

COTT®



T9 KEYBOARD HANDHELD FULLY RUGGED TERMINAL

HL45 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 IP67 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.



4G
full Netcom



5000mAh
Safety Battery



1.8m
Drop-proof



13M
Camera



GNSS
GPS+Beidou+Glonass



T9
Keyboard

APPEARANCE



SPECIFICATION

Model:HL45

Hardware		Communications & Networking	
CPU	ARM Cortex 1.5 GHz qude-core	Phone Call	GSM /WCDMA/TD-SCDMA/CDMA 1X/VoLTE
GPU	Mali-T720	2G	GSM/CDMA 1X/EDGE/GPRS/WAP
RAM	3GB LPDDR3	2G Band	GSM (B2/3/5/8)
Internal Memory	32GB ROM	3G	WCDMA 3.75G (HSDPA+ 42.2Mbps, HSUPA+ 11.5Mbps),TD-SCDMA, EVDO
External Memory	Micro SD card (T-FLASH card), max 128GB	3G Band	WCDMA (B1/2/5/8) , TDSCDMA (B34/39) ,Evdo: BC0/BC1 CDMA: BC0/BC1
Main Camera	13.0MP(AF) with flash led	4G	FDD: 150Mbps down, 50Mbps UP TDD: 150Mbps , 50Mbps uplink
Sub Camera	N/A	4G Band	TD-LTE (B38/39/40/41) ; FDD LTE (B1/2/3/5/7/20)
Battery	5000mAh (Replaceable battery)	WI-FI	Dual-band (2.4GHz/5Ghz) single stream 802.11 a/b/g/n MAC/BB/RF
Display	4.5 inch IPS/AFFS 960*540 QHD industrial 500nit Sunlight Readable	Bluetooth	BT v2.1+EDR/BT 3.0+HS compliance/ Bluetooth v4.0 Low Energy (LE)
Touch Panel	Capacitive/toughened glass 9H support glove touch/spray/Active capacitance pen		
IO/Sensor/Navigation		Industrial & Reliability Design	
SIM Card	1.8/3.3V SIM card	Shake-proof	1-19Hz/1.0mm; 19-200Hz/1.0g
TF Card	Micro SD card (T-FLASH card) ;max 128GB	Dropproof /IK	MIL-STD-810G/Method516.6/Procedure IV & Touch Panel IK05
Headphone	3.5mm (CTIA)	Waterproof	Class 7 (IEC 60529)
Data interface	USB Mini 5pin support OTG	Dustproof	Class 6 (IEC 60529)
UART (optional)	UART TTL3.3 X3 onboard	Reliability	MTBF>5000h; MTTR<0.5h
Direction Sensor	Support	Operating temperature	-20°C to 55°C
Gravity sensor	Support	Storage Temperature	-40°C to 80°C
Magnetic Field Sensor	Support	RH	5% to 95%
Motion sensor	Support	Operating Altitude	Max: 4,500 m (15,000 feet)
Rotation Vector	Support	Certification/OS/Software	
Light-sensor	Support	Certification	MA /3C /FCC/CE/ROHS/EX/IP67 (IEC 60529)
Acceleration sensor	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.
Charger	5.0V 2A-10W	OS	Andriod 5.1/7.0 UP
Navigation	GPS+Beidou+AGPS (EPO) optional (GPS+Glonass)	Package/Warranty terms/OEM	
Appearance		Warranty	24 months
Size	202*138*22mm (LxWxH)	OEM/ODM	Support
Weight	660g	Package	USB cabledx1, charger 5V 2.1Ax1,user guide x1,tool bag x1,screen protectorx1
Color & Material	Black&yellow Black&green Black&Gray		



OPTIONAL MODULES & ACCESSORIES



Barcode Reader
Optional 1D/2D



1D Barcode Module-M923

- Decoding: 1D
- Scanning angle: default $47^{\circ} \pm 3^{\circ}$, general setting is $35^{\circ} \pm 3^{\circ}$
- Scanning speed: 104 ± 12 scans / second (bidirectional)
- Technology: Laser



2D Barcode Module ES202

2D: Data Matrix,Maxicode,QR Code,MicroQR,Aztec,Hanxin,etc.

1D: UPC, EAN, Code 128, Code 39, Code 93, Code 11,
Matrix 2 of 5,Codabar Interleaved 2 of 5,Mis Plessey,
GSI DataBar, China Postal,Korean Postal, etc.

640 pixels (H) x 480 pixels (V) High Resolution;

10 mil (Data Matrix): 0mm-50mm;

13 mil (UPCA) : 5mm-110mm



2D Barcode Module Honywell N3680

2D: PDF417, MicroPDF417, Data Matrix, Maxicode, QR Code,
MicroQR, Aztec, Hanxin, etc.

1D: UPC, EAN, Code 128, Code 39, Code 93, Code 11,
Matrix 2 of 5, Codabar Interleaved 2 of 5, Mis Plessey,
GSI DataBar, China Postal, Korean Postal, etc.

640 pixels (H) x 480 pixels (V) High Resolution;

6.88 mil (PDF417): 0mm-50mm;

012345678901234567890



OPTIONAL MODULES & ACCESSORIES

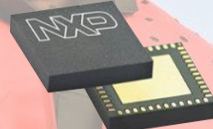


RFID Reader
Optional LF HF UHF



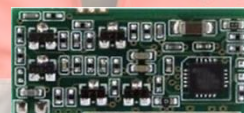
125K LF RFID Module

support: ID card (8H-10D) EM4100,4001,TK4100, EM43C
Read distance 2-5cm
(optional HID card support)



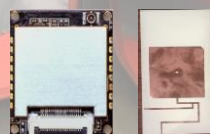
13.56M HF RFID Module

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
865MHz – 868MHz(Optional)
Output range:0-26 dBm
Output accuracy: +/- 1dB
Output power level: +/- 0.2dB
The label is sensitive and stable
Read distance : 1.5-2m (standard test card E41)

**The RFID module only supports one of the optional

OPTIONAL MODULES & ACCESSORIES



Charging docking station
(optional)