MBH-N49 SmartPhone

Product Description

Issue 02

Date 2025-05-16

Copyright © Honor Device Co., Ltd. 2025. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without

prior written consent of Honor Device Co., Ltd.

Trademarks and Permissions

HONOR and other Honor trademarks are trademarks of Honor Device Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their

respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Honor

and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all

statements, information, and recommendations in this document are provided "AS IS" without

warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made

in the preparation of this document to ensure accuracy of the contents, but all statements,

information, and recommendations in this document do not constitute a warranty of any kind,

express or implied.

The availability of this Specifications depends on the network operators in different countries or

regions. Contact your network operator for details.

Honor Device Co., Ltd.

Address: Suite 3401, Unit A, Building 6, Shum Yip Sky

Park, No. 8089, Hongli West Road, Xiangmihu Street, Futian District,

Shenzhen, Guangdong 518040, People's Republic of China

Website:

https://www.honor.com

i

Contents

1 Change Record	1
2 Product Overview	2
2.1 Introduction	2
2.2 Appearance	3
3 Hardware specification	4
4 Software specifications	17
5 Packing List	20

1 Change Record

Version	SE	Modify Content	Released Data
01	WANGDONGJIE	First Released Version	2025-01-16
02	WANGDONGJIE	Add Specification of Production	2025-05-16

2

Product Overview

2.1 Introduction

MBH-N49 is a 5G dual-card foldable smartphone independently developed by HONOR.

- Thinnest Foldable 8.8mm in thickness, 217g in weight
- 5820mAh HONOR Silicon-Carbon Battery
- Full-focal length fusion computational photography with 100X digital zoom
- Snapdragon 8 Elite, Gemini Assistant, and Gemini

Remark:

- 1. 8.8mm refers to the thickness of the Ivory White model in the folded state, 217g refers to the weight of the Ivory White model excluding the inner protective film.
- 2. The typical battery capacity is 5820mAh, and the rated battery capacity is 5690mAh.
- 3. Please refer to official website for detail information and description of product specification.

2.2 Appearance



3

Hardware specification

Item	Description
Appearance	
Shape	Foldable
Color	Dawn Gold, Reddish Brown, Black, Ivory White
Size	Ivory White Version:
	Expanded: 156.8mm (L) ×145.9mm (W) ×4.1mm (D)
	Folding: 156.8mm (L) ×74.3mm (W) ×8.8mm (D)
	Others Version:
	Expanded: 156.8mm (L) ×145.9mm (W) ×4.2mm (D)
	Folding: 156.8mm (L) ×74.3mm (W) ×9.0mm (D)
	Note: The actual dimensions may vary depending on
	the configuration, manufacturing process, and
	measurement method.
Weight	Approx. 217 g (Ivory White Version, including the battery)
	Approx. 222 g (Others Version, including the battery)
	Note: The actual weight may vary depending on the
	configuration, manufacturing process, and
	measurement method.
Battery Type	Li-ion Polymer Battery
Display	
LCD	• Screen size:
	outer screen: 6.43 inches; inner screen: 7.95 inches
	* The display screen adopts a rounded corner

Item	Description
	design. When measured according to a standard rectangle, the diagonal length of the screen is 6.43 inches for the outer screen and 7.95 inches for the inner screen (the actual viewing area is slightly smaller).
	Screen material: OLEDScreen color: True 1.07 billion colors
	• Resolution:
	External screen: 2376×1060
	Internal screen: 2352×2172
	* This resolution corresponds to a standard rectangle, and the actual screen has slightly fewer effective pixels.
	• Screen pixel density:
	external screen: 404 PPI ; internal screen: 403 PPI
	* The pixel density is calculated according to the screen size, which is an approximate value, please refer to the actual use
Touch-sensitive screen	Support multi-touch technology, support up to 10 points of touch
Network	
Network standard	5G NR/LTE TDD/LTE FDD/WCDMA /GSM
	* illustrate:
	• 5G supports NSA and SA network standards. SA is opened by depends on the network operators in different countries or regions.
	Card slots 1 and 2 can be switched to the default mobile data card at will.
	Networks and frequency bands in different regions may be different, depending on the local operator and your location (4G/5G network use, need to

Item	Description
	determine whether it is supported according to the local operator's network and related business deployment).
Frequency band	5G NR NSA/SA
	● N1:1920-1980 MHz(UL) ,2110-2170 MHz(DL)
	• N2: 1850 – 1910 MHz(UL) , 1930 – 1990 MHz(DL)
	● N3: 1710–1785 MHz(UL), 1805–1880 MHz(DL)
	● N5: 824–849 MHz(UL), 869–894 MHz(DL)
	● N7: 2500–2570 MHz(UL), 2620–2690 MHz(DL)
	● N8: 880–915 MHz(UL), 925–960 MHz(DL)
	● N12: 699 MHz–716 MHz(UL), 729 MHz–746 MHz(DL)
	● N20: 832–862 MHz(UL), 791–821 MHz(DL)
	● N25: 1850 MHz–1915 MHz(UL),1930 MHz–1995 MHz(DL)
	● N26: 814 MHz – 849 MHz(UL),859 MHz – 894 MHz(DL)
	• N28:703-748 MHz (UL) , 758-803 MHz (DL)
	● N38:2570MHz-2620MHz
	● N40:2300-2400 MHz
	● N41:2496-2690 MHz
	● N48: 3550-3700 MHz
	● N66: 1710 – 1780 MHz(UL), 2110 - 2200 MHz(DL)
	● N71: 663 – 698 MHz(UL), 617–652 MHz(DL)
	● N75: 1432 – 1517 MHz(DL)
	● N77:3300-4200 MHz
	● N78:3300-3800 MHz
	● N79:4400-5000 MHz
	4G TDD-LTE

Item	Description
iteiii	• TDD-LTE B34: 2010–2025 MHz
	• TDD-LTE B38: 2570–2620 MHz
	● TDD-LTE B39: 1880–1920 MHz
	● TDD-LTE B40: 2300–2400 MHz
	● TDD-LTE B41: 2496–2690 MHz
	● TDD-LTE B42: 3400–3600 MHz
	● TDD-LTE B48: 3550–3700 MHz
	4G FDD-LTE
	● FDD-LTE B1: 1920–1980 MHz(UL), 2110–2170 MHz(DL)
	● FDD-LTE B2: 1850 – 1910MHz(UL), 1930–1990MHz(DL)
	● FDD-LTE B3: 1710–1785 MHz(UL), 1805–1880 MHz(DL)
	● FDD-LTE B4: 1710 – 1755MHz(UL), 2110–2155MHz(DL)
	• FDD-LTE B5: 824 – 849MHz(UL), 869 – 894MHz(DL)
	● FDD-LTE B7: 2500– 2570MHz(UL), 2620–2690MHz(DL)
	● FDD-LTE B8: 880 – 915MHz(UL), 925 – 960MHz(DL)
	● FDD-LTE B12: 699 – 716MHz(UL), 729 – 746MHz(DL)
	● FDD-LTE B13: 777 – 787MHz(UL), 746 – 756MHz(DL)
	● FDD-LTE B17: 704 – 716MHz(UL), 734 – 746MHz(DL)
	• FDD-LTE B18: 815- 830MHz(UL), 860 - 875MHz(DL)
	• FDD-LTE B19: 830– 845MHz (UL), 875– 890MHz(DL)
	● FDD-LTE B20: 832 – 862MHz(UL), 791 – 821MHz(DL)
	● FDD-LTE B25: 1850 – 1915MHz(UL), 1930 –

Item	Description
	1995MHz(DL)
	● FDD-LTE B26: 814 – 849MHz(UL), 859 –
	894MHz(DL)
	● FDD-LTE B28: 703 – 748MHz(UL), 758 – 803MHz(DL)
	● FDD-LTE B32: 1452 – 1496MHz(DL)
	● FDD-LTE B66: 1710 – 1780MHz(UL), 2110 – 2200MHz(DL)
	● FDD-LTE B71: 663 MHz – 698 MHz(UL),617 MHz – 652 MHz(DL)
	3G WCDMA
	● WCDMA B1: 1920–1980 MHz(UL), 2110–2170 MHz(DL)
	● WCDMA B2: 1850–1910 MHz(UL), 1930–1990 MHz(DL)
	● WCDMA B4: 1710–1755 MHz(UL), 2110–2155 MHz(DL)
	• WCDMA B5: 824–849 MHz(UL), 869–894 MHz(DL)
	• WCDMA B6: 830–840 MHz(UL), 875–885 MHz(DL)
	• WCDMA B8: 880–915 MHz(UL), 925–960 MHz(DL)
	● WCDMA B19: 830 – 845MHz(UL), 875 – 890MHz(DL)
	2G GSM
	• GSM B2: 1850–1910 MHz(UL), 1930–1990 MHz(DL)
	• GSM B3: 1710–1785 MHz(UL), 1805–1880 MHz(DL)
	• GSM B5: 824–849 MHz(UL), 869–894 MHz(DL)
	● GSM B8: 880–915 MHz(UL), 925–960 MHz(DL)
Maximum transmit	5G NR
power	• N1: 21-25dBm (Power Class 3)
	• N2: 21-25dBm (Power Class 3)

Item	Description
	• N3: 21-25dBm (Power Class 3)
	● N5: 21-25dBm (Power Class 3)
	● N7: 21-25dBm (Power Class 3)
	● N8: 21-25dBm (Power Class 3)
	• N12: 21-25dBm (Power Class 3)
	• N20: 21-25dBm (Power Class 3)
	● N25: 21-25dBm (Power Class 3)
	• N26: 21-25dBm (Power Class 3)
	● N28: 20.5-25dBm (Power Class 3)
	• N38: 21-25dBm (Power Class 3)
	• N40: 21-25dBm (Power Class 3)
	• N41: 21-25 dBm (Power Class 3), 23-28dBm (Power class2)
	● N66: 21-25dBm (Power Class 3)
	● N71: 20.5-25dBm (Power Class 3)
	• N77: 20-25 dBm (Power Class 3), 23-28dBm (Power class2)
	• N78: 20-25 dBm (Power Class 3), 23-28dBm (Power class2)
	• N79: 20-25 dBm (Power Class 3), 23-28dBm (Power class2)
	4G TDD-LTE
	● TDD -LTE B34: 21–25 dBm(Power Class 3)
	● TDD -LTE B38: 21–25 dBm(Power Class 3)
	● TDD -LTE B39: 21–25 dBm(Power Class 3)
	● TDD -LTE B40: 21–25 dBm(Power Class 3)
	TDD -LTE B41: 21-25 dBm (Power Class 3), 24-28dBm (Power class2)
	• TDD -LTE B42: 20-25 dBm (Power Class 3)
	● TDD -LTE B48: 20-25 dBm (Power Class 3)

Item	Description
	4G FDD-LTE
	● FDD-LTE B1: 21–25 dBm(Power Class 3)
	● FDD-LTE B2: 21–25 dBm(Power Class 3)
	● FDD-LTE B3: 21–25 dBm(Power Class 3)
	● FDD-LTE B4: 21–25 dBm(Power Class 3)
	● FDD-LTE B5: 21–25 dBm(Power Class 3)
	● FDD-LTE B7: 21–25 dBm(Power Class 3)
	● FDD-LTE B8: 21–25 dBm(Power Class 3)
	● FDD-LTE B12: 21–25 dBm(Power Class 3)
	● FDD-LTE B13: 21–25 dBm(Power Class 3)
	● FDD-LTE B17: 21–25 dBm(Power Class 3)
	● FDD-LTE B18: 21–25 dBm(Power Class 3)
	● FDD-LTE B19: 21–25 dBm(Power Class 3)
	● FDD-LTE B20: 21–25 dBm(Power Class 3)
	● FDD-LTE B25: 21–25 dBm(Power Class 3)
	● FDD-LTE B26: 21–25 dBm(Power Class 3)
	● FDD-LTE B28: 20.5–25 dBm(Power Class 3)
	● FDD-LTE B66: 21–25 dBm(Power Class 3)
	● FDD-LTE B71: 20.5–25 dBm(Power Class 3)
	3G WCDMA
	• WCDMA B1: 21–25 dBm(Power Class 3)
	• WCDMA B2: 21–25 dBm(Power Class 3)
	• WCDMA B4: 21–25 dBm(Power Class 3)
	• WCDMA B5: 21–25 dBm(Power Class 3)
	• WCDMA B6: 21–25 dBm(Power Class 3)
	• WCDMA B8: 21–25 dBm(Power Class 3)
	● WCDMA B19: 21–25 dBm(Power Class 3)
	2G GSM
	● GSM B2: 28–32 dBm(Power Class 1)

