

Mackay GUARDIAN™ Multi Elite



Mackay Guardian™ Multi Elite (Pay-by-Plate version)



Key features:

- High strength stainless steel keeps it secure and rust free.
- High-security, large capacity, stainless steel cash box.
- Microsoft® Windows® CE operating system, combined with a 32-Bit ARM® Processor,
- 32 MB of SDRAM and 32 MB of Flash memory.
- Flexible, modular design that is easy to upgrade, service and maintain.
- Powerful off-site monitoring capabilities by adding a communications kit and Sentinel™ Meter Management System. Monitor your equipment remotely, generate reports, and receive alerts, no matter where you are.
- Comprehensive and easy-to-use configuration menus.
- Supports Pay by Plate, Pay by Space or Pay & Display configurations
- Features a color VGA Liquid Crystal Display with back light, capable of displaying graphics.
- English? Español? Français? The multi-language capability allows users to select the language of their choice to carry out transactions.
- Offer end users security, convenience, and reject fraudulent payment. Use Mackay's On-line Real-time Credit Card Approval feature utilizing secure PCI compliant electronic payment processes.
- Mackay Meters backs its product lines with a solid warranty based on the confidence in the quality of its products.

<over for specifications>



Colour Display



Solar Option



Illuminated
LED Accept & Cancel

SPECIFICATIONS

General Specifications

Environmental

- Extended operating temperature range¹: -29°C (-20°F) to 60°C (140°F)
- Humidity: Up to 95% RH (non condensing)

Cabinet Materials, Dimensions & Weight

- Welded reinforced Grade 304-2B stainless steel (9 gauge carbon steel equivalence)² for cabinet and doors
- Aluminium front with Lexan® display covers for the LCD screens, rate/instruction plate, LED panel and site branding display
- Total installed weight (Solar, 40Ahr battery): 113 kg (249 lbs.)
- Overall dimensions: 1524mm (60 inches) (H) x 343mm (13.5 inches) (W) x 295mm (11.6 inches) (D)
- Overall height with solar panel: 2045mm (80.5 inches)

Power Supply Configurations/Options

- AC Single Phase, 110/120/220/240VAC, 50/60 Hz
- Solar powered (20W panel) with 40Ahr or 60Ahr battery

Operating System & Hardware

- Microsoft® Windows® CE operating system
- Latest technology 32 Bit ARM® processor
- Memory 32MB SDRAM 32MB Flash

Communication Options

- Ethernet port can support hardwire (Cat5) cable or add-on WiFi devices for local network connection³
- Serial RS232 port can support either GPRS or CDMA (1X) modem³
- Ethernet port can support a line-of-sight pay by plate primary/secondary network configuration⁴
- Both wide area or local area pay by plate network options are supported, allowing payment for any plate, at any machine, at any time
- Wireless handheld pay by plate enforcement available

Payment Systems

- Coins
- Tokens (optional)
- Credit cards utilizing secure, on-line real-time PCI compliant processes (optional)
- MacKay Smart (Chip) Cards (optional)
- Cell phone payment (optional)
- Bills (optional)

Ticket Printing

- Thermal printer offers alphanumeric printing in various fonts and languages
- Ticket size: Standard - Short 75mm (3 inches) x 57mm (2¼ inches) or Long 100mm (4 inches) x 57mm (2¼ inches). Other lengths can be specially ordered
- Ticket capacity: 4,000 3-inch tickets per roll

[1] All MacKay Guardian™ Elite components are operational within this range. Standard sealed lead acid battery operational temperature rating is from -20C (-4F) to 50C (122F) when charging, and from -20C (-4F) to 60C (140F) when discharging.

[2] Independent laboratory tests indicate that all things being equal, a component made of 11-gauge 304-2B stainless steel, would have equal or greater tensile strength, shear strength and malleability, as compared to the same component made out of 9-gauge carbon steel.

[3] May require additional MacKay Guardian™ Multi Elite software modules, or 3rd party hardware.

[4] Length of run limitations must be observed; primary machine is AC powered and network hub required.

Components

Display

- High contrast, color, sunlight readable, 640 x 480 pixels graphics LCD
- Viewing area 114mm (4.5 inches) x 89mm (3.5 inches)
- Self-adjusting contrast to temperature
- LED back light

Coin Acceptor

- Programmable: Accepts up to 16 coins or tokens
- Programmed coin acceptance can easily be turned on/off with a switch

Card Reader (Optional)

- Single slot, dual mode card reader captures magnetic stripe (ISO 7810/11) credit card data, and provides an ISO 7816 interface for smart card acceptance

Keypads & Buttons

- Tactile feedback keypad and buttons
- Vandal resistant and rated for resistance to impact, shock and vibration to MIL standards
- Sealed against ingress of water and dust to IP67, and designed for exposed outdoor and extreme environmental conditions
- New - LED accept and cancel buttons that can light up.

Printer

- Heavy-duty printer head with minimal moving parts ensuring quality, reliability and endurance
- Print life of over 20 million character lines
- Designed for high-resolution printing
- Guillotine type cutter with full or partial paper cutting options (software selectable)
- Accessible for ease of maintenance

Cash Box

- Two (2) supplied with each machine, each with a convenient carry handle
- Rugged, secure, high-capacity 4.2 litres (1.1 US gallon), stainless steel container
- Self-locking lid on removal, and includes a high security lock/key (unique key codes available upon request)
- Printed audit record produced when cash box is removed from machine (software selectable)

Bill Acceptor (Optional)

- Built-in, integrated bill acceptor
- Bill cassette with 600 or 1000 bill capacity secured in cash vault
- Programmed bill acceptance can easily be turned on/off on-site
- Reads bills inserted in any of 4 directions

Features

Security

- High security locks for cash box, cash vault, and main door
- Seven (7) point locking mechanism on vault door
- System monitored access sensors on main and vault doors and sensor detecting presence of cash box

Audit and Statistic

- Local printouts of grand totals and subtotals for coins, bills and card transactions per type
- Full or quick audit tickets are software selectable

Maintenance

- User-friendly graphic interface tools for diagnostics, configuration and editing
- Easy access modular design

Configuration

- Flexibility through the MacKay Guardian™ Multi Elite user interface
- User-friendly menus allow selection of tariff, ticket and display files
- Programmable multiple tariff structures such as overlapping period, pre-payment and free ticket
- User interface (display, keypad and dedicated software), provides clear and concise operating instructions, messages, and graphics
- Multi-language capability: any combination of English, French and/or Spanish is available as an option. Other languages available by special order

Web-Based Hosted Sentinel™ Meter Management System (Optional)

- Remotely monitor and generate audit, transaction and occupancy reports for all on-street equipment using a web browser and secure web portal
- Generates a variety of reports including grand totals and subtotals for coins, bills and card transactions per type, which can be exported as PDF or CSV files, or imported into other applications

MacKay Guardian™ Multi Elite Options

- AC Fan
- AC Heater Kit, includes an AC heater and an AC fan
- Customizable front graphics for main door
- Electronic Lock (vault and maintenance door)
- Keypad feedback buzzer (optionally turned off)
- Solar panel riser
- MacKay's Sentinel™ Meter Management System

Warranty

J.J. MacKay Canada Limited, the manufacturer, guarantees for a period of one year from the date of shipment against defects in workmanship and/or materials.

As our policy is one of continuous product improvement and development, we reserve the right to alter product specification and design.

Photos are representative; product appearance may differ.

Copyright © 2011 J.J. MacKay Canada Limited. All rights reserved. The MacKay Logo, MacKay Guardian and Sentinel are either trademarks or registered trademarks of J.J. MacKay Canada Limited in Canada and other countries. Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. ARM is a registered trademark of ARM Limited. All other trademarks are the property of their respective owners. J.J. MacKay Canada Limited reserves the right to modify the specifications without prior notice. Please refer to our website for up-to-date specifications.

Head Office:

J.J. MacKay Canada Limited Phone (902) 752-5124
1342 Abercrombie Road, PO Box 338, Fax (902) 752-5955
New Glasgow, Nova Scotia, Canada B2H 5E3

Head Office customer support and technical support:

Toll free in North America: 1-888-4MACKAY (462-2529)
Fax (902) 752-4889
Email customer.service@mackaymeters.com
Web www.mackaymeters.com

Sales Office:

