



## MC65

### Rugged software configurable dual 3.5G WAN Enterprise Digital Assistant (EDA)

#### Make the most out of every minute in the field with the Zebra MC65

Supercharge your mobile workforce and redefine productivity with the toughest, most flexible EDA on the market. Workers have multiple tasks and limited time. With the MC65, they have the tools in hand to get their jobs done right — right now. Desktop-like performance provides instant access to the applications and information back at the office. Shave hours of time out of the work week by capturing and processing just about any type of data on site, quickly and easily — from a single document to hundreds of bar codes, a library of photos or a signature. Activate and reactivate the MC65 on virtually any cellular network in the world, eliminating the need to purchase network technology (GSM or CDMA) specific devices, extending device lifecycle and ensuring that each and every worker has the best connection possible. Add a customizable user interface that makes doing business easier than ever and you have a real workforce multiplier — a device that turns paperwork and repeat visits into more tasks completed per day.

#### Streamline and error-proof processes with advanced data capture

The MC65 does it all — 1-D and 2-D bar codes, photos complete with embedded notes, documents, signatures and more. Poorly printed or damaged bar codes a problem? Not for the MC65. Our most advanced scanning technology allows the rapid-fire capture of items as they are removed from the delivery truck, so your customers get what they ordered, every time.

With the MC65, an equipment inspector can capture a photo, add comments and automatically embed a geostamp via integrated GPS, sending supervisors the information they need to get the right technician to the right location to complete a repair. And that repair technician can take and transmit live video to collaborate with a specialist to troubleshoot a problem. A city building inspector can capture a document, complete with legible fine print and a signature, keeping all forms related to a code enforcement case in hand. And when account managers scan the product inventory remaining on the shelves in a grocery store, the resulting real-time count creates real-time accurate sales orders and production schedules.

#### Connect to virtually any carrier network in the world — GSM or CDMA

The MC65 offers a Zebra first — the ability to connect to virtually any wireless carrier around the world. Both 3.5G GSM HSPA and CDMA EVDO Rev A software configurable cellular radios are built into the device, allowing you to select the network that will provide the best coverage for your workers. Do your workers travel through large territories best served by different networks? Need to activate on a different network for workers in a different office? No problem. This single device can be deployed and re-deployed on virtually any network, anywhere in the world, making purchasing and device management easy — and maximizing your return on investment.

#### The most rugged EDA design yet — period

The MC65 is built to last, so your workers have a device they can count on while your business enjoys a maximum return on investment (ROI). We designed it with features that ensure reliable operation despite drops and exposure to heat, cold, dust, and moisture. Tested for toughness, the device passes our own stringent drop and tumble tests and meets environmental sealing, military standard (MIL-STD) and IEC specifications. Structural stability has been



**ZEBRA**

#### FEATURES

##### ADVANCED DATA CAPTURE

Zebra MAX Data

Capture for advanced

high-performance

multi-mode data capture

Zebra's latest generation 2-D imager: delivers unparalleled

laser-like performance on both 1-D and 2-D bar codes;

reads even damaged and poor quality codes;

omni-directional reading eliminates need to align bar code and scanner window

for rapid-fire comfortable scanning

3.2 autofocus flash-enabled digital color camera with

user-controllable flash: can capture photos, videos,

documents with legible fine print and bar codes (for

non-intensive scanning applications)



##### COMPREHENSIVE VOICE

Zebra MAX Voice delivers advanced voice

functionality and voice quality

Leading-edge noise reduction and echo cancellation technology eliminates background noise; high quality speakerphone, microphone and transducer provide robust support for handset, Bluetooth headset and speakerphone modes

##### ADVANCED USER FEATURES

Zebra MAX Sensor for the intelligence to sense — and act — on the environment

Motion sensing:

automatically rotates screen;

powers down when not in



improved with our patented unibody housing and a special internal component provides extra protection for sensitive electronics. There's even a patented spring-loaded accessory interface that prevents damage if the MC65 is dropped while attached to a peripheral, like a magnetic stripe reader (MSR).

