoid the liquid coming into contact with skin and eyes. In case of contact with the skin, wash copiously with soap and water. In case of contact with the eyes, rinse copiously with cold water and consult a doctor. If you notice a suspicious smell or noise, or observe smoke around the power adapter disconnect it immediately.

Caution: The battery used in this device may present a risk of fire or chemical burn if mistreated. Do not disassemble, heat above 45C (113F), or incinerate. Replace battery with model FRANBBAT01 or other Framework-recommended batteries only. Use of another battery may present a risk of fire or explosion.

Do not use the Framework<sup>TM</sup> Laptop if its cover has been broken and the battery's plastic or mylar cover has been cracked or compromised in any way. Do not expose the battery to excessive physical shock. Do not expose the Framework<sup>TM</sup> Laptop and its battery to heat or dispose of it in a fire. Do not put the battery in a microwave oven or in a pressurized container. Do not attempt to dismantle, pierce, distort, or cut the battery and do not attempt to repair the battery. Keep away from children.

Caution: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the battery disposal instructions below.

#### **WARNING: Coin Cell Battery**

This products coin-cell battery may contain perchlorate and may require special handling when recycled or disposed of. For more information, see <a href="https://www.dtsc.ca.gov/hazardouswaste/perchlorate">www.dtsc.ca.gov/hazardouswaste/perchlorate</a>. Do not ingest battery, Chemical Burn Hazard. The Framework™ Laptop contains coin/button cell batteries. If the coin/button cell battery is swallowed it can cause severe internal burns and can lead to death. Keep new and used batteries away from children. After the internal parts have been installed, remember to replace all covers securely. If the coin/button cell battery is not secure in the holder, stop using the product and keep away from children. If you think the batteries may have been swallowed or placed inside any part of the body, seek immediate attention.

Note: If you replace a battery that uses the wrong type, there may be an explosion. Please follow the battery disposal instructions below to dispose of the old battery.

### **WARNING: Button Battery**

Button batteries for this product may contain perchlorates and may require special treatment during recovery or disposal. For more information, see www.dtsc.ca.gov/hazardouswaste/perchlorate.

#### **WARNING: ESD Shock**

The Framework<sup>™</sup> Laptop includes internal components that are sensitive to ESD. Improper use may result in electrostatic shock to the user or minor to severe damage to the product. Please visit our support page for more information in regards to operating and repairing the Framework<sup>™</sup> Laptop properly to avoid ESD issues.

## **WARNING: Hearing Damage**



To prevent possible hearing damage, do not listen at high volume levels for long periods.

#### **WARNING: Prop 65**

WARNING: This product can expose you to DINP (Di-iso-nonyl Phthalate) material, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.

#### Operating Guide: Temperature, Storage, Use, and Replacement

Operate and store the Framework<sup>™</sup> Laptop in a place where the temperature is between 5C -35C (41F - 95F) (operating) -25C- 45C (-13F - 113F) (storage). Low or high-temperature conditions might temporarily shorten battery life or cause the Framework<sup>™</sup> Laptop to temporarily stop working properly.

This equipment is not suitable for use in locations where children are likely to be present

Do not place the portable computer directly on the user's lap and exposed skin. Avoid using your portable computer with the base resting directly on the skin. The surface temperature may rise during normal operation. Sustained contact with exposed skin may cause discomfort or burn.

Do not operate the Framework<sup>™</sup> Laptop without all of the removable components installed. Operation must include all components.

Please follow the below safety instructions in order to safely replace all of the Framework<sup>™</sup> Laptops interchangeable components.

- 1. Remove your laptop from all power sources by unplugging your AC adapter from your power outlet
- 2. Turn your computer off
- 3. Wait until your laptop is completely cool to the touch to open or remove any internal components (This can take anywhere from 5 30 minutes).

Caution - if you do not wait for the laptop to cool down you may risk the chance of encountering hot components which may result in a potential burn risk.

#### Powering Framework™ Laptop Back On

- 1. Before restarting the Framework™ Laptop users must ensure that all screws are in place and tightened both internally and externally. The user must also ensure that all of the interchangeable components must be in their original locations. Note. Please pay particular attention that the C cover is aligned and all screws are tightened.
- 2. For instructions on the reassembly of the Framework™ Laptop please refer to the replacement instructions in the reverse order.

