

# HUGEROCK S50 Version:2021

RUGGED PDA  
4.5 Inch T9 Keyboard Mobile Handheld

S50(2021) intelligent terminal is ideal for highly mobile outdoor and field workers in markets like logistics, construction, mine, military, field sales and the public sector. It meets MIL-STD-810G and IP65 standards for durability and protection against dirt, dust, water, motion, vibration, temperature and other factors that would quickly damage an industrial-grade handheld device. It can withstand up to a 1.8m drop and 2 ton shock pressure test. It also comes with a suite of integrated features including an UHF RFID, 1D/2D barcode scanner, high precision GNSS. Also it goes with a long-life 5000mAh battery sunlight-readable, and operating under extreme low temperature.

- All-mode  
Full Bands
- 5000mAh  
Safety Battery
- 1.8m  
Drop-proof
- 13M  
Camera
- T9  
Keyboard
- GNSS  
GPS+Beidou+Glonass  
+AGPS+SBAS



Shenzhen SOTEN Technology Co., LTD  
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## APPEARANCE



- 1. Power button
- 2. Scan button
- 3. MIC
- 4. Barcode scanner (optional)
- 5. earphone (Sealed Cover)
- 6. light sensation
- 7. Handset
- 8. charge lamp
- 9. Home
- 10. Arrow and confirm Button
- 11. Menu Button
- 12. Back Button
- 13. Number Button
- 14. Power ON/OFF
- 15. \* Button
- 16. # Button
- 17. 2pin pogo pin
- 18. Type-C (Sealed Cover)
- 19. Volume up
- 20. Volume Down
- 21. main camera (optional)
- 22. Function box(optional)
- 23. Nameplate
- 24. Speaker
- 25. battery

Order No : 5021Y      Order No : 5021G      Order No : 5021R



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## SPECIFICATION

Model : S50(2021)

Hardware		Communications & Networking	
CPU	ARM A73 2.0GHz Octa-core	Phone Call	GSM /WCDMA/CDMA 1X/VoLTE
GPU	ARM Mali-G72 MP3	2G	GSM/CDMA 1X/EDGE/GPRS/WAP
RAM	4GB	2G Band	GSM (B2/3/5/8)
Internal Memory	32GB ROM	3G	WCDMA 3.75G/HSDPA+42.2Mbps, HSUPA+11.5Mbps), EVDO
External Memory	Micro SD card(T-FLASH card), max 256GB	3G Band	WCDMA (B12/5/8), Evdo: BCD/BC1 CDMA: BCO/BC1
Main Camera	13.0MP(AF) with flash led	4G	FDD: 150Mbps down, 50Mbps UP TDD: 150Mbps downlink, 50Mbps uplink
Sub Camera	N/A	4G Band	TD-LTE (B38/39/40/41); FDD LTE (B12/3/4/5/7/8/12/17/20/28)
Battery	5000mAh(Replaceable battery)	Wi-Fi	Dual-band WIFI(2.4GHz/5GHz) single stream 802.11 a/b/g/n/ac
Display	4.5 inch IPS/AFFS 540*960 QHD industrial 500nit Sunlight Readable	BT	4.2 Low Energy (LE)
Touch Panel	Capacitive/frosted tempered film supports glove touch/spray/active capacitive pen	Industrial & Reliability Design	
IO/Sensor/Navigation		Shake-proof	1-19Hz/1.0mm/19-200Hz/1.0g
SIM Card	1.8/3.3V SIM card	Dropproof /IK	MIL-STD-810G/Method516.6/Procedure IV & Touch Panel IK05
TF Card	Micro SD card (T-FLASH card); max 256GB	Waterproof	Class 5 (IEC 60529)
Headphone	3.5mm (CTIA)	Dustproof	Class 4 (IEC 60529)
Charging Interface	Type-C & 2pin pogo pin	Reliability	MTBF>5000h; MTTR<0.5h
Data Interface	USB Type-C(OTG)*1	Operating temperature	-20°C to 55°C
Gravity sensor	support	Storage Temperature	-40°C to 80°C
Motion sensor	support	RH	5% to 95%
Direction Sensor	support	Operating Altitude	Max: 4,500m (15,000 feet)
Magnetic Field Sensor	support	Certification/OS/Software	
Gyro sensor	support	Certification	3C/FCC/CE/ROHS/IP65 (IEC 60529)
Rotation Vector	support	Language	English, Spanish, Portuguese(Brazil), Portuguese(Portugal), Italian, German, Dutch, French, Polish, Romanian, Turkish, Russian, Arabic, Indonesian, Malay, Thai, Vietnamese, Hindi, Hebrew, Simplified, Chinese, Chinese Traditional, etc
Light-sensor	support	OS	Android 10.0 / 11.0
Acceleration sensor	support	Package/Warranty terms/OEM	
Charger	5.0V 2A-10W	Warranty	24 months
Navigation	GPS+Beidou+Glonass+AGPS+SBAS (EPO 2.5m)	OEM/ODM	Support
Appearance		Package	USB cable/Charger 5V 2A/Introduction manual/Screen protector/Packing box (Can be customized logo)/Aircraft box/Toolkit (optional)
Size	197*92*26.5mm (LxWxH)		
Weight	420g		
Color & Material	Black&yellow Black&green Black&Gray		



