

# M020

#### ONE SOLUTION. INFINITE OPPORTUNITIES

The M020 is a new leading-edge solution that empowers retailers through a single hardware integration to roll out payments across even the most challenging POS environments.

By giving you a single device, one API and a simple way of configuring this solution with innovative plug and play peripherals, you can now deliver enhanced payment services to merchants across all retail verticals.

As one device, the M020 fits all retail POS environments and, more importantly, optimizes both technical and operational investments as it only needs one development API. This delivers unprecedented benefits by standardizing both integration and certification processes. Retailers also benefit by having a seamless staff experience and reduced operating costs, as a result of the ability to provide a singular set of training and support services.

The M020 is perfect for all in store environments, from traditional in store fixed PED right through to table-side, queue busting and even mobile where enterprise level solutions are required – bringing down costs and guaranteeing a swift return on investment. And, with standardized API and architecture, the M020 simplifies and speeds up integration with existing and new systems.









#### **Enhanced Retail UI**

Big, full colour, high-res screen, fully programmable to simplify consumer facing tasks e.g. gratuities, additional touch screen features enable digital signature capture and an optimised interface for consumers

# Connectivity

Bluetooth and wi-fi as standard, intelligent USB connectivity for traditional POS, works with all main platforms; iOS, Android, Windows.

#### Secure and Certified

As an enterprise retail payment solution, the M020 meets all security and scheme certifications including; PCI 5.0 Certified/Common.SECC, EMV and contactless, P2PE V2 Modular Certiciation (Application and Key Management Component).

#### Reduced TCO

The M020 delivers industry leading cost benefits including: Miura Revive™ – an integrated platform feature allowing the recovery of a device when an OS or application related issue has rendered the device inoperable. With one button, it performs a structured revival that quickly restores the device to the last payment. So there's no need for help from an engineer or to return a product. What's more, with our innovative peripheral approach you can meet the demands of many different payment environments, without the need for multiple devices - greatly reducing your CapEX.

# Software development (SDK)

Developed on the proven Miura Linux secure platform, the M020 is provided with an extensive SDK to allow partners the ability to develop their own applications quickly on any mobile platformwithout the need for specialised development resource and the constraints of proprietary development languages. This allows our partners to develop new and innovative solutions for all aspects of retail payments and stay ahead of the game in delivering the next generation of retail payment.

#### M-Link Connector

The M-Link connector technology from Miura, extends the M020 functionality with a wide range of peripherals and accessories. These open up new retail environment opportunities, allowing merchants of all sizes to take payments at any location, queue bust and serve in-store or anywhere in the field. Stylishly integrated into design the M-Link contacts allow for innovative use of peripherals such as cradles and allow for easy integration into other smart devices, such as tablets.

# Single Platform

A common platform approach means integrating the M020 is simple and easy and opens up access to all of the innovative Miura hardware solutions. And, when you integrate with Miura once you'll never need to do it again.







#### Processor

Secure 32 bit - ARM 9

# Memory

256 Mbytes SLC NAD Flash, 64 Mbytes mobile DDR

# Power input

Charge via USB (Standard Micro B Connector) or a Miura approved charging peripheral

#### M-Link Contacts

Low Profile USB/Power contacts on the rear of the device providing both Fast Charge and USB Communication

#### Bluetooth & Wi-Fi

Dual Communication with Bluetooth 4.2 class 1 with BLE (Smart Beacon) supported and Wi-Fi 802.11n

#### **USB Serial Communication**

USB Serial communication is provided via the Miura M-Link connection or the Micro B connector (USB 2.0 High Speed OTG)

# Colour Display

Colour TFT, 2.3", landscape, QVGA (240x320 pixels)

#### Touch Screen

Capacitive touch with signature capture capability is available as a build option

# Keypad

Physical Key Mat

4 rows x 3 columns 0-9

CNL (RED) + ENT (GREEN) keys Single clear key (YELLOW)