#### **Operating Guide: Charging**

Examine the power adapter regularly for damage to the cord, plug, enclosure, or other parts. Never use a damaged power adapter cord. Use only certified power adapter cords for charging. Misuse can cause electrical shock.

Never charge a leaky battery or one that has been damaged. Do not use the Framework™ Laptop to charge any other battery than the compatible rechargeable battery.

Do not cover your product while the battery is charging. Recharge the battery at a temperature of between 5C -35C (41F - 95F) (operating).

Do not use the Framework™ Laptop if its cover has been broken and the battery's plastic or mylar cover has been cracked or compromised in any way.

The socket-outlet shall be installed near the equipment and shall be easily accessible.

# Framework Computer Inc Limited Warranty

By using your Framework Computer Inc ("Framework") product, you agree to be bound by the terms of the Framework Limited Warranty ("Warranty") at http://frame.work/support/warranty

If you do not agree to the terms of the Warranty, please return the Product within the return period stated in Framework's Terms of Sale.

# Framework<sup>™</sup> Laptop Technical and Certification Information

# Laptop Technical Information

Component	Base	Performance	Professional
Model	FRANBP0000	FRANBP0000	FRANBP0000
Processor I/Os	Intel® Core Processor i5-1135G7 (8M Cache, up to 4.20 GHz)	Intel® Core Processor i7-1165G7 (12M Cache, up to 4.70 GHz)	Intel® Core Processor i7-1185G7 (12M Cache, up to 4.80 GHz)
Graphics	Iris Xe Graphics	Iris Xe Graphics	Iris Xe Graphics
Memory	8GB DDR4-3200 (1x8GB)	16GB DDR4-3200 (2x8GB)	32GB DDR4-3200 (2x16GB)
Storage	256GB NVMe SSD	512GB NVMe SSD	1TB NVMe SSD
Connectivity	WiFi 6, Bluetooth 5.2	WiFi 6, Bluetooth 5.2	WiFi 6 with vPro, Bluetooth 5.2
os	Windows 10 Home	Windows 10 Home	Windows 10 Pro
Display	13.5" 2256x1504	13.5" 2256x1504	13.5" 2256x1504
Battery	55Wh	55Wh	55Wh
Ports	4x User-selectable Expansion Cards	4x User-selectable Expansion Cards	4x User-selectable Expansion Cards
Camera	1080p 60fps	1080p 60fps	1080p 60fps
Biometrics	Fingerprint Reader	Fingerprint Reader	Fingerprint Reader
Dimensions	296.63mm x 228.98mm x 15.85mm	296.63mm x 228.98mm x 15.85mm	296.63mm x 228.98mm x 15.85mm
Weight	1.3kg	1.3kg	1.3kg
Power Adapter	60W USB-C	60W USB-C	60W USB-C
Warranty	1 Year Limited	1 Year Limited	1 Year Limited

# **Laptop Certification Information**

PASS/FAIL	EU	CE
PASS/FAIL	United States	FCC
PASS/FAIL		RCM
PASS/FAIL	Japan	VCCI
PASS/FAIL		EN301489
PASS/FAIL		EN62311
PASS/FAIL	Aus/NZ	Aus/NZ MEPS
PASS/FAIL	Australia/NZ	СТІСК
PASS/FAIL	South Korea	MSIP
PASS/FAIL	South Korea	КСС

# **EMC** Declarations of Conformity

EMC Emissions Class refers to one of the following use environments:

EMC Class B products are intended for use in residential/domestic environments but may also be used in non-residential/non-domestic environments.