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## OPTIONAL MODULES & ACCESSORIES

**Barcode reader**  
Optional 2D module

**2D Barcode Module N1**  
N12D PDF417, QR Code, Micro QR, Data Matrix 1D Code 128, EAN-13, EAN-8, Code 39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ITF-4, ITF-14, ISBN, ISSN, Code 93, UCC/EAN-128, CSI Databar, Matrix 2 of 5, Code 11, Industrial 2 of 5, Standard 2 of 5, AIM128, Plessey, MSI-Plessey 640\*480 CMOS, EAN13(13mil)65-350mm, PDF417(6.7mil)90-125mm, Code39(5mil)40-150mm, Data Matrix(10mil)45-120mm, QR Code(15mil)30-170mm



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**RFID Reader**  
Optional LF HF UHF

**125K LF RFID Module**  
support: ID card(8H-10D)EM4100, 4001, TK4100, EM4305  
Read distance: 2-5cm  
(optional HID card support)

**13.56M HF RFID or NFC Module**  
13.56M HF support ISO14443A/B/ISO15693 readable/data transmission/Card Emulation/encryption authenticated/Read distance: 2-5cm

**134K LF RFID Module**  
Operation Frequency: 134.2KHz/support agreement: ISO11784/5/Read distance>5cm  
Working mode:FDX-B (full-duplex communication)

**UHF RFID Module/antenna**  
Air interface protocol: EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C/Operating spectrum range: 902Mhz - 928Mhz/8.65MHz - 8.68MHz (Optional)  
Output range: 0-26 dBm  
Output accuracy: +/- 1dB  
Output power level: +/- 0.2dB  
Read distance: 1.5-2m (2db antenna test card E41)

\*\*The RFID module only supports one of the optional



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## OPTIONAL MODULES & ACCESSORIES



