DORLAND®

Industrial Intrinsically Safe 5G Smartphone

Versatile_5G PRO

5G
Thermal Imaging
DORLAND®
Your safety is our misson
DORLAND

Ex-mark: Ex ib IIC T4 Gb / Ex ib IIIC T130°C Db

IP Grade: IP68 (1m underwater for 1 hour)

Product Advantages

6.583-inch IPS
1080*2408 FHD+

Operating System
Android 13.0

12GB+256GB
Support extended memory

Explosion-proof Battery
10800mAh

Thermal Imaging
−10°C~+150°C (High Gain)
100°C~+550°C (Low Gain)

Front Camera 32MP
Rear Camera:
50MP+24MP+8MP

Fingerprint+Face
Double Unlock System

GPS + Galileo
+ Glonass + Beidou

Your safety is our mission

1 Explosion protection range

Suitable for Zone 1&2 of the explosive hazardous zone

2 Waterproof/Dustproof

Waterproof/Dustproof-IP68 (1m underwater for 1hour)

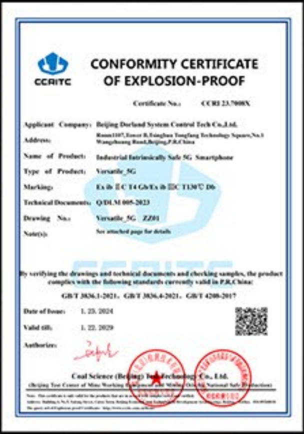
3 Shockproof

Withstand a drop test of 1.5m height to the floor

4 Anti-rolling

Withstand the rolling of 1.5 tons car

Certification authority



CONFORMITY CERTIFICATE OF EXPLOSION-PROOF

Certificate No.: CCRI 23.7008X

Applicant Company:	Beijing Dorland System Control Tech Co.,Ltd.
Address:	Room1107,Tower B,Tsinghua Tongfang Technology Square,No.1 Wangzhuang Road,Beijing,P.R.China
Name of Product:	Industrial Intrinsically Safe 5G Smartphone
Type of Product:	Versatile_5G
Marking:	Ex ib ⅡC T4 Gb/Ex ib ⅢC T130℃ Db
Technical Documents:	Q/DLM 005-2023
Drawing No.:	Versatile_5G ZZ01
Note(s):	See attached page for details

By verifying the drawings and technical documents and checking samples, the product complies with the following standards currently valid in P.R.China:

GB/T 3836.1-2021、GB/T 3836.4-2021、GB/T 4208-2017

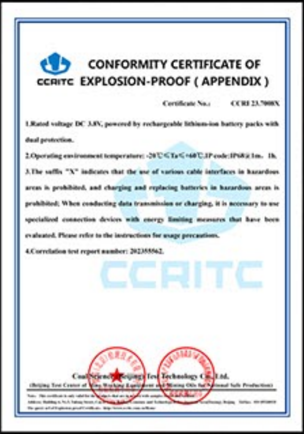
Date of Issue: 1. 23. 2024

Valid till: 1. 22. 2029

Authorize:

Coal Science (Beijing) Test Technology Co., Ltd.

(Beijing Test Center of Mine Working Equipment and Mining Oils for National Safe Production)



CONFORMITY CERTIFICATE OF EXPLOSION-PROOF (APPENDIX)

Certificate No.: CCRI 23.7008X

1.Rated voltage DC 3.8V, powered by rechargeable lithium-ion battery packs with dual protection.

2.Operating environment temperature: -20℃≤Ta≤+60℃;IP code:IP68@1m、1h.

3.The suffix "X" indicates that the use of various cable interfaces in hazardous areas is prohibited, and charging and replacing batteries in hazardous areas is prohibited; When conducting data transmission or charging, it is necessary to use specialized connection devices with energy limiting measures that have been evaluated. Please refer to the instructions for usage precautions.

4.Correlation test report number: 202355562.

Coal Science (Beijing) Test Technology Co., Ltd.

(Beijing Test Center of Mine Working Equipment and Mining Oils for National Safe Production)

5G Full Netcom

Global Frequency Band

2G GSM: B2/3/5/8

3G WCDMA: B1/2/4/5/6/8/19

CDMA: BC0/BC1/BC10

4G FDD: B1/2/3/4/5/7/8/12/17/18/19/20/25/26/28A/28B/66

TDD: B34/38/39/40/41

5G NR: N1/N3/N7/N28/N38/N41/N77/N78/N79

Powerful Chip

It delivering lightning-fast speed
and seamless multitasking
for a smooth user experience.