### Hear every word on every call

Every call counts — whether you're talking to customers, supervisors, co-workers or other business associates. But out in the field, background noise can wreak havoc with phone conversations. The MC65's Dual-Microphone Noise Cancellation technology makes sure that all anyone will hear is you. Our leading-edge noise reduction and echo cancellation technology uses one microphone to capture the speaker's voice and a second to identify and eliminate distracting background noise, including wind, crowds, vehicles or other conversations in the area.

### Sensor technology that makes good business sense

The MC65 is a new class of device, one that is able to sense its environment and take action to conserve battery power, provide consistent screen visibility and adjust ringer settings. For example, the integrated accelerometer reacts to motion, or the lack of motion. You can automatically switch to portrait or landscape display modes to match the device orientation. The MC65 can also power down to sleep mode when the device is placed face down or remains untouched for a pre-defined period of time. With full access to the accelerometer data, you can create custom business applications that help identify a potential man down, improving the safety of remote field workers. As workers travel from inside buildings to bright sunlight, the display automatically adjusts to save power, ensuring the screen is readable at all times. And when workers enter a noisy or quiet area, ringer volume and vibration mode are automatically adjusted to make sure calls are not missed and co-workers in the vicinity are not disturbed.

### The Zebra end-to-end advantage

When you choose the MC65, you enjoy the advantages of world-class partners, world-class management solutions and world-class services. Our partners provide a best-in-class broad set of ready-to-go and custom applications that minimize deployment time and cost. Our Mobility Services Platform allows you to manage your entire mobility solution — including Zebra mobile computers and peripherals as well as mobile devices from other manufacturers. And our Service from the Start with Comprehensive Coverage support program is a unique service that protects your investment and keeps your MC65 devices operating at peak performance. This program sets the standard for post-deployment support by including normal wear and tear, as well as coverage for internal and external components damaged through accidental breakage — significantly reducing your unforeseen repair expenses. This truly comprehensive service also covers all the items that ship 'in the box' at no additional charge, including the stylus, screen protector, hand strap and battery door.

For more information on how the MC65 can redefine the productivity of your mobile workforce, please visit us on the web at [www.zebra.com/mc65](http://www.zebra.com/mc65) or access our global contact directory at [www.zebra.com/contact](http://www.zebra.com/contact)

## ADDITIONAL FEATURES

### HIGH-POWERED PLATFORM

#### The most advanced mobile operating system

Microsoft's Windows® Embedded Handheld 6.5 increases interoperability with existing enterprise infrastructure; enhances security features; provides a more flexible development platform; improves mobile messaging collaboration

#### Powerful microprocessor designed for mobility

The MSM 7627 @ 600 MHz with multi-processor architecture delivers desktop-like multimedia performance — even on the most demanding applications

#### The memory to support any application

512MB RAM/1GB Flash and a user accessible microSD card slot with support up to 32GB provide the memory space required to enable robust performance for database and other processing intensive applications

#### Protects your application investments

Support for Zebra's Enterprise Mobility Developer Kit (EMDK) APIs preserves existing application investments by enabling easy and cost-effective porting of applications from other Zebra mobile computers

use to preserve battery; enables utilization of sensor data in custom applications  
Light sensing: automatically adjusts display as workers move between indoors and outdoors to maintain visibility at all times

Sound sensing: automatically adjust settings based on environmental noise levels — such as reducing ringer volume and activating vibration mode

#### Anywhere anytime

#### accurate GPS with Zebra MAX Locate

Enables a signal lock in



challenging areas

such as urban canyons and deep inside buildings where GPS is typically not available

; highly precise positioning improves application accuracy; provides users with location-based services in more areas; supports Autonomous and Assisted GPS with gpsOneXTRA™

## COMPREHENSIVE WIRELESS CONNECTIVITY



### **Works on any cellular network**

Zebra MAX FlexWAN provides true network independence with the industry first software configurable dual 3.5G broadband WAN; supports GSM HSPA and CDMA-EVDO Rev A; deploy and re-deploy a single pool of devices anywhere in the world on virtually any network

