UHF RFID Handheld Reader MC3190-Z

The MC3190-Z reader from Zebra Technologies combines rugged design and high performance, making it an ideal fit for retail stores. The durable, ergonomic reader is designed to increase workforce productivity for inventory cycle counting, product location, writing tags, receiving merchandise, and more.

The patented omnidirectional MAX RFID antenna delivers extraordinary reliability without the need to precisely align the reader with the tag. The design combines linear and circular polarization for longer read range with wider coverage.

This business-class RFID handheld built on the proven, widely adopted MC3100 platform, passes one of the industry's most stringent impact tests: the ability to survive a 4ft (1.2m) drop to concrete. With the IP54 sealing, the device can also withstand dust, spills and routine wipe downs.

This MC3190-Z puts two best-in-class data capture technologies into one device so associates can both read RFID tags and scan barcodes, even damaged and poor quality 1-D barcodes.

At just half the weight of its industrial counterparts, the Zebra MC3190-Z is the lightest ruggedized UHF RFID handheld reader on the market — period. Its well-balanced, gun-style grip brings comfort to the most read-intensive applications.

Efficient power management means the MC3190-Z runs longer on a single charge, and the Single Slot Serial/USB cradle can charge the mobile computer main battery and a spare battery simultaneously.

Retailer Values

// Reduces capital and operational costs with versatile RFID and barcode scanning in one device

// Ensures comfort and ease of use with ergonomic grip and trigger design

// Meets and exceeds MILSTD 810F standards for drop and tumble

// Protects against dust, dirt and moisture found in typical retail environments with IP54-rated sealing

// Assists global deployments with US and European RFID frequencies

// Supports TrueVUE Inventory Intelligence software for increased inventory accuracy, the foundation for omni-channel excellence

Product Codes

3190Z-HH2-1D-WW
MC3190-Z UHF RFID Reader, 48 key, 1D barcode imager, 802.11 a/b/g (FCC)

3190Z-HH2-2D-NA
MC3190-Z UHF RFID Reader, 48 key, 2D barcode imager, 802.11 a/b/g (FCC)

3190Z-HH2-1D-EU
MC3190-Z UHF RFID Reader, 48 key, 1D barcode imager, 802.11 a/b/g (ETSI)

3190Z-HH2-2D-EU
MC3190-Z UHF RFID Reader, 48 key, 2D barcode imager, 802.11 a/b/g (ETSI)

3190Z-HH1-2D-EU
MC3190-Z UHF RFID Reader, 28 key, 2D barcode imager, 802.11 a/b/g (ETSI)

Options

Charging
Cradle Kit, Single Slot, Serial/USB (US)

Universal Battery Charger, 4-Slot Base

Product Compatibility

TrueVUE Software

EPC Gen2 standard RFID Tag

Sensormatic AM/RFID 2D Barcode Tag

Specifications

Dimensions .... 19.34 x 11.94 x 16.26cm (7.6 x 4.7 x 6.4in)

Weight .... 650g (22.9oz) (including battery, stylus, narrow keypad & strap)

Power ....Li-Ion 4,800 mAH @ 3.7Vdc (2X battery only)

Display ....3in QVGA color display (320 x320) touchscreen with backlight

Network Connections .... RS232; USB (host & client)

Keypad ....48-key Alpha-Numeric; 28-key Numeric

Data Capture Options.....................RFID, 1-D laser scanner and 2-D imager

Environmental Constraints

Operating Temperature

-10°C to 50°C (14°F to 122°F)

Storage Temperature

-30°C to 70°C (-22°F to 160°F)

Humidity

5% to 95% non-condensing

Drop Specification

Multiple 4ft/1.2m drops to concrete across the operating temperature range

Multiple 5ft/1.5m drops to concrete at ambient temperature 73°F/23°C; meets and exceeds MIL-STD 810G

Tumble Specification

500 1.64ft/.5m tumbles (1,000 drops) at room temperature; meets and exceeds MIL-STD 810F

Sealing

IP54

Performance Characteristics

Operating System

Microsoft® Windows Embedded Handheld 6.5.3

CPU

Marvell PXA320 @ 624 MHz

Memory

256MB RAM/1GB Flash as shipped, user expandable

RFID Performance

Standards Supported

EPC Gen 2 DRM (DRM compliant up to 0.5W)

Antenna

Integrated Orientation Insensitive

Frequency Range

EU: 865-868 MHz; US: 902-928 MHz

Output Power

EU: 1 watt ERP for Europe

US: 1 watt EIRP

Wireless LAN Voice and Data

Radio

Tri-mode IEEE® 802.11a/b/g

Data Rates Supported

802.11a: up to 54 Mbps, 802.11b: up to 11 Mbps, 802.11g: up to 54 Mbps

Security

WPA2 (Personal or Enterprise);

802.1x; EAPTLS;

TTLS (CHAP, MS-CHAP, MS-CHAPv2, PAP or MD5);

PEAP (TLS, MSCHAPv2, EAPGTC);

LEAP, EAP-FAST (TLS, MS-CHAPv2, EAP-GTC);

CCXv4 certified; support for IPv6;

FIPS140-2 Certified

VOIP-Ready

Optional (region dependent)

Wireless Pan Data and Voice Communications

Bluetooth®

Region dependent

Charging

Cradle

Single-slot USB/RS232 charging cradle with spare battery well

Charger

Four-slot battery charger; adapter for universal battery charger

Regulatory

Country Availability

Supported regions based on European RFID frequencies (ETSI EN 302-208) and US RFID frequencies

Electrical Safety

UL 60950-1, CSA C22.2 No. 60950-1, IEC 60950-1

EMI/EMC

FCC Part 15 Class B, ICES 003 Class B, IEC 60601-1-2, EN 301 489-1, EN 301 489-17, EN 301 489-3

Laser Safety

IA21CFR1040.10, IEC/EN 60825-1

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