Perfecting delivery in parcel & post:

Deliver everything your workers need to reduce costs, increase productivity and improve customer service with the Motorola MC55

The MC55 provides all the features required to streamline your end-to-end delivery chain — from retail outlets to carriers, dispatch and distribution. From the moment an item enters the delivery chain to the moment it is delivered, workers have what it takes to improve productivity as well as enable end-to-end real-time track and trace of everything from registered letters to packages.

The challenge: escalating costs — and competition

Today's parcel and post industry faces a number of challenges, from escalating operating costs to increasing parcel volumes, deregulation, and an intensifying competitive landscape. In recent years, operating expenses have skyrocketed due to volatile fuel costs, rising employee-related costs, and the need to hire additional staff to keep pace with customer demands for faster and more reliable service. At the same time, online shopping has not only increased the volume of goods shipped — but also the expectations of an increasingly demanding and technologically-aware customer base.

With operating costs and customer service playing a major role in business strategy, the competition among parcel and post providers has become fierce. Success requires a broad, service offering — as well as the ability to maintain reliability, speed and cost-efficiency. And in Europe, competition is even more intense: postal reform (known as deregulation) is forcing long-standing government-run postal operations to compete with private postal services. With a previously protected customer base that is now able to 'shop around' for postal services, European government-based postal operations are under pressure to think and act more like a commercial business. In order to maintain market share, these entities must find ways to extend existing service offerings, yet retain a fee structure that is competitive with private operators.

The solution: give your workers the tools they need to act right on the spot with the Motorola MC55

The Motorola MC55 Enterprise Digital Assistant (EDA) can help address these issues by providing all the features and functionality required to streamline the end-to-end parcel and post delivery chain, offering a new level of flexibility for staff working both inside the Distribution Center and out in the field. With a sleek, industrial design and consumer-friendly styling, the MC55 is a lightweight-

KEY BENEFITS

- Increase employee productivity

- Automate sorting with bar code scanning, ensuring that items follow the fastest and most cost-efficient route — from receipt to delivery

- Improve delivery times and consistency of service quality

- Enable real-time proof of delivery with electronic signature capture, reducing billing cycle times — and improving cash flow

- Enable real-time cost-effective tracking of assets such as bulk mail containers, roll cages and pallets

- Improve routing efficiency — mileage is reduced along with fuel costs and vehicle wear and tear

- Ensure timely vehicle maintenance to help prevent downtime and higher repair costs — mileage can be tracked by GPS, enabling automatic scheduling of maintenance when pre-set mileage thresholds are reached

- Enable the delivery of new services at pickup sites — such as processing of credit cards for cash-on-delivery shipments or the ability to sell stamps and create a customer loyalty account

The Motorola MC55 helps protect one of your largest capital investments — your vehicle fleet. The integration of best-in-class GPS ensures connectivity even challenging areas, such as urban canyons and dense foliage — boosting the value of your location-based applications. Now, dispatchers can track vehicle location in real time, improving routing efficiency and reducing mileage as well as vehicle wear-and-tear. The ability to automate fuel tax computations eliminates the need for drivers to complete and process paper forms, again freeing time for more stops per day. And when a pre-set mileage threshold is reached, vehicles can be automatically scheduled for regular maintenance, helping to preserve the lifecycle of these high-dollar assets.

yet-rugged tool that delivers reliable operation despite exposure to the weather, drops, spills, and other environmental hazards common in the parcel and post industry. Small enough to slip easily into the pocket of the user or into a small cradle on a vehicle dashboard, it can be utilized at any point in the delivery chain, from the post office to the distribution warehouse and in delivery operations. With the MC55, the tools your workers need to get the job done are always in hand:

- **Real-time voice and data:** Wireless LAN and Wireless WAN radios provide a real-time voice connection as well as a real-time connection to your business applications

- **Advanced data capture – bar code scanner, imager and high-resolution color camera:** The ability to scan a bar code and capture a signature or photograph helps minimize errors and reduce the steps in many processes, as well as provide support for expanded service offerings.

- **Best-in-class GPS:** The SIRFstarIII GSC3ef/LP GPS chipset (available only in the MC5574 WWAN-enabled configurations) provides robust support for location-based applications, even when carriers on foot and delivery drivers in vehicles are in areas where GPS is typically unavailable — such as urban canyons or neighborhoods with dense foliage.

- **High definition color display:** the 3.5 inch color QVGA display is easy to see indoors and outdoors, in virtually any lighting condition — including bright sunlight.

- **High performance architecture:** Built on Motorola's Mobility Platform Architecture (MPA), the MC55 offers the processing power and memory required to support the most demanding applications, ensuring that mobile workers experience 'deskphone' quality voice and a desktop-like data connection — whether they are connected to the WWAN out in the field or the WLAN inside your four walls.

- **Motorola's signature rugged design:** The MC55 is built to easily endure the tough environmental demands of the parcel and post industry, delivering dependable performance inside and outside the four walls. Whether your workers are in the 'carpeted' space, out in the Distribution Center or yard, on the road or on route, Motorola's flagship drop and tumble tests combined with IP54 sealing enable the MC55 to survive the inevitable drops, bumps and exposure to the elements. Where competitive devices often conduct drop tests at ambient temperature, Motorola tests across the entire operating temperature range, ensuring reliability. Additionally, a tumble test, unique to Motorola, ensures dependable operation even after 500 successive 1.6 ft./0.5 m drops.

- **Motorola's leading ergonomic design:** Motorola's mobile computers are known for their excellence in industrial design. The MC55 delivers exceptional all day comfort in a wide variety of applications — from the scan intensive Distribution Center to the retail point of sale (POS).

The applications: streamline your end-to-end delivery chain

From retail outlet operations and carriers to distribution and dispatch services, the MC55 provides business value throughout the entire parcel and post operation.

Retail operations/Post office counters

The MC55 expedites customer purchases at the point-of-sale (POS), enabling sales clerks to capture bar codes on stamps, packaging materials and other products, thereby rapidly and accurately completing purchases. In addition, when a compact, lightweight mobile printer is wirelessly connected to the MC55 via Bluetooth®, bar code labels can be printed and attached instantly to facilitate package tracking at the outset of the delivery chain. A full family of accessories is also available for the MC55, allowing the addition of a magnetic stripe reader for on-the-spot processing of credit cards. Now, during peak hours or holidays — or whenever lines are long — organizations can direct additional employees to the retail floor to line-bust, enabling the effective creation of mobile POS stations as the business demands. Customer wait times are reduced — improving customer service and satisfaction.

Express deliveries/vehicle workers

The MC55 provides multiple value-added applications that improve the productivity of carriers delivering letters and parcels:

- **Parcel pickup:** With an MC55 in hand and a small mobile printer worn on a belt, drivers can easily generate, attach, and scan bar code labels when picking up packages, allowing track and trace to begin the moment a parcel enters the delivery chain.

- **Proof of Delivery (PoD):** The ability to electronically capture a signature, scan the bar code on items that are delivered and transmit that information in real time to your business systems provides instant proof of delivery. As a result, the invoicing cycle can be reduced from days to hours. Instead of a paper form that must be entered into the computer to trigger the creation of the invoice, an invoice can be automatically generated within hours of delivery.

- **Proof of Condition:** In the event a package is damaged, carriers can snap a picture to document proof of parcel condition. And the ability to transmit that photo directly to your delivery application allows the photo to easily

and instantly become a part of the proof of delivery record — no need to manage separate physical photos or digital photo files.

- **Attempted delivery notices:** With the MC55 and a mobile printer, carriers have everything they need to complete an electronic form to print accurate and easy-to-read attempted delivery notices. A scan of the bar code on a package or registered letter can auto-fill the majority of the form, further reducing errors and saving time. When customers arrive at the depot to retrieve the item, employees at the retail outlet can easily locate the item — legibility issues associated with handwritten forms are eliminated and all required information is readily available. Since an electronic version of the notice is immediately transmitted to your business systems, customer-facing real-time tracking portals are always up-to-date — and dispatch can easily reschedule deliveries.

The MC55 is packed with virtually every feature required to streamline business processes across the entire delivery chain — from drop-off and pickup to delivery.

The Motorola MC55 provides the tools to improve driver and carrier productivity — from pick-up to delivery. When packages are picked up at a customer location, a quick scan of the bar code enters the package into the tracking system in seconds, reducing paper — and errors. With the addition of a mobile printer, carriers can generate bar code labels for packages, right on the spot, as well as print computer-generated attempted delivery notices in seconds — increasing efficiency and eliminating legibility issues. With the high-resolution digital color camera, carriers can snap a quick picture of a package to document proof of condition — and the autofocus function provides the wide focal range required to capture a detailed close up photo as well as the package label — including the ability to read the fine print. Finally, during delivery, the ability to scan the bar code on packages, capture a signature and process credit cards automates the delivery process and provides the real-time proof of delivery required to expedite billing cycle times. Carrier efficiency is improved — carriers can make more stops per day. The ability to offer convenient payment options improves customer service and satisfaction. And the order-to-cash cycle time is reduced, improving cashflow and profitability.

- **Real-time navigation:** Integrated GPS helps keep carriers on time throughout the day with turn-by-turn directions. Drivers can easily locate delivery destinations and identify alternative routes to circumvent traffic jams and roadwork, providing faster and more consistent customer service.

Distribution centers

Inside the distribution center, the Motorola MC55 streamlines sorting and asset management:

- **Automated sorting:** Regardless of what type of bar code symbologies are in use in your organization, the MC55 can enable the rapid and accurate scanning of packages and bins to ensure that the right item follows the right route, traveling the fastest and most cost-efficient path from package receipt to delivery. In the event the label has been damaged and the bar code or the address is illegible, a lightweight mobile printer worn on a belt allows workers to print a replacement label in seconds — allowing rapid and cost-effective processing of these exceptions.

- **Asset management:** The assets used to move items through the delivery chain — such as bulk mail containers, roll cages, pallets and racks — are not only expensive, but also time consuming to track. But the lack of availability of these assets can slow the speed of service, forcing businesses in this industry to invest in higher asset inventory levels to ensure availability. With the MC55, workers can easily scan the bar code labels on these assets as they move through the delivery chain, enabling real-time track and trace of these valuable assets. Workers are more accountable — they can scan the bar code on their employee badge as well as the bar code label on an asset, providing a full audit trail of

each asset — including who handled them. The audit trail also helps deter theft. In addition, lower stocking levels of these high dollar assets help reduce capital and operational expenses — there are fewer assets to purchase and manage.

Dispatch services

The Motorola MC55 brings a new level of efficiency to the dispatch function, improving driver productivity, vehicle utilization and the ability to respond to new customer pick-up requests:

- **Route efficiency/dynamic routing:** Integrated GPS allows dispatchers to monitor route efficiency as well as the real-time location of all vehicles and drivers. As a result, dispatchers can maximize the efficiency of delivery routes, minimizing mileage, fuel costs and vehicle wear and tear. In addition, the ability to dynamically route the closest carrier to fulfill incoming pick-up requests ensures the ability to meet service level commitments — and prevent excessive mileage.

- **Automatic fuel tax computation:** The integrated GPS in the MC55 can automatically capture and transmit mileage to your business systems, enabling the automatic completion of fuel tax forms. By eliminating the need to complete and process paper forms, workers can spend more time in the driver's seat — and make more stops per day.

- **Automated maintenance scheduling:** Since mileage is automatically tracked, vehicles can be automatically scheduled for maintenance. The ability to perform maintenance on the right vehicle at the right time helps reduce the effects of everyday wear and tear, protecting against high repair costs — and the high cost of vehicle downtime.

The benefits: reduce costs — and improve your competitive advantage

The Motorola MC55 extends your business-essential applications right to the point of work — regardless of whether those workers are inside or outside the four walls. The result is improved productivity, improved quality of service, reduced costs and the flexibility to add new revenue-generating services.

Increased employee productivity

With the MC55, workers have all the tools they need to take action right on the spot, regardless of their location. The result is a dramatic reduction in cycle times — and errors. By providing mobile access to essential information such as pricing, inventory, asset location, pick-up requests and more, the MC55 keeps your staff moving and productive throughout the workday. Advanced data capture — from bar code scanning to signature capture — replaces error-prone handwritten forms and the need for manual data entry. Push-to-talk (PTT) functionality provides the instant voice communications needed to keep business moving — for example, dispatchers can instantly reach any driver or carrier out in the field in seconds.

Improved service quality

The MC55 helps improve service levels across the parcel and post delivery chain, improving the overall customer experience and increasing customer satisfaction and retention. A more efficient end-to-end handling process helps ensure fast delivery as well as the ability to pick up packages on time, every time. The increased efficiency can enable businesses to extend pick-up hours for key customers. And the ability to cost-effectively track and trace packages from the moment they are received to the time of delivery enables the creation of a Web-based portal that allows customers to track their packages in real time.

Reduced costs

As delivery volumes rise, many providers are pressured to add staff to maintain service levels, which in turn increases overhead costs and diminishes profit margins. But the productivity increases afforded by the MC55 improve staff utilization — simply put, the same staff can now handle more work, helping control staffing costs. In addition, a self-service Web-based portal can enable customers to track their own packages, dramatically reducing the volume of customer calls — and the required corresponding call center staff and infrastructure.

In addition, vehicle and other asset-related costs are reduced. The ability to increase vehicle utilization through better route optimization can eliminate the need to purchase additional vehicles. The creation of efficient routes combines with dynamic routing to reduce mileage and fuel costs. Timely maintenance helps protect the lifecycle and ensure a low total cost of ownership for these high dollar assets. Real-time tracking of the assets required to move parcels and letters through the delivery chain reduces stocking levels and prevents the theft — and re-purchase — of these expensive and crucial assets.

Support for new service offerings

In order to add value for customers and promote business growth, parcel and post companies need to be able to add services to better meet customer needs as well as create new revenue streams within existing lines of business. The MC55 offers the flexibility to deliver services right at the customer's doorstep, including the ability to:

- Process credit cards for cash-on-delivery (COD) shipments

- Create a customer loyalty account

- Offer and print special coupons tailored for individual customer needs

- Collect customer survey data to gather targeted market information to aid in the development of new services

The rugged MC55: a TCO advantage

Several factors help the MC55 deliver a low total cost of ownership (TCO), offering a superior value for parcel and post operations. First, the MC55 is built to last, offering a TCO that is exponentially lower than that of consumer PDAs. While the actual consumer PDA itself may cost less, the rugged design of the MC55 offers a three to five year lifecycle with minimal repair required — a timeframe that would typically require the purchase of multiple consumer grade PDAs as well as numerous repairs. A Venture Development Corporation (VDC) study revealed that consumer grade devices require replacement every two and a half years, but rugged devices are typically in service for at least four years. Statistics reveal that in the first year of deployment, only 3.3% of rugged devices were replaced compared to 18% of the consumer grade devices; in year two, just 7.8% of the rugged devices were replaced compared to

38.5% of the consumer grade devices; and in year three, 18.2% of the rugged devices were replaced, while consumer grade device replacement reached an all-time high of 82.6%.

The survey also revealed that the number one reason for consumer device failure was exposure to liquids, followed by exposure to excessive heat and cold — 64% of the consumer style devices failed due to exposure to water or other liquid, while 24% failed due to extreme temperatures. The rugged MC55 eliminates these issues: IP54 sealing allows the device to withstand liquid sprayed from any direction as well as dusty environments; and an extended temperature range of 14° F to 122° F/ -10° C to 50° C plus a drop test performed over the entire temperature range ensure reliable operation despite extreme cold or heat.

The end result is that the TCO of consumer grade devices is nearly 50% greater than the TCO of a rugged device, such as the Motorola MC55. According to the same VDC study, over a five year period, the rugged handheld mobile computer will cost approximately $14,000, while the non-rugged consumer grade counterpart will cost a total of $21,000.[1]

In addition, two Motorola differentiators further reduce TCO. Motorola's remote management solution, Mobility Services Platform (MSP), allows your IT staff to remotely stage, provision, monitor and troubleshoot your Motorola MC55 mobile computers and other mobile devices regardless of where in the world they are located — all from a single centralized location. The result is a substantial reduction in IT time and cost required to manage your entire 'fleet' of Motorola mobile computers. In addition, the MC55 is eligible for Motorola's Service from the Start with Comprehensive Coverage, a unique service that 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. This truly comprehensive service begins on the day of purchase, providing true service 'peace of mind' — and protection against unforeseen repair expenses.

The cost-effective 'single-family' advantage

The Motorola MC55 offers multiple configuration options to support broad functionality, providing the simplicity of a single device family solution for every task and role on the delivery chain. This highly flexible product family allows you to cost-effectively meet the needs of a broad range of employees, from task workers to managers inside and outside your four walls. The ability to standardize on a single product line simplifies IT maintenance and support by eliminating the need to understand and manage multiple technologies and multiple devices — and reduces training requirements by providing end-users with a consistent technology experience.

Choose from a WLAN-only device for workers inside the four walls, or a combination WLAN/WWAN model that provides the cellular connectivity required in the field, as well as cost-effective in-building connectivity when workers are in the office, depot or a hotspot. Since different jobs require different types of data capture capabilities, four configurations allow you to match the device with worker needs. Select either a 1D laser scanner (for 1D bar codes) or a 2D imager (offering 1D and 2D bar code scanning as well as signature capture) — and add a high-resolution color camera to either the scanner or the imager for workers who need to capture photographs for proof of condition and more. Finally, a broad range of keypads ensures easy operation for a wide variety of applications — from numeric keypads for users who primarily use the MC55 as a smartphone or for simple data entry to an array of alphanumeric keypads for more sophisticated data entry.

For more information

To find out more about how you can leverage the power of Motorola's MC55 in your parcel and post operations for a competitive edge, please visit us on the web at www.motorola.com/mc55 or access our global directory at www.motorola.com/enterprisemobility/contactus

About Motorola Enterprise Mobility Solutions

When you choose Motorola for your mobility solution, you get the peace of mind that comes with choosing an industry leader as your technology partner. Motorola offers the proven expertise and technology you need to achieve maximum value and a fast return on investment — as well as first hand experience in virtually every size business in nearly every major industry. Every day, businesses of all sizes all over the world count on Motorola Enterprise Mobility Solutions to maximize employee effectiveness, improve customer service and increase supply chain efficiency.

Our broad technology portfolio and world-class partnerships enable us to offer true end-to-end solutions that offer the simplicity of a single accountable source — regardless of the number of vendors involved. Our comprehensive product offerings include: rugged and enterprise class mobile computers with extensive advanced data capture and wireless communications options; business-class smartphones; rugged two-way radios for always-on voice communications; private wide area and local area wireless network infrastructure to deliver wireless connectivity to workers inside and outside the four walls — and to network multiple business locations; comprehensive RFID infrastructure, including fixed, mobile and handheld RFID readers; a partner channel delivering best-in class applications; software products for central and remote management of every aspect of your mobility solution; and a complete range of pre-and post-deployment services to help get and keep your mobile automation system solution running at peak performance every day of the year.

1. Source for all statistics in this section: A White Paper on Total Cost of Ownership (TCO) Models for Mobile Computing and Communications Platforms; Second Edition; Venture Development Corporation; Mobile and Wireless Practice; David Krebs; July 2007

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