### **Works on any wireless LAN**

The 802.11a/b/g tri-mode radio connects to both 2.4Ghz and 5Ghz WLANs for cost-effective voice and data connectivity in the office and hot spots; 802.11a support enables segmentation of voice traffic to ensure voice quality

### **The most advanced Bluetooth functionality**

Bluetooth® v2.0 with EDR provides a wireless connection to more device types, including modems, printers, headsets and more; simplifies pairing; improves security; reduces power consumption

## THE MOST RUGGED EDA



### **Zebra MAX Rugged for industry leading rugged design — and reliability**

Drop (impact) test: multiple 6 ft./1.8 m drops per MIL-STD 810G

Tumble (endurance) test: reliable operation after 1,000 1.5 ft./0.5 m consecutive tumbles (2,000 drops) in Zebra's tumble drum

IP64 sealing: complete protection against dust and splashing liquids

Patented Monocoque 'unibody' housing: greatly improves structural stability and ability to handle the twisting common in a fall or bump

Patented I/O connector: improves the reliability and durability of the accessory point of interface

Improved shock absorption for internal components: a rigid yet lightweight magnesium frame encases the main circuit board and all electronics

Rugged display construction: space between display and touchscreen helps prevent damage to the display

## ADVANCED PHYSICAL FEATURES

### **Advanced ergonomic design for ease of use and user comfort**

Specifically designed for one-handed operation — data entry is easy regardless of hand size with minimal movement

### **Crystal clear text and graphics with Zebra MAX Display**

3.5 inch extra-crisp PenTile® high-resolution color VGA touchscreen display is easy to view in virtually any lighting condition — indoors and outside; additional white pixel improves contrast; energy efficient



### **A family of keypads for global flexibility**

QWERTY, AZERTY, QWERTZ, Numeric, PIM and DSD keypads enable the MC65 to support a wide range of applications in just about any geography

### **Compatible with MC55 accessories**

Upgrade from the MC55 to the latest mobile technology advancements while preserving your existing accessory investments

## WIRED NETWORK SECURITY OVER ANY WIRELESS NETWORK

### **Make sure only authorized users access your devices, your data and your network**

Compatibility with Zebra's Mobile Security Suite provides device-level protection — a firewall, intrusion prevention, enforced authentication, data encryption and integrity monitoring protect the data that is resident on and in transit to and from your MC65 devices; Mobile Virtual Private Networks (MVPNs) bring wired-line security to wireless communications without the typical performance degradation

## EASY CENTRALIZED MANAGEMENT

### **Easy global remote management of your devices — and their accessories**

Compatibility with Zebra's Mobility Services Platform (MSP) enables comprehensive and flexible centralized


management of Zebra mobile computers and non-Zebra mobile computers and peripherals, anywhere in the world, all from a single console

## END-TO-END SUPPORT SERVICES

### Increase uptime and reduce support costs with all-inclusive support plan

Optional Service from the Start with Comprehensive Coverage covers normal wear and tear as well as internal and external components damaged through accidental breakage for both device and select accessories

