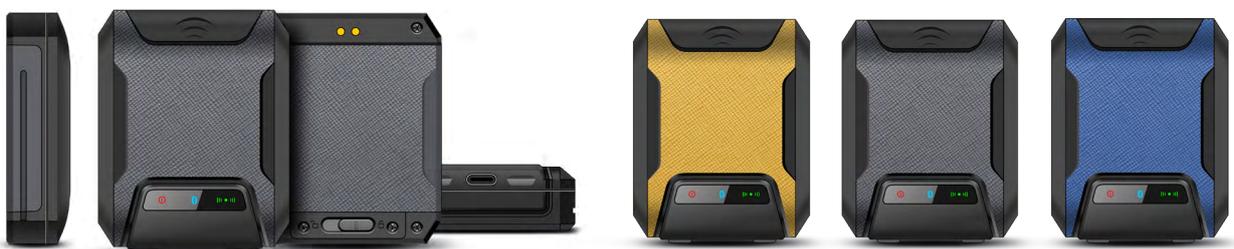# MR20

Wearable UHF Reader

Chainway MR20 is our refined and new generation wearable Bluetooth UHF reader supporting the latest Impinj Gen2X. Being a compact and portable device, it can be operated together with gloves, wristbands, or lanyards and make your work much more flexible and convenient. With a built-in UHF module, Chainway MR20 possesses a powerful data-collection and transmission function via a simple Bluetooth connection with Android/iOS devices. Removable battery and fast charging capability enable it to achieve work continuity for a long duration. Besides, this tiny device has the protection features like dustproof, waterproof, shockproof, and drop resistance. All these functions make the MR20 a most adaptable device in a wide spectrum of circumstances such as logistics & express delivery, retail store management, warehouse management, power patrol inspection, asset management, e-commerce picking, and tickets checking, etc. helping users free their hands and significantly improve work efficiency.

Specification

Physical Characteristics

Dimensions	50 × 62 × 19 mm / 1.97 × 2.44 × 0.75 in.
Weight	64 g / 2.26 oz. (with glove: 90 g / 3.17 oz.)
Color	Yellow, Blue, Gray
Port	USB Type-C
Button	ON/OFF, SCAN
Battery	1200 mAh (removable)
Charging Current	5 V / 1.5 A
Charging Duration	1 hours
LED Indicator	Red indicator will be ON when charging;
	Blue indicator will be ON when device has been fully charged;
	Green indicator will be ON when battery is higher than 20%;
	Green indicator will flash when battery is lower than 20%;
	Bluetooth is not paired when bluetooth indicator is OFF;
	Bluetooth is paired when bluetooth indicator is ON

Performance

MCU	Cortex-M3
	72MHz

Developing Environment

SDK	Android / IOS SDK Supported
Security	RFID Encrypted Module (reserve)

Communication

USB Type C	USB connection to realize data transfer
BT	Bluetooth Low Energy (BLE) 5.0

User Environment

Operating Temp.	-20 °C to +50 °C
Storage Temp.	-40 °C to +70 °C
Humidity	5% RH - 95% RH non condensing
Dropping	1.5m dropping on concrete
Sealing	IP65

UHF

Engine	CM-3N module based on Impinj E310
Antenna parameter	Linear Polarized Antenna
Frequency	920-925 MHz / 902-928 MHz / 865-868 MHz
Impinj Gen2X	Supported
Protocol	EPC C1 GEN2 / ISO18000-6C Supports Impinj Gen2X
Power	0.5W (27dBm, support +19-27dBm adjustable)
R/W range	80 cm

*Range depends on tags and environment

Accessories (Optional)

Glove, wristband, lanyard, charing cradle for battery