BRING THE BENEFITS OF RFID TO THE CARPETED SPACE
The MC3190-Z represents another RFID first from Motorola — the first business-class handheld RFID reader designed specifically to extend RFID beyond industrial spaces and into customer facing and business environments. This highly versatile device is at home in the retail storefront, the carpeted business office and hospitals as well as the warehouse and manufacturing production line. The MC3190-Z starts with the same signature rugged design and high performance found in all Motorola industrial handheld RFID products, and adds the ergonomics required for all day comfort and ease of use. At just half the weight of its industrial counterparts, the MC3190-Z is the lightest UHF RFID rugged handheld reader on the market — period. Its well-balanced, gun-style grip brings comfort to the most read-intensive applications. And the advanced, high efficiency Motorola RFID reader engine increases workforce productivity with faster read rates that increase throughput.

MOTOROLA MAX RFID ANTENNA FOR MAXIMUM RFID PERFORMANCE
Until now, enterprises have been forced to choose between two types of antennas: linear polarization for a longer read range or circular polarization for wider coverage. The MC3190-Z antenna combines the advantages of these two technologies into a patented omnidirectional antenna that offers the best of both worlds — a superior read range and superior coverage area. The orientation insensitive antenna delivers extraordinary reliability and there’s no need to precisely align the reader with the tag. As a result, workers can accurately and rapidly capture RFID tags on even the most challenging items — from a pile of clothing in a retail store or a box of files in the office to a shelf full of data tapes in the data center.

GET SUPERIOR VALUE — MOTOROLA’S SIGNATURE RUGGED DESIGN AND DUAL DATA CAPTURE FUNCTIONALITY
The MC3190-Z offers the best of form and function with Motorola MAX Rugged and Motorola MAX Data Capture. While the MC3190-Z is designed for the carpeted space, Motorola MAX Rugged provides Motorola’s flagship rugged specifications to ensure dependable operation and a maximum lifecycle in any environment. The reader passes one of the industry’s most stringent impact tests, able to survive a 4 ft./1.2 m drop to concrete across the entire operating temperature range. In our unique endurance test, the MC3190-Z performs reliably after 1,000 1.64 ft./0.5m hits in our tumble drum. And with IP54 sealing, the device can withstand dust, spills and the routine wipedowns required in healthcare and other challenging environments.

FEATURES
Business-class RFID handheld for global deployments
Supports regions based on European RFID frequencies (ETSI EN 302-208) and US RFID frequencies
Motorola RFID reader engine
Delivers advanced, high efficiency read performance for faster read rates and higher throughput
Motorola’s patented omnidirectional MAX RFID Antenna
Orientation insensitive design eliminates the need to align reader and tag for faster and more accurate reads
Pinpoint locating technology
A unique combination of intuitive audible and visual cues easily guides workers to a specific item
Proven platform
Built on the proven, widely adopted MC3100 platform
For more information on how you can bring the benefits of RFID into new areas of your business, please visit us on the web at www.motorolasolutions.com/MC3190Z or access our global contact directory at www.motorolasolutions.com/enterprisemobility/contactus

MC3190-Z APPLICATIONS
As the first business-class handheld RFID reader, the MC3190-Z enables the extension of RFID beyond industrial spaces and into customer facing and business environments. Industries and applications include:

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>APPLICATION</th>
</tr>
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<tbody>
<tr>
<td>Retail</td>
<td>• Inventory/cycle counting</td>
</tr>
<tr>
<td>Sales Floor, POS, backroom</td>
<td>• Automatic replenishment</td>
</tr>
<tr>
<td></td>
<td>• Receiving/shrink control</td>
</tr>
<tr>
<td></td>
<td>• Item finding</td>
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<tr>
<td>Enterprise</td>
<td>• Asset/IT management</td>
</tr>
<tr>
<td>Business offices/carpeted spaces</td>
<td>• File and document tracking</td>
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<tr>
<td></td>
<td>• Item finding</td>
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<tr>
<td>Healthcare</td>
<td>• Asset management (for high value critical assets)</td>
</tr>
<tr>
<td>Hospitals; clinics</td>
<td>• Patient tracking</td>
</tr>
<tr>
<td></td>
<td>• Item finding</td>
</tr>
<tr>
<td>Manufacturing/Warehousing</td>
<td>• Work in Process (WIP)</td>
</tr>
<tr>
<td>(environmentally controlled)</td>
<td>• Receiving/shipping</td>
</tr>
<tr>
<td>Production line, warehouse aisles and loading docks</td>
<td></td>
</tr>
</tbody>
</table>
# SPECIFICATIONS CHART