PASS/FAIL	USA	FCC WLAN body SAR
PASS/FAIL	USA	WLAN TCB review
PASS/FAIL	USA	WLAN C2PC RSE
PASS/FAIL	CANADA	WLAN FCB review
PASS/FAIL	CANADA	WWAN FCB review
PASS/FAIL	MEXICO	IFETEL
PASS/FAIL	GERMANY	RED/TEC review
PASS/FAIL	JAPAN	MIC
PASS/FAIL	AUSTRALIA	AS 4268
PASS/FAIL	AUSTRALIA	ACMA
PASS/FAIL		(Is this NCC?) Conducted power + WWAN submission
PASS/FAIL	NEW ZEALAND	ACMA
PASS/FAIL	SINGAPORE	iMDA

# **RF Classification**

RF OUTPUT	Model Number:	Max Output Power: dBuA/m	CLASSIFICATION
LAPTOP	FRANBP0000		System
MAINBOARD	FRANFG0000		Peripheral
KEYBOARD	FRANBK0000		Peripheral
TOUCHPAD			Peripheral
CAMERA			Peripheral
SPEAKER			Peripheral
DISPLAY			Peripheral
EXPANSION CARD_HDMI			Peripheral
EXPANSION CARD_USBC			Peripheral
EXPANSION CARD_USBA			Peripheral
EXPANSION CARD_SSD			Peripheral
EXPANSION CARD_MICRO SD			Peripheral

NOTE: All of the items categorized as peripheral have been certified as Unintentional Radiators and comply with 47 CFR  $\S$  15. Transmit Frequency: BLE 4.0 (2402MHz – 2480MHz) Wireless Charging (125kHz) Maximum RF Output Power of (Framework/Model Number):  $0\pm1$ dBm

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

## **Environmental Certification**

PASS/FAIL	USA	ENERGY STAR
PASS/FAIL	USA	CEC MEPS
PASS/FAIL	USA	CEC BCS/ DOE BCS/ NRCan BCS
PASS/FAIL	Canada	*NRCan BCS
PASS/FAIL	Mexico	ErP lot3 or 6/26
PASS/FAIL	South Korea	e-standby (KES)
PASS/FAIL	AUS/NZ	AUS/NZ MEPS

PASS/FAIL	Taiwan	GREEN MARK

## **Safety Certification**

PASS/FAIL	Global	СВ
PASS/FAIL	USA	NRTL/UL
PASS/FAIL	Mexico	NOM
PASS/FAIL	Germany	GS Mark
PASS/FAIL	South Korea	кс
PASS/FAIL	Taiwan	BMSI

# Framework™ Laptop Declaration of Conformity

This product has been determined to be compliant with the applicable standards, regulations, and directives for the countries where the product is marketed. The product is affixed with regulatory marking and text as necessary for the country/agency. All certifications pertain to Model Number: FRANBP0000

# **European Union**



Hereby, Framework Computer Inc declares that Framework Laptop , FRANBP0000 is in compliance with the essential requirements and other relevant provisions of Radio Equipment Directives: 2014/53/EU, RoHS Directive 2011/65/EU, Ecodesign Directive 2009/125/EC

The following Safety and Health standards have been applied:

Article 3.1a: EN IEC 62368-1:2020+A11:2020 and EN 50566:2017

Article 3.1a: EN 301 489-1 V2.2.3 and EN 301 489-17 V 3.2.4

Other Tests: IEC 60950-1, European Norm EN 60950-1, EMC - CISPR 32/CISPR 35, EN55032/55035, Regulation (EC) No. 1275/2008, EN 50564:2011, IEC 62301:2011, EN50581:2012, IEC 63000:2018, REACH

The EC Declaration of Conformity can be referenced at the below link: https://frame.work/support

## **United States**



#### FCC ID: 2AZR6\_FRANBBAT16

This device complies with FCC CFR Title 47, Part 15, Subpart B, Class B of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference.

## Canada

#### IC ID:27217\_FRANBBAT16

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## Mexico



Fábrica: Compal Electronics Inc. Pingzhen

Planta de producción: No. 8-1 & No. 8, Nandong Rd., Phingzhen Dist., Taoyuan City 324, Taiwan

Modelo:	FRANBP0000
Voltaje de alimentación:	110-240 VAC
Frecuencia:	50-60hz
Consumo de corriente de entrada:	1.5A
Consumo de corriente de salida:	3A
Voltaje de salida:	5V-20V