Item	Description
	● GSM B3: 28–32 dBm(Power Class 1)
	● GSM B5: 31–35 dBm(Power Class 4)
	● GSM B8: 31–35 dBm(Power Class 4)
Static sensitivity	5G NR
	■ N1: better than-96.5 dBm/20MHz
	■ N2: better than-91.8dBm/20MHz
	● N3: better than-91.6 dBm/30MHz
	● N5: better than-86.8dBm/20MHz
	● N7: better than-91.8 dBm/20MHz
	● N8: better than-85.8dBm/20MHz
	● N12: better than-84.0dBm/15MHz
	• N20: better than-89.8dBm/20MHz
	• N25: better than-90.3dBm/20MHz
	● N26: better than-87.6dBm/20MHz
	● N28: better than-90.8 dBm/20MHz
	● N38: better than-96.5 dBm/20MHz
	• N40: better than-87.6 dBm/80MHz
	● N41: better than-87.4 dBm/100MHz
	• N48: better than-95.4 dBm/10MHz
	● N66: better than-93.3dBm/20MHz
	● N71: better than-87.3 dBm/20MHz
	● N75: better than-93.8dBm/20MHz
	● N77: better than-87.8 dBm/100MHz
	● N78: better than-87.8 dBm/100MHz
	● N79: better than-87.8dBm /100MHz
	4G TDD -LTE
	● TDD -LTE B34: better than - 96.3 dBm/10 MHz
	● TDD -LTE B38: better than - 96.3 dBm/10 MHz
	● TDD -LTE B39: better than - 96.3 dBm/10 MHz

Item	Description
	● TDD -LTE B40: better than - 96.3 dBm/10 MHz
	● TDD -LTE B41: better than - 94.3 dBm/10 MHz
	● TDD -LTE B42: better than - 96.0dBm/10 MHz
	● TDD -LTE B48: better than – 95.0dBm/10 MHz
	4G FDD-LTE
	● FDD-LTE B1: better than - 96.3 dBm/10 MHz
	● FDD-LTE B2: better than - 94.3 dBm/10 MHz
	● FDD-LTE B3: better than - 94 dBm/10 MHz
	● FDD-LTE B4: better than - 96.3 dBm/10 MHz
	● FDD-LTE B5: better than - 94.3 dBm/10 MHz
	● FDD-LTE B7: better than - 94.3 dBm/10 MHz
	● FDD-LTE B8: better than - 93.3 dBm/10 MHz
	● FDD-LTE B12: better than - 94 dBm/10 MHz
	● FDD-LTE B13: better than - 94 dBm/10 MHz
	● FDD-LTE B17: better than - 94 dBm/10 MHz
	● FDD-LTE B18: better than - 96.3 dBm/10 MHz
	● FDD-LTE B19: better than - 96.3 dBm/10 MHz
	● FDD-LTE B20: better than - 93.3 dBm/10 MHz
	● FDD-LTE B25: better than – 94 dBm/10 MHz
	● FDD-LTE B26: better than - 94.8 dBm/10 MHz
	● FDD-LTE B28: better than - 94.8 dBm/10 MHz
	● FDD-LTE B32: better than – 94 dBm/10 MHz
	● FDD-LTE B66: better than – 96.5 dBm/10 MHz
	● FDD-LTE B71: better than -94.2 dBm/10 MHz
	3G WCDMA
	● WCDMA B1: better than –106.7 dBm/3.84 MHz
	● WCDMA B2: better than –104.7 dBm/3.84 MHz
	● WCDMA B4: better than -106.7 dBm/3.84 MHz
	● WCDMA B5: better than -104.7 dBm/3.84 MHz