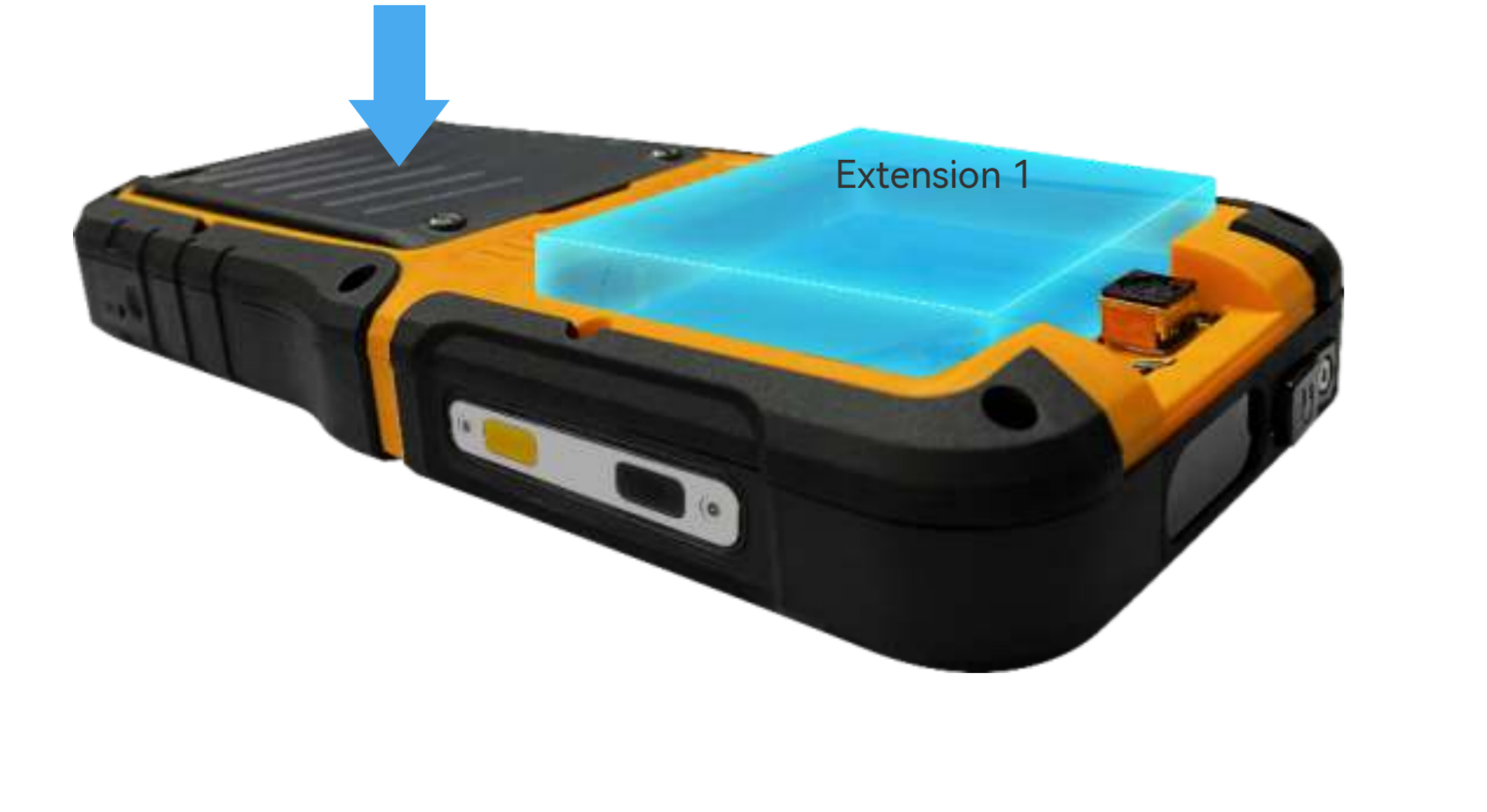
115\*83\*88 (L\*W\*H)

Optional base



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## OPTIONAL MODULES



UHF module	(M500 ASTM)+ Antenna (M500 EN)+Antenna
LF RFID module	125K LF ID card (8H-10D) 125K LF ID card (10D) 125K LF animal tag module
HF RFID module	13.56M HF module (single protocol) 13.56M HF module (multi-protocol)
1D/2D barcode module	
RS232 module	
NFC module	
Other customer supply modules	Need to meet the interface conditions : Powered by 3.3V-1.5A/5V-1.5A, UART interface, interface level 3.3V/5V, GPIO 1 /electrical level 3.3V/5V.
Extension 2	NFC module

When the RFID and NFC modules are selected at the same time, the NFC card reading area moves to the bottom.



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## Customized



Boot screen: lengthways  
Boot screen background color: white, light color  
Boot screen resolution: 540\*960



**Nameplate customization:**

Program 1: C: Black  
M: Acrylic or PET  
F: silk screen process

Nameplate size: 37.5x20mm

Example:



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