# **Taiwan**

### **BSMI**

# 限用物質含有情況標示聲明書

Declaration of the Presence Condition of the Rost total Substances Marking

Memory (Hg)	MCabetan (Cd)	六價路 Hesevalent	多类等苯 Printensing	多溴二苯酚
0	10.000	cheamann (C)**)	d hiphoryly (PER)	Polytrominate diphosyl others (PSDE)
	0	0	0	0
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0	0	0	0	0
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# 使用過度恐傷害視力

- (1) 使用 30 分鐘請休息 10 分鐘。
- (2) 未滿 2 歲幼兒不看螢幕, 2 歲以上每天看螢幕不要超過 1 小時。

# **Accessory Technical and Certification Information**

### **Power Cord Technical Information**

Laptop Model Number	FRANBP0000	
Adapter Model Number	FRANCEPH0F, FRANCEPH0Q, FRANCEPH0Z, FRANCEPH0T, FRANCEPH0G	
Input Voltage	110-240 VAC	

Output Voltage	5V-20V	PPS support
Input Current (Maximum)	1.5A	
Input Frequency	50-60hz	
Rated Output Current (Maximum)	3A	
Maximum Power	60W	Up to 65W also acceptable
No load power	<0.15W	CoC Tier 2
Protocol	USB PD 3.0	
Output current	3A	
Output receptacle	USB-C	
Input receptacle	IEC C6	non-polarized
AC cable length	1.0m	
Switcher	INN3379C-H302	Or other high efficiency switcher
PD Controller	WT6635P	Or other USB-PD 3.0 PPS controller
Dimensions	<61x61x27mm	Keeping square X/Y when reducing dimensions
Operating Lifetime	5 years	25C ambient, 80% load

## **Power Cord Certification Information**

PASS	USA, CANADA	UL+CB via UL	<ol> <li>UL 60950-1, 2nd Edition ,CAN/CSA C22.2 No. 60950-1-07, 2nd Edition</li> <li>UL 62368-1, 2nd Edition, CAN/CSA C22.2 No. 62368-1-14, 2nd Edition</li> <li>IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013</li> <li>IEC 62368-1:2014 (Second Edition)</li> </ol>
PASS	USA, CANADA	FCC + ICES	<ol> <li>47 CFR FCC Part 15, Subpart B, Class B</li> <li>ICES-003,Issue 6, Class B</li> </ol>
PASS	MEXICO	NOM	1. NOM-001 2. NOM-029
PASS	USA	NRCAN, CEC, DOE	<ol> <li>US DOE: Office of Energy Efficiency and Renewable Energy 10 CFR Parts 429 and 430</li> <li>US CEC: California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4. Appliance Efficiency Regulations, Sections 1601 through 1609</li> </ol>
PASS	EUROPE	NRCAN	Amendment 14 to the Energy Efficiency Regulations for External Power     Supplies in the Canada Gazette, Part II
PASS	Australia		<ol> <li>Quebec: O.C.1394-2018 in GAZETTE OFFICIELLE DU QUEBEC, December 12, 2018, Vol. 150, No.50</li> </ol>
PASS	Australia/NEW ZEALAND	GEMS	1. AS/NZS4665.1-2005+A1:2009 2. AS/NZS4665.2-2005+A1:2009
PASS	Australia	GEMS	1. EU COMMISSION REGULATION(EU) 2019/1782 of 1 October 2019

PASS	Australia		EU: Code of Conduct on Energy Efficiency of External Power Supplies     Version 5
PASS	UK,Germany,France,Italy,Spain, Netherland,Belgium,Austria.Irel and.Sweden,Poland,Switzerlan d,Denmark,Norway,Finland,Cze ch,Bulgaria,Croatia,Hungary,Ro mania,Slovakia,Slovenia	CE EMC	1. EN 55032:2015+AC:2016, Class B +EN 2. 55024:2010 +A1:2015 + EN55035:2017+EN 301489-1
PASS		CE LVD (CB)	1. EN 62368-1:2014 + A11:2017
PASS	Australia/NEW ZEALAND		1. AS/NZS CISPR 32 2. AS/NZS 62368.1
PASS	Taiwan	BSMI	1. CNS13438(95年版) 2. CNS14336-1(99年版) 3. CNS15663(102年版)
PASS	Singapore	PSB	1. IEC 62368-1:2014 (Second Edition)
PASS	South Korea	KCC+KC + K-MEPS via KTC	1. K60950-1 2. KN32,KN35

Framework's products are provided with the power cord and user documentation suitable for the intended country of delivery. Products that are relocated to other countries should use nationally certified power cords and plugs to ensure safe operation of the product. Contact Framework to determine if alternate power cords or user documentation in other languages is available for your market.