## MC65 Specifications

PHYSICAL CHARACTERISTICS		ZEBRA INTERACTIVE SENSOR TECHNOLOGY (IST)	
Dimensions:	6.38 in. L x 3.03 in. W x 1.32 in. D (with antenna) 162.2 mm L x 77 mm W x 33.5 mm D (with antenna)	Motion Sensor:	3-axis accelerometer that enables motion-sensing applications for dynamic screen orientation and power management
Weight:	12.5 oz./359g (with rechargeable 3600mAh Lithium Ion battery)	Light Sensor:	Ambient light sensor to auto adjust display backlight brightness
Display:	PenTile® 3.5 in Color VGA, super bright 650+ NITS		
Touch Panel:	Glass analog resistive touch	DATA CAPTURE	
Backlight:	LED backlight	Options:	Three configurations available: 2-D SE4500-SR imager; 2-D SE4500-SR imager + 3.2 MP Camera; 2-D SE4500-DL imager + 3.2 MP Camera
Power:	 PowerPrecision 3600 mAh Li-Ion rechargeable battery	Data Types:	1-D and 2-D bar codes, photographs, video, signatures, documents
Backup Battery:	Li-MnO2 (rechargeable) 25mAh 3.0V (not user-accessible or replaceable)		
Expansion Slot:	microSD slot (supports up to 32GB )	CAMERA	
Communication Interface:	USB 2.0 High Speed (host and client)	Resolution:	3.2 megapixel
Notification:	Audible tone plus multi-color LEDs	Illumination:	User controllable flash
Keypad Options:	Numeric, QWERTY, AZERTY, QWERTZ, PIM and DSD	Lens:	Autofocus
Audio:	Dual microphone support with noise cancellation; vibrate alert; speaker; Bluetooth headset	2D IMAGER ENGINE (SE4500)	
		Focal Distance:	From center of exit window: SR - 7.5 in./19 cm
PERFORMANCE CHARACTERISTICS		Sensor Resolution:	752 x 480 pixels
CPU:	MSM Qualcomm 7627@ 600 MHz (multi-processor architecture)	Field of View:	Horizontal 40°; Vertical 25°
Operating System:	Microsoft Windows® Embedded HandHeld 6.5	Optical Resolution:	WVGA 752H X 480V pixels (gray scale)
Memory:	512MB RAM/1GB Flash	Roll Tolerance:	360°
		Pitch Tolerance:	± 60° from normal
		Skew Tolerance:	± 60° from normal
USER ENVIRONMENT		Ambient Light (from total darkness):	Indoor: 450 ft. candles (4845 lux) Outdoor: 9000 ft. candles (96,900 lux)
Operating Temperature:	14° F to 122° F/-10° C to 50° C		

<b>Storage Temperature:</b>	-40° F to 158° F/-40° C to 70° C	Sunlight: 8000 ft. candles Fluorescent: 450 ft. candles
<b>Humidity:</b>	5 to 95% non-condensing	<b>Ranges:</b> 5 mil Code 39: <b>SR Focus Range</b> 2.1 in./53 mm (Near) 7.5 in./191 mm (Far) 100% UPC/EAN: 1.6 in./41 mm (Near) 15.5 in./394 mm (Far) 6.7 mil PDF417: 3.4 in./86 mm (Near) 7.1 in./180 mm (Far)
<b>Drop Specification:</b>	Multiple 6 ft. drops per MIL-STD 810G specifications	
<b>Tumble Specification:</b>	1,000 1.6 ft./0.5 meter tumbles ( 2,000 drops) at room temperature; per applicable IEC tumble specifications	
<b>Sealing:</b>	IP64; per applicable IEC sealing specifications	<b>DL Focus Range</b> 5 mil Code 39: 1.4 in./36 mm (Near) 7.3 in./185 mm (Far) 100% UPC/EAN: 1.6 in./41 mm (Near) 12 in./305 mm (Far) 5 mil PDF417: 2.8 in./71 mm (Near) 4.5 in./114 mm (Far)
<b>Vibration:</b>	4g's PK Sine (5Hz to 2KHz); 0.04g2/Hz Random (20Hz to 2KHz ); 60 minute duration per axis, 3 axis	
<b>Thermal Shock:</b>	-40° F to 158° F/-40° C to 70° C rapid transition	
<b>Electrostatic Discharge (ESD):</b>	± 15kv Air discharge, ± 8kv direct discharge, ± 8kv indirect discharge	<b>Aiming Element ( VLD):</b> 655 nm ± 10 nm Laser

## BATTERY PERFORMANCE

<b>Standby Time:</b>	100 Hours	<b>Illumination Element (LED):</b> 625 nm ± 5 nm LEDs (2x)
<b>Talk Time:</b>	6 Hours	<b>Field of View:</b> Horizontal: 39.6°; Vertical: 25.7°
<b>User Profiles:</b>	8 Hours (user profile dependent)	