## PHYSICAL CHARACTERISTICS

| Dimensions       | 7.6 in. H x 4.7 in. W x 6.4 in. D  
|                  | 19.3 cm H x 11.9 cm W x 16.2 cm |
| Weight           | 22.93 oz. /650 g (including battery, stylus, narrow keypad & strap) |
| Display          | 3 in. QVGA color display (320 x 320) touchscreen with backlight |
| Battery          | Li-ion 4,400 mAh @ 3.7Vdc  
|                  | (2X Battery only) |
| Network Connections | RS232, USB (host and client) |
| Keypad           | 48-key Alpha-Numeric, 28-key Numeric |
| Data Capture Options | RFID, 1D laser scanner and 2D imager |

## WIRELESS PAN DATA AND VOICE COMMUNICATIONS

- **Bluetooth®**: Region dependent

## PERIPHERALS AND ACCESSORIES

- **Cradles**: Single-slot USB/RS232 charging cradle with spare battery well
- **Chargers**: Four-slot battery charger, adaptor for universal battery charger
- **Printers**: Supports Motorola approved printers
- **Other Accessories**: Charging cables, magnetic stripe reader

## REGULATORY

- **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
- **Electrical Safety**: UL 60950-1, CSA C22.2 No. 60950-1, IEC 60950-1
- **RF Exposure**: EU: EN 50360; EN 50364  
  USA: FCC Part 2, FCC OET Bulletin 65 Supplement C  
  Canada: RSS-102  
  Japan: ARIB STD T56  
  Australia: Radiocommunications Standard 2003
- **WLAN, Bluetooth and RFID**: EU: EN 300 328, EN 301 893 : EN 302 208  
  Canada: RSS-210  
  Australia: AS/NZS 4268
- **Laser Safety**: A21CFR1040.10, IEC/EN 60825-1
- **Model Numbers for Regulatory Certifications**: MC319ZUS, MC319ZEU

## GEOGRAPHIC AVAILABILITY

- **Supported regions based on European RFID frequencies (ETSI EN 302-208) and US RFID frequencies**
- **WARRANTY**: The MC3190-Z is warranted against defects in workmanship and materials for a period of 12 months from date of shipment, provided that the product remains unmodified and is operated under normal and proper conditions.

## RECOMMENDED SERVICES

- **Customer Services**: Service from the Start with Comprehensive Coverage

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## WIRELESS LAN VOICE AND DATA COMMUNICATIONS

- **Radio**: Tri-mode IEEE®@ 802.11a/b/g
- **Security**: WPA2 (Personal or Enterprise); 802.1x; EAP-TLS; TTLS (CHAP, MS-CHAP, MS-CHAPv2, PAP or MD5); PEAP (TLS, MSCHAPv2, EAP-GTC); LEAP; EAP-FAST (TLS, MS-CHAPv2, EAP-GTC); CCXv4 certified; support for IPv6; FIPS140-2 Certified
- **Data Rates Supported**: 802.11a: up to 54 Mbps, 802.11b: up to 11 Mbps, 802.11g: up to 54 Mbps
- **VoIP-Ready**: Optional (region dependent)

## WIRELESS PAN DATA AND VOICE COMMUNICATIONS

- **Bluetooth®**: Region dependent

## PERIPHERALS AND ACCESSORIES

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1 - LED lighting with high AC ripple content can impact scanning performance
FEATURING MOTOROLA MOBILITY ARCHITECTURE EXTENSIONS (MAX)

Motorola Mobility Architecture eXtensions (MAX) allows Motorola mobile computers to deliver extraordinary value — a truly unprecedented return on investment (ROI) and total cost of ownership (TCO). This unique set of Motorola features turbo charges Motorola mobile computers, driving ease-of-use, ease-of-management, flexibility, modularity, lifecycle and overall system performance to new heights. Features in the MC3190-Z include...

**MAX Rugged**
With MAX Rugged, you can count on a device built for the most demanding business environments. A minimum of three specifications — industry leading mechanical stress and endurance tests plus environmental sealing — insures dependable performance and maximum lifecycle.

**MAX Data Capture**
Integrate best-in-class advanced data capture functionality, including: 1D, 2D and DPM bar code scanning; signature capture; high resolution image and document capture; RFID and more.

**MAX RFID Antenna**
Maximize the performance of your RFID solutions with this patented orientation insensitive antenna. The unique combination of linear and circular polarization maximizes read range and coverage area, delivering the extraordinary reliability required to capture tags — even on the most challenging items.

**MAX Secure**
MAX Secure provides the security features required to ensure secure data transmissions over either the WLAN or the WWAN — including highly sensitive applications in government and public safety.