## **Battery Technical Information**

Framework Model Number	Description	Туре	Battery Weight (Kg)
FRANBB0000	55Wh	Rechargeable Lithium Ion	<10Kg

# **Battery Certification Information**

PASS	Global	UN38.8	UN Recommendations on transport of dangerous goods. Manual of tests and Criteria ST/SG/AC.10/11/Rev. 6/Amend.1 38.3
PASS	Global	UL2054	USR, CNR - UL2054+UL/CSA62368
PASS	Global	UL1642	USR – UL 1642 Investigation for Secondary, lithium-ion cell
PASS	Global	PI965	<ol> <li>IATA Dangerous Goods Regulation (61st Edition)</li> <li>IATA Dangerous Goods Regulation (62nd Edition)</li> <li>IMO International Maritime Dangerous Goods Code (2018)</li> </ol>

PASS	EU	Battery Directive	EU directive 2006/66/EC and its amendment
PASS	USA	REACH	Regulation (EC) No 1907/2006
PASS	Taiwan	BSMI	CNS 15364 (102)
PASS	Canada	CB-IEC	1. IEC 62133-2:2017 2. IEC 62368-1:2014
PASS		CTIA-IEE1625	Has this been Completed?
PASS		UL1642	UL2054
PASS		ROHS + HF	<ol> <li>2011/65/EU</li> <li>(EU) 2015/863</li> <li>RoHS Directive 2011/65/EU with amendment (EU) 2015/863</li> <li>IEC 62321-3-1:2013</li> <li>EN 14582:2016</li> </ol>
PASS	Korea	КС	KC62133-2(2020-07)
PASS	Japan	PSE	Has this been completed?
PASS		Electromagnetic Compatibility Directive (EMC) 2014/30/EU.	1. EN 55032:2015 + A11:2020 2. EN 55035:2017 3. EN 55024:2010 +A1:2015
PASS	Australia	RCM	4. EN 55032:2015 5. A11:2020

# **Expansion Card Technical Information**

HDMI		
SSD 250G		
SSD 1T		
MICRO SD		
USB-A		
USB-C		

# Expansion Card Certification Information- Needs to be updated per Bizlinks test results

Status:	Region	Test	Test Specification
PASS	Example: USA	BSMI	

PASS		
PASS		
PASS		

#### **DATASHEET RESPONSIBLE PARTY NAME AND ADDRESS**

Responsible Party	Address:	Website	
Framework Computer Inc	1870 Odgen Dr, Burlingame, CA 94010, USA, +1 (415) 475 3769	https://frame.work	

# **End of Life Product Disposal**

At the end of this product's life, do not dispose of this product in your general household waste. Instead, in order to prevent possible harm to the environment or human health from uncontrolled waste disposal, please dispose of this product separately in accordance with your local laws and regulations.

For more information on the separate collection systems for waste electrical and electronic equipment that are available for consumers near your home free of charge, please contact your local municipality. You can also contact the retailer from which you purchased your Framework <Product Name> as they may have recycling services or may be part of a specific recycling program.

If disposed of properly, this product will be treated in an environmentally sound manner at a licensed recycling plant and its components will be recovered, recycled or reused in the most efficient manner in compliance with the requirements of the Directive on Waste Electrical and Electronic Equipment (2012/19/EU) of 14 February, 2014 (as subsequently amended or replaced) ("2012/19/EU").

# **Battery Disposal**

Damaged or unusable batteries must be disposed of in a container specially reserved for this purpose. When disposing of the battery, follow appropriate local guidelines and regulations. For further information, contact your local solid waste authority.

## **WEEE**



The trash can symbol on the Framework Laptop or on its packaging indicates that it must not be disposed of with your other household waste, pursuant to 2012/19/EU. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service, or the shop where you purchased the product.

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