ELECTRONIC VOUCHER TERMINAL

The Unique Micro Design ('**UMD**') *Electronic Voucher Terminal* ('**EVT**') is a new breed of intelligent data capture device for *Point of Service* ('**POS**') and other applications.

The EVT is an *Internet of Things* ('**IoT**') device requiring only a WiFi Internet connection. It can operate standalone or be connected to a host/POS system via USB.

The addition of **Cloud Services** to the EVT creates a powerful and secure ecosystem that can deliver:

- A simple micro Point of Sale ('**µPOS**')
- A closed loop payment system
- A loyalty program front end
- Real-time marketing redemption at the POS
- Customised functionality as required

The EVT is POS agnostic:

- Reduces implementation time
- Reduces integration cost
- Increases ease and flexibility of deployment to disparate sites

The EVT is comprised of:

- **Programmable** microntroller
- Large **non-volatile storage**
- Soft **configuration** options
- A fast **barcode reader** which can read barcodes off mobile phones
- A **Near Field Communications** ('**NFC**') reader/writer
- **Screen**
- **Keypad**
- Audible and visual **annunciation**

The EVT is primarily targeted at retail and is capable of many more applications. It is able to operate in the following main modes:

- *Simple data capture* - reads keystrokes, barcodes and NFC tags, passing this, or modified, data through to the POS.

- *Intelligent data capture -* passes data to cloud business services for processing before returning the same or converted data to the POS.
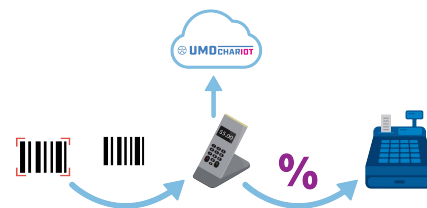
- *Stand alone µPOS* - displays and processes a simple configurable menu. µPOS has the option of cloud processing.

The EVT is backed by the UMD '*CharIoT*' **Terminal Management** and **Service Broker** cloud platform.

CharIoT Terminal Management provides:

- *Over the Air* ('**OTA'**) application updates
- OTA configuration
- Device health monitoring
- Device logs
- Device asset management (eg groups, sites)

The Service Broker:

- Allows <u>multiple</u> **Application Services** to be "attached" to specified EVTs.
- The architecture allows granular business logic to be applied down to a single EVT.

Application Services include:

- **BarTab:** Closed loop, patron initiated, cashless payment system specifically for hospitality.

- **Disrupted Flights:** Closed loop payment system specifically for airlines and airports. Manages patron redemptions at airport vendors and vendor settlement by airlines.

- **dQue:** Cashless payment overlay for existing event ticketing. Trusted third party account management with distributed account visibility to the Event Organiser, Vendors and Cardholders.

- **Loyalty & Rewards:** front end business tool for processing Loyalty programs in real-time at the POS.

- **Simple Payment Service:** An e-commerce service that utilises SMS to initiate secure credit card payments.

- **Third party services:** Readily accommodated by our secure API.

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Rewards Example

EVT (Electronic Voucher Terminal)

Marketing develops an offer
1

Marketing creates vouchers
2

Vouchers distributed to customer
3

Voucher encourages more foot traffic
4

Customer purchases goods
5

Customer presents voucher at EVT
6

EVT validates voucher with CharIOT Application Services
7

Voucher offer transferred to POS (injects barcode)
8

POS processes the sale
9

Customer enjoys the offer
10

Merchant benefits from uplift in sales
11

EVT Infographic Issue 005

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Specifications

Manufacturer / Model	Unique Micro Design / M782B

Mechanical

Dimensions	67 (w) x 132 (h) mm x 140 (d) mm
Weight	310 g
Materials	Black ABS, Clear polycarbonate, clear/black silicone, stainless steel

Electrical

Input Voltage	4.5 - 5.5V DC via USB
Current	0.33 A – quiescent 0.55 A – operational and barcode active

Environmental

Operating temperature	0°C to 40°C @ 90% relative humidity (non-condensing)

Display

Type	White OLED
Panel Size	60.5 (w) x 37 (h) mm
Resolution	128 x 64 pixels

Keypad

Matrix	3 columns x 4 rows
Legend	0 to 9, Cancel, Enter, Menu
Style	Silicone rubber over membrane matrix

Annunciation

Visual	Individually controllable full colour LEDs
Audible	Single tone, 2.4kHz, 88dB buzzer

Communications

POS / Host Interface	USB 2.0 Type A (Client)
Protocol	Human Interface Device (HID) & Serial Port Protocol (SPP)
WiFi	IEEE802.11b/g/n (2.4GHz)

Near Field Communication

Wireless Protocol	ISO14443 A/B, ISO15693, Mifare Classic 1K/4K, Mifare DESFire

Barcode reader

Scan Engine	Honeywell N66xx series
Symbologies	All common 1D & 2D
Illumination/Aimer	LED (white) / LED (green)

Memory / Storage

Type / Size	MicroSD / 16GB (supplied as standard)

Regulatory Compliance

Body / Certification	A.C.M.A. / R.C.M. for Australia and New Zealand