A backlit Key mat is available as a build option

# Mag swipe

Bi-Directional and Triple Track (1, 2 & 3) Secure Mag Stripe Reader

#### Contactless

ISO 14443 A/B supports major mobile wallets and Scheme brands as well as FeliCa. EMVL1, TQM Visa Contactless (PayWave), MasterCard Contactless, ExpressPay, Discover, ApplePay, SamsungPay, Google Pay

#### Miura Revive™

An integrated platform feature allowing the recovery of a device when an OS or application related issue has rendered it inoperable

# Beeper

Various tones under software control. Volume is suitable for retail environment. Speaker is available as a build option

# Battery

Integrated Li-ion 1150mAh battery – options for additional battery packs via M-Link connection

# Size (mm)

126x63x13

# Weight (g)

128g

# Security

PCI PTS V5 (Including Open Protocols & SRED), Common.SECC

P2PE Application & CA Component Certified

# Statutory

CE, FCC, IC, ROHS, WEEE, Telec

#### Contact

EMVL1, EMV L2 Certified, TOM

# **Encryption/Key Management**

Scheme Certified Remote Key Management (Data & PIN Encryption) DES, TDES, RSA, DUKPT

# MFI Certified

Includes Apple Authentication Co-Processor and certified to Apples MFI Program

# **Environmental Conditions**

Storage temperature	-20°C to +60°C
Operating temperature	0°C to +50°C
Humidity	10% to 90 % non-condensing







Elevate the M020 solution and use it seamlessly in any fixed retail environment. The robust Retail Stand secures to a counter and has a proprietary latching mechanism which can be locked or opened to allow mobile operation of the M020. The design also incorporates a USB interface, power, plus the option of a PIN Shield for privacy.



#### Printer

Dock the M020 with the Printer Module and create a fully functional payment solution for physical receipts. The M020 printer module has an integrated lithium-ion battery and a fast and reliable thermal printer. Now payments can be completed in any retail and hospitality environments where both payments and receipts must be completed together.



#### Multi-Charger

The M020 Multi-Charger has been designed for demanding retail environments where fast charging times are essential. Its unique design allows for simple 'drop and charge' support and acts as a safe housing unit when idle. Our charger incorporates an innovative racking system – just add additional chargers when you introduce more devices, or create multiple charge locations.

# MO20 PERIPHERALS DATASHEET





#### Smart Battery

Smart Battery is exactly that: a simple but effective way to expand the battery capacity of the M020 and add physical protection with a smartly designed, lightweight peripheral. The additional 1300 mAh battery ensures that the M020 has added performance in high demand retail environments.



#### Tablet POS

The M020 and our innovative M-Link connector technology are both integrated using Tablet POS. This provides a seamless payment solution for mobile or fixed point of sale environments. Tablet POS connects the M020 either physically (via USB) or wirelessly. Both the tablet and the M020 are charged simultaneously when the tablet is docked.



#### **Smart Case**

The Smart Case provides a neat and lightweight solution for protecting and carrying both a smart device and the M020. Multiple configuration options create a seamless and straightforward payment experience for both retailers and consumers. Options within the case include an additional battery and USB connectivity for environments where Bluetooth is not suitable.



#### Desktop Cradle

The Desktop Cradle allows the M020 to be easily adapted for a wide variety of fixed or integrated POS environments. With its optimised footprint it delivers all the advantages of a traditional desktop PED. And with its proprietary locking mechanism you have the option to safely secure the device in place when required.

# MO20 PERIPHERALS DATASHEET





#### Lanyards and protective cases

Take advantage of additional implementation support with the M020. From simple lanyards to all-in-one protective cases, these accessories deliver simple yet effective ways to improve the payment experience for retailers and consumers.



Extend the functionality of the M020 even further with the In-Vehicle Cradle. Designed specifically to safely hold the M020 in a range of transportation environments, it can be quickly and easily adapted to deliver a robust and reliable mounting solution for all types of vehicles whenever it's needed.



#### 3rd party peripheral development

Our unique M-Link connector technology allows Miura partners and 3rd party solution providers to create peripherals or companion solutions built around the flexibility of the M020.