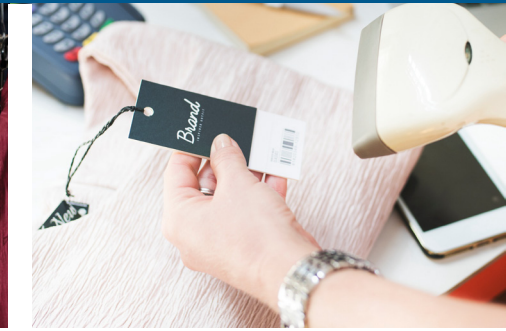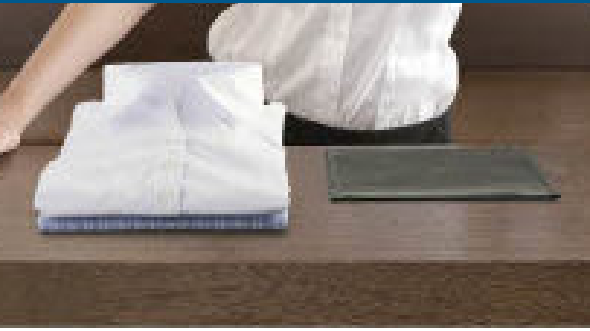# UMD Smart Stock: RFID Starter Kit

Providing Retailers and Merchants the ability to add RFID, using lightweight infrastructure, with minimal effort.

The RFID Starter Kit has been developed in response to organisational issues with legacy POS software and ERP systems that do not support serialised inventory items that RFID tagged items demand.

It also provides a vehicle for Retailer and Merchants to:

• Experience RFID technology in real environments

• To understand any changes needed

• To provide training

• Using plug-and-play RFID solution

• UMD's RFID Starter Kit: is a standalone RFID technology solution, that enables retail merchants to immediately incorporate real-time inventory tracking into their business operations with minimal effort

• Seamlessly integrates into the POS system using "lightweight" infrastructure removing the need for software changes. As Smart-Stock converts the RFID data into a barcode, no POS software changes are required

• UMD's RFID Starter kit is part of UMD's Retail Edgeware Application Platform (REAP) which provides IoT based productivity gains and enhanced customer experience for Merchants. It can be expanded at any time. REAP also seamlessly integrates with UMD's RACE – RFID Portal architecture

• Ideally suited for Merchants that wish to evaluate RFID in retail by simplifying the complexity of integration and reduces the excessive consultