HANDHELD READER

IDT RHC50 5G

Designed using Impinj E710 module

Android 12/14	5G	WiFi	Bluetooth 5.1	NFC	IP 67	Impinj E710 Module	

The IDT RHC50 UHF is a 5G handheld reader built with an Impinj chip and Gen2X support. It delivers powerful UHF performance and comes with a detachable back-clip that easily turns it into a lightweight mobile computer. With fast 5G, Wi-Fi 6 support, and advanced features, it's a complete solution for high-speed, reliable performance.

PHYSICAL PARAMETER

Dimension	165.0 x 83.8x 138.0mm / 6.49 x 3.30 x 5.43 in.
Weight	679g (device with battery)
Interface	USB Type-C, USB 3.1, OTG
Sensor	G_sensor, proximity sensor, light sensor, geomagnetic sensor, gyroscope
Display	6-inch high definition display (18:9), 1440 x 720
Battery	5000mAh removable main battery
Expansion	1 for SIM card, 1 for SIM or TF card
Touch Panel	Corning Gorilla Glass, multi-touch panel, gloves and wet hands supported
Audio	2 microphones, 1 for noise cancellation; 1 speaker; 1 receiver
Notification	Sound, LED indicator, vibrator
Keypad	Power, 2 scan keys, volume +/-

PERFORMANCE

Processor	Octa-core, 2.0GHz
Expansion	Supports up to 256GB TF card
RAM+ROM	4GB + 64GB / 6GB + 128GB (Optional) / 8GB + 128GB (Optional)

ENVIRONMENTAL SPECIFICATIONS

Operating Tempreture	-20 °C to +50 °C
Storage Temperature	-40 °C to +70 °C
Humidity	5% RH - 95% RH non condensing
Drop Test	1.5 m to the concrete
Protection	IP67

COMMUNICATION

WLAN	Support IEEE802.11 a/b/g/n/ac/d/e/h/i/k/r/v/w, 2.4G/5G dualband, IPV4, IPV6; Support 5G PA
	Fast roaming: PMKID caching, 802.11r, OKC
	Operating Channels: 2.4G(channel 1~13), 5G(channel36,38,40,42,44,46,48,52,56,60,64, 100,104,108,112,116,120,124,128,132,136,140,149,153,157,161,165), depends on local regulations
	Security and Encryption: WEP, WPA/WPA2-PSK(TKIP and AES), WAPI-PSK—EAP-TTLS, EAP-TLS, PEAP-MSCHAPv2, PEAP-LTS, PEAP-GTC, etc.
WWAN	2G: GSM850/GSM900/DCS1800/PCS1900
	3G: CDMA EVDO: Bc0
	4G: B1/B2/B3/B4/B5/B7/B8/B20/B34/B38/B39/B40/B41
	5G: N1/N3/N8/N28/N41/N78/N79
Vo-LTE	Support Vo-LTE HD video voice call
Bluetooth	BT 5.1
GNSS	GPS/AGPS, GLONASS, BeiDou, Galileo, internal antenna

NFC

Frequency	13.56 MHz
Protocol	ISO14443A/B, ISO15693, NFC-IP1, NFC-IP2, etc.
Chip	M1 card (S50, S70), CPU card, NFC tags, etc.
Range	2-4 cm

CAMERA

Front Camera	5MP
Rear Camera	Rear 16MP Autofocus with flash

BARCODE SCANNING (OPTIONAL)

2D Scanner	Zebra: SE4710/SE5500/SE4750; CM60;
1D Symbologies	UPC/EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, etc.
2D Symbologies	PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro
	QR code, Aztec, MaxiCode; Postal Codes: US PostNet, US Planet, UK Postal,
	Australian Postal, Japan Postal, Dutch Postal (KIX), etc.

UHF (OPTIONAL)

Engine	CM710-1 module based on Impinj E710
Frequency	865-868 MHz / 920-925 MHz / 902-928 MHz
Protocol	EPC C1 GEN2 / ISO18000-6C
Antenna	Circular Polarized Antenna
Power	1W (30dBm, +5dBm to +30dBm adjustable)
	26m (Impinj MR6 tag, size 70 x 15mm)
Read Range	28m (Impinj M750 tag, size 70 x 15mm)
	30m (Alien H3 Anti-Metal tag, size 130 x 42mm)

DEVELOPING ENVIRONMENT

SDK	IDT RHC50 Software Development Kit
Operating System	Android 12
Language	Java
Tool	Eclipse / Android Studio

OPTIONAL ACCESSORIES

USB Cable, Adapter, Charging Cradle, Rugged Rubber Boot, etc.

ORDER INFORMATION

Part Number	IDT.RH.C50

APPLICATION AREA

Retail	Construction	ETC	Manufacturing Unit	Transport	Supply Chain