## VOICE AND AUDIO

<b>Voice and Audio:</b>	VoWWAN; VoWLAN; PTT, VoIP-ready; high-quality speakerphone; support for wireless (Bluetooth) headsets; support for PTT headsets, handset and speaker phone modes	<b>REGULATORY</b>
		<b>Electrical Safety:</b> IEC/UL/CSA/EN 60950-1
		<b>Environmental:</b> RoHS/WEEE compliant
		<b>WLAN and Bluetooth (PAN):</b> USA: FCC Part 15.247, 15.407 Canada: RSS-210 EU: EN 300 328, EN 301 893 Japan: ARIB STD-T33, ARIB STD-T66, ARIB STD-T70, ARIB STD-T71 Australia: AS/NZS 4268

## WIRELESS WAN VOICE & DATA COMMUNICATIONS

<b>Radio:</b>	Dual 3.5G: GSM HSPA/HSUPA and CDMA EVDO Rev A	<b>Wireless WAN (GSM HSUPA/HSPA) :</b> Global: 3GPP TS 51.010, 3GPP TS 34.121, 3GPP TS 34.123 GCF and PTCRB approved USA: FCC Part 22, Part 24 Canada: RSS-132, RSS-133 EU: EN301 511, EN301 908 Australia: AS/ACIF S042.1 & 3
<b>Frequency Band:</b>	UMTS/HSDPA and HSUPA: 850, 1900 and 2100 MHz GSM/EDGE: 850, 900, 1800 and 1900 MHz CDMA/EVDO Rev A: 850 and 1900 MHz	<b>Wireless WAN (CDMA-EVDO Rev A ):</b> USA: FCC Part 22, Part 24 Canada: RSS-132, RSS-133
		<b>RF Exposure:</b> USA: FCC Part 2, FCC OET Bulletin 65 Supplement C Canada: RSS-102 EU: EN 50360; EN 62311 Australia: Radio communications Standard 2003

## WIRELESS LAN VOICE AND DATA COMMUNICATIONS

<b>GPS:</b>	Integrated standalone or Assisted-GPS (A-GPS) with gpsOneXTRATM	<b>EMI/RFI:</b> USA: FCC Part 15, Class B Canada: ICES 003 Class B EU: EN55022 Class B, EN 55024,
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<b>Radio:</b>	Tri-mode IEEE802.11a/b/g
<b>Security:</b>	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)
<b>Data Rates Supported:</b>	1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54 Mbps
<b>Voice Communication:</b>	Voice-over-IP ready, Wi-Fi™-certified, IEEE 802.11a/b/g direct sequence wireless LAN, Wi-Fi Multimedia™ (WMM and WMM-PS) Zebra Voice Quality Manager (VQM)

EN 301 489-1, EN 301 489-3, EN 301 489-7, EN 301 489-17, EN 301 489-24, EN 60601-1-2, EN 50121-3-2, EN 50121-4  
Australia: AS/NZS CISPR-22

<b>Laser Safety:</b>	IEC Class2 / FDA Class II in accordance with IEC60825-1/ EN60825-1
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## WARRANTY

The MC65 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

## WIRELESS PAN DATA AND VOICE COMMUNICATIONS

<b>Bluetooth:</b>	Class II, v2.0 with Enhanced Data Rate (EDR)
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## RECOMMENDED SERVICES

Customer Services: Service from the Start with Comprehensive Coverage

## PERIPHERALS AND ACCESSORIES\*

<b>Communication and Charging Cables:</b>	Charge only cable, auto charge cable, USB charge/sync cable
<b>Battery Chargers/ Cradles:</b>	4-slot battery charger; 4-slot Ethernet cradle; 4-slot charge only cradle; single slot USB cradle; vehicle holder using auto charge cable; vehicle cradle with charging capabilities
<b>Vertical Specific Attachments:</b>	Snap-on magnetic stripe reader (MSR); snap-on trigger handle
<b>Soft Goods:</b>	Rigid and soft case holsters, headsets

\* Visit [www.zebra.com/mc65](http://www.zebra.com/mc65) for a complete list of available peripherals and accessories



**MAX**  
*FlexWAN*



**MAX**  
*Rugged*



**MAX**  
*Display*



**MAX**  
*Sensor*



**MZEBRA**  
*Data Capture*



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**ZEBRA TECHNOLOGIES**