Item	Description
	● WCDMA B6: better than –106.7 dBm/3.84 MHz
	● WCDMA B8: better than –103.7 dBm/3.84 MHz
	● WCDMA B19: better than -106.7dBm/3.84MHz
	2G GSM
	● GSM B2: better than -102 dBm/200 kHz
	● GSM B3: better than -102 dBm/200 kHz
	● GSM B5: better than -102 dBm/200 kHz
	● GSM B8: better than -102 dBm/200 kHz
Network rate	5G NR
	• UL: 1.2Gbit/s (Maximum speed in theory)
	• DL: 6.5Gbit/s (Maximum speed in theory)
	4G TDD-LTE
	• UL: Cat 18, 200Mbit/s (Maximum speed in theory)
	• DL: Cat 19, 1.6Gbit/s (Maximum speed in theory)
	4G LTE FDD
	● UL: Cat 18, 200Mbit/s
	• DL: Cat 20, 2.0Gbit/s
	3G WCDMA
	• HSDPA Cat 24: 42 Mbit/s(DL)
	• HSUPA Cat 6: 5.76Mbit/s(UL)
	• WCDMA: 384 Kbit/s(UL), 384 Kbit/s(DL)
	2G GPRS/EGPRS
	• EDGE Class 12: 236.8Kbit/s(UL), 236.8Kbit/s(DL)
	• GPRS: 80Kbit/s(UL), 80Kbit/s(DL)
LTE-NR DC	Refer to 《MBH CA & ENDC》
CA	MBH-N49 CA & ENDC 2025-05-12.xlsx
QAM	UL: 256QAM

Item	Description		
	DL: 256QAM		
Storage			
Memory	16GB RAM +512GB ROM		
	Note: The available internal storage may be smaller as part of the internal storage is occupied by phone software.		
External memory support	Not Support		
System			
Processor	CPU: Qualcomm Snapdragon 8 Elite Mobile Platform		
	Prime core, up to 4.32 GHz		
	Performance cores, up to 3.53 GHz		
	GPU: Adreno 830		
Device control	Power key; Volume up button; Volume down button		
External interface	Headset type: Type-C		
	Data interface: Type-C USB		
SIM card interface	Applicable to dual cards		
	Card slot 1: nano-SIM card / e-SIM card		
	Card slot 2: nano-SIM card / e-SIM card		
	*eSIM requires a wireless service plan and allows you to activate a mobile network plan without the use of a Nano SIM. eSIM availability may vary depending on country and carrier.		
e-SIM card	Supported		
Transmission function			
GPS	• GPS (L1 + L5 Dual band)		
	• AGPS		
	• GLONASS L1c		

Item	Description				
	● Beidou(B1I+B1C+B2a Tri-band)				
	• GALILEO (E1 + E5a Dual band))				
	• QZSS (L1 + L5 Dual band))				
Wi-Fi	WIFI7				
	• 2.4GHz: 802.11 b/g/n/ax/be, MIMO				
	• 5GHz: 802.11 a/n/ac/ax/be, MIMO				
	● 6GHz: 802.11 ax/be, MIMO				
USB	Type-C, USB 3.1				
Bluetooth	Bluetooth 6.0, Support Bluetooth Low Energy, SBC, AAC, LDAC, aptX, aptX HD, AptX-Adaptive are supported.				
NFC	Supported				
Sensors	Infrared sensor				
	Fingerprint sensor				
	Proximity light sensor				
	Ambient light sensor				
	Gravity sensor				
	• Compass				
	Gyroscope				
	Hall sensor				
	Color temperature sensor				
	Barometer sensor				
Others					
Camera	Front camera:				
	• 20MP Wide Camera (f/2.2) (Interior screen)				
	• 20MP Wide Camera (f/2.2) (Exterior screen)				
	Rear camera:				
	• 50MP Ultra Wide Camera (f/2.0)				