5G
MediaTek
Dimensity 1080

CPU Model:
MTK Dimensity 1080 Octa Core 2.6GHz
Feature:
2×Cortex A78 2.6GHz + 6×Cortex A55 2.0GH
Framework: ARM Cortex A78 / Cortex A55
Technology: 6nm
GPU Model: Arm Mali-G68 MC4

Upgraded Memory

- **RAM:**

  12GB + Up to 8GB Extended RAM
  It making multitasking a breeze

- **ROM:**

Base ROM: 256GB
With the option to expand its storagecapacity by utilizing a T-flash card, you can add up to a staggering 2TB of additional storage

High-capacity Battery

10800 mAh

37 Days
Standby

3-4 Days
Normal Use

53 Hours
Calling

33 Hours
Music Playing

18 Hours
Video Watching

17 Hours
Web Browsing

High profile camera lenses

32MP
Front Camera

24MP
Night Vision Camera

8MP
Fusion Camera

50MP
Rear Main Camera

Temperature can be seen

Versatile_5G PRO	Thermal Imaging Camera
Sensor	Tiny1-C
Spectral Range	8~14μm
Pixel Size	256×192
Pixel Spacing	12μm
NETD	<50mK@25°C, F#1.0, 25Hz
Thermal Time Constant	<10ms
Detector Frame Rate	≤25Hz
Image Output	10bit/14bit
Measuring Range	Industrial temperature measurement: -10°C~+150°C (high gain) 100°C~+550°C (low gain) Biological temperature measurement: 30°C~45°C
Thermometric Accuracy	Industrial temperature measurement: ±2°C or ±2% of reading Biological temperature measurement: ±0.5°C

Temperature Measuring Distance	Industrial temperature measurement: ≤5m (3.2mm lens) Biological temperature measurement: ≤3m (3.2mm lens)

Suitable for various industrial and daily detection scenarios

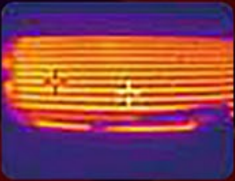
Invisible hazards, visible through thermal imaging!

Electric-diagnosis

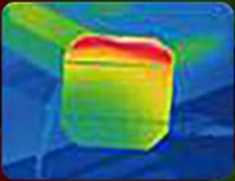
Hvac maintenance

Fire-fighting operation

Equipment maintenance



Car Repair



Electronic electrician

Pipeline inspection

Machine room inspection

Large-screen + Anti-damage

6.583'' FHD+

- 6.583-inch IPS Waterdrop screen 90Hz
- Screen-to-body ratio: 85%
- 16.7 million colors
- 1080*2408 FHD+
- 20:9
- Peak Brightness: 480cd/m²
- Pixel density: 401ppi

Anti-damage & Anti-scratch

CORNING GORILLA GLASS
Corning Gorilla Glass

Double unlock system

You can unlock your phone immediately at a slight fingertip press.

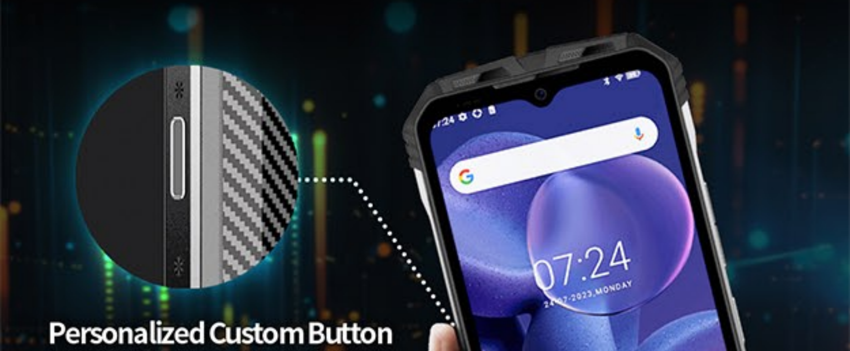
0.19S
Response Speed

Capacitance
Touch Sensor

360°
Identification Angle

508DPI
Scanning Resolution

Personalized Custom Button



Personalized Custom Button

With just one click, double click, or long press, you can effortlessly navigate to the functions you need most.

[One Click] [Double Click] [Long Press]

Play Store
Camera

Multiple position navigation

Supports multiple positioning and navigation

- GPS
- GALILEO
- GLONASS
- BEIDOU

Digital Toolkit

Compass
Sound Meter
Pic Hanging
Gradienter
Height Measure
Magnifier
Protractor
Plumb Bob
Alarm Bell
Flashlight
Pedometer
Mirror

NFC/BT5.2/WiFi6

NFC

BT5.2

WiFi6
WiFi6

Opening the Era of Digital Office

"Match a variety of intelligent management and control systems

ERP
SCADA
MES
OA
VP690

suitable for hazardous explosion environment

It is especially suitable for hazardous explosion environment, such as petroleum, chemical, natural gas, pharmaceutical, utility&power, coal mining, metallurgy, off shore, marine shipping and other dangerous places with combustible and explosive gas, which is convenient for users to communicate with production and scheduling in time.

PHARMACEUTICAL

This product is widely used in scenarios such as [Point-to-point intercom in dangerous places],[Secure Mobility Solution],[Personnel location & Safety management], [Patrol inspection of petrochemical hazardous areas].

Point-to-point intercom in dangerous places

Secure Mobility Solution

Personnel location Safety management

Patrol inspection of petrochemical hazardous areas

Hex-vision images

5G
Thermal Imaging
DORLAND
Your safety is our misson
DORLAND

Specification Parameter

Product Certificate

Ex-mark: Ex ib IIC T4 Gb / Ex ib IIIC T130°C Db
Certification No.: CCRI 23.7008X
Protection Grade: IP68

Product Overview

Unit weight (including battery): 390g
Dimensions: 178.46*83.1*17.89mm
Operating system: Android 13.0

Processor

CPU Model: MTK Dimensity 1080 Octa Core 2.6GHz
Feature: Octa Core 2×Cortex A78 2.6GHz + 6×Cortex A55 2.0GHz
Framework: ARM Cortex A78 / Cortex A55
Technology: 6nm
GPU Model: Arm Mali-G68 MC4

Video

Video encode: FHD+(21:9)@120fps
MPEG-4 : 720 x 480@30 fps
H.263 : 640 x 480@30 fps
H.264/265 : 4K/2K@30fps

Video decode: MPEG-4 : 1080p@60 fps/60 Mbps
H.263 : 1080p@60 fps/60 Mbps
H.264/265/VP-9 : 4K/2K@30 fps/100Mbps

Network

Network: Global frequency band
Frequency: GSM : B2/3/5/8
WCDMA : B1/2/4/5/6/8/19
CDMA : BC0/BC1/BC10
FDD : B1/2/3/4/5/7/8/12/17/18/19/20/25/26/28A/28B/66
TDD : B34/38/39/40/41
NR : N1/N3/N7/N28/N38/N41/N77/N78/N79
EDGE/GPRS: SUPPORT

Storage

Memory: 12GB RAM (Extended RAM : 3GB/5GB/8GB) +256GB ROM UFS2.2+LPDDR4X
SIM Card Type: SUPPORT Nano Sim card + Nano Sim card + T card (choose two from three)
Memory Card Type: T-flash card
Expanded Memory: Up to 2TB

Camera

Front Camera 32MP

Sensor: SONY IMX616-AAJH5-CM
Sensing area: 1/2.7inch 5P
Pixel area: 32M (6560*4928)
Aperture: F/2.0±5%
Optical zoom: N/A

Field of view angle: 83.84°
Focus mode: FF
Flash led: N/A
Software function: Video、Picture、UHD、Gif、Filter、Beauty、Brand watermark、Mirror

Rear Main Camera 50MP

Sensor: SONY IMX766
Sensing area: 1/1.5 inch 7P
Pixel area: 50M (8192*6144)
Aperture: F/1.8±5%
Optical zoom: N/A
Field of view angle: 85.5°(Diag)

Focus mode: PDAF
Flash led: Support
Software function: HDR, AI, Water Mark, Night Vision, Video, Picture, UHD, Night Mode, Pro Mode, Potrait, Gif, Panorama, Intelligent Scanning

Night Vision Camera 24MP

Sensor: OmniVision OV24A1B-rev-1B
Sensing area: 1/2.83inch 6P
Pixel area: 24M (5664*4248)
Aperture: F/1.8±5%
Optical zoom: N/A

Field of view angle: 78°(Diag)
Focus mode: AF
Flash led: Support
Software function: Video、Picture

Fusion camera 8MP

Sensor: Sumsung S5K4H8YX
Sensing area: 1/4inch 5P
Pixel area: 8M (3264*2448)
Aperture: F/1.8±5%
Optical zoom: N/A
Field of view angle: 81.5°(Diag)

Focus mode: N/A
Flash led: N/A
Software function: Global temperature measurement, temperature measurement parameters, image mode, regional temperature measurement, temperature ruler, photography, video recording, delayed photography, thermometer mode

Thermal imaging camera

Sensor: Tiny1-C
Spectral range: 8~14 μm
Pixel size: 256*192
Pixel spacing: 12 μm
NETD: <50mK@25°C, F#1.0, 25Hz
Thermal time constant: <10ms
Detector frame rate: ≤25Hz
Image output: 10bit/14bit
Measuring range: Industrial temperature measurement: -10°C~+150°C (high gain) 100°C~+550°C (low gain)
Biological temperature measurement: 30°C~45°C
Thermometric accuracy: Industrial temperature measurement: ± 2°C or ± 2% of reading
Biological temperature measurement: ± 0.5°C
Temperature measuring distance: Industrial temperature measurement: ≤ 5m (3.2mm lens)
Biological temperature measurement: ≤ 3m (3.2mm lens)

Mobile phone display

Screen color: 16.7 million colors
Type: in-cell
Resolution: 1080*2408 FHD+
Pixel density: 401PPI
Screen aspect ratio: 20:9

Screen-to-body ratio: 85%
Brightness: 400cd/m²/(TYP) Peak Brightness 480cd/m²
Screen contrast: 1500:1(TYP)
Size & Technology: 6.583-inch IPS Waterdrop screen
90Hz refresh rate

Touch panel

Panel technology: Capacitive touch
IC: FT8722
Sensor technology: Excel Architecture

Material: GG3
Fitting method: Full fit

Transmission function

Navigation: Beidou,Galileo,Glonass,GPS (4 out of 4)
WIFI: Wi-Fi6(ax/ac/a/b/g/n)
Bluetooth: BT5.2

FM: Support
OTG: Support (Support reverse charging)
NFC: Support

Sensor

G-sensor: Support
Proximity sensor: Support
Ambient light senor: Support

Compass (magnetic): Support
Geomagnetism: Support
Gyroscope: Support

Hall switch: N/A
Infrared remote control: N/A
HotKnot: N/A

Unlock method

Fingerprint location: Side fingerprint
Face recognition: Support
Sensor: SW9022

Coating: Fuel injection
With or without metal ring: Yes
Responding speed: <0.2s

Recognition angle: 360° recognizable
Induction method: Capacitive sensor
Spatial resolution: 508DPI

Hardware features

Wireless charge: N/A
Hard coulometer: Support
Sound Amplifier: Smart PA AW88261

Physical buttons

Power button: Support
Volume button: Support
Custom key function: Support

Virtual buttons

Home button: Support
Menu button: Support
Return button: Support

Electric acoustic devices

Mic: Silicon MIC, dual mic noise reduction
Notify light: Support
Buttun LED: N/A

Speaker: 1216 speaker BOX, dual speaker, stereo surround sound
Motor: 1027 flat motor
Receiver: 0809 cartridge earpiece

Battery

Capacity: 10800mAh
Fully charge and discharge frequency: 500 times
Material: Lithium cobalt oxide

Voltage: 3.8V
Discharge coefficient: MAX 1.2C
Battery density ratio: 680Wh/L

Port

Headphone port: Type-c
Charger interface: Type-c

Housing

Housing structure: Two-shot injection
Housing material: PC+10% fiber+TUP90 degree+aluminum alloy
Housing color: Wood grain+vermilion color, vermilion color

System function

Smart gesture: Three finger screenshot, three finger access to camera, two finger adjustment of volume, double tap to wake up, unlock, alarm clock flipping mute, sliding to unlock bright screen, palm shaking at the distance sensor position of the phone to unlock

System navigation: Gesture navigation, "3 button" navigation
Supported languages: Support multiple languages
Air gesture: N/A
Communication somatosensory: N/A
System somatosensory: N/A

Entertainment features

Video playback: avi, mp4, 3gp, 3g2, 3gpp, 3gpp2, m4v, flv, f4v, webm, wmv, asf, mov, qt, ts , m2ts, mts, mkv
Video produce: Highest support @30fps video shooting

Audioplayer: MP3, M4A, AAC, MKA, AMR, WMA/RA
Graphic format: JPEG, BMP, GIF, PNG, etc.
Game: Support
Applications: Support

Other software

Software Toolbox: Compass, Noise test, Pic Hanging, Gradienter, HeightMeasure, Magnifier, Protractor, Plumb Bob, Alarm bell, Flashlight, Pedometer

Market: Support
Share: Support
Privacy protection, visitor mode: N/A

Package Contents (Standard)

Cellphone×1
Charger×1
Type-C Port Cable×1
Tempered film (Posted on the screen) ×1
Card Slot Opener×1
Packing box×1
Manual×1