Item	Description		
	● 50MP Wide Camera (f/1.6), OIS		
	• 64MP Telephoto Lens Camera (f/2.5), OIS		
	* The photo pixels of different camera modes may be different, please refer to the actual situation.		
FM	Not support		
Battery TBD	• Capability: 5820mAh (Typical value), 5690mAh (Rated value)		
	• Theoretical Charging Time: About 43Mins (Note: Laboratory data is generated by charging using the Honor Super charger with the screen off. The actual charging time may vary depending on usage.)		
Power supply	● Input: 100-240V 1.8A ● Output: Max 66W		
Temperature	 Operating temperature: 0°C- 35°C Warehouse temperature: -20°C- +45°C 		
Relative humidity	5%-95%		
Water and Dust Resistance	IP58 & IP59		
Certification	EMVCo, GCF, CE, BQB, Wi-Fi, RoHS, WEEE, REACH, ERP		

4

Software specifications

Item	Description		
System			
Operating system	MagicOS 9.0.1 (Based on Android 15)		
Home screen	MagicOS 9.0.1		
Browser	Chrome browser		
Input method	GBoard		
5G Voice resolution	● VoNR EPSFB		
4G Voice resolution	VolteVoWiFiCSFBVilte		
Voice codec	 Volte: AMR-WB/AMR-NB WCDMA: AMR-WB/AMR-NB GSM: FR/EFR/HR/FR AMR/HR AMR Note: The availability of EVS depends on the networ operators in different countries or regions. 		
Entertainment			
Messaging	• SMS • MMS		

Item	Description			
Email	Support(POP3/IMAP/Exchange)			
Multi-media	• Audio File Format: mp3, mp4, 3gp, ogg, amr, aac, flac, wav			
	• Video File Format: 3gp, mp4			
	● Image File Format: png, gif, jpg, bmp, webp, wbmp			
Streaming media	• File format: 3gp, mp4			
Sound effect	• Speaker: Dual Speaker, supports stereo			
	• MIC: 3 MIC			
Shooting function				
Camera & Video	Rear Camera:			
resolution	• 50MP Ultra Wide Camera (f/2.0)			
	• 50MP Wide Camera (f/1.6), OIS			
	64MP Telephoto Lens Camera (f/2.5), OIS			
	Video: Up to 2160×3840 pixels			
	Photo: Up to 6912×9216 pixels			
	Front Camera:			
	• 20MP Wide Camera (f/2.2) (Interior screen)			
	• 20MP Wide Camera (f/2.2) (Exterior screen)			
	Video: Up to 2160 × 3840 pixels			
	Photo: Up to 3840 × 5120 pixels			
	* The photo pixels of different camera modes may be different, please refer to the actual situation. The video pixels of different shooting modes may be different, please refer to the actual situation.			
Shooting mode	Rear camera: Al Super Zoom, Artistic, Film Simulation, Moving Photo, Time-lapse, Al photography, Super Wide Angle, Aperture, Multi-Video, Night shot, Portrait mode, Photo, Pro mode, Video, Slow-Mo, Panorama, STORY, Filter, WATERMARK, SCAN			

Item	Description			
	DOCUMENT, Capture smiles, Timer, HIGH-RES			
	 Front camera: Portrait, Filter, Watermark, Capture smiles, Mirror reflection, Timer, Night, Gesture control 			
Video Shooting	Rear camera: supports 4K video recording			
	• Front camera: supports 4K video recording			
Focus mode	• Front camera: Fixed focal length (FF)			
	• Rear camera: Autofocus (AF)			
Flash	• Front camera: Not supported			
	• Rear camera: High-brightness flash			
Photo and video	• Capture file format: *.png, *.gif, *.jpg, *.bmp			
	• Recording file format: *.3gp, *.mp4			
Others				
Transmission	• Wi-Fi hotspot			
function	• Wi-Fi Direct			
Other function	HONOR Docs, HONOR Notes, Magic Text, Smart Multi-window, App Extender, One-swipe Split,			
	Horizontal Split,			
Software update	HONOR OTA online update			
USB function	• USB OTG			
	• USB charging			

Packing List

Index	Item	Count	Description
1	Mobile phone (with built-in battery)	1	Standard
2	Quick Start Guide	1	Standard
3	Type-C cable	1	Standard
4	Warranty Card	1	Dependent on market
5	Eject tool	1	Standard
6	Inner screen protective film	1	Attached on the phone before delivery
7	External screen protector film	1	Attached on the phone before delivery
8	PU Protective cover	1	Standard

Remarks: The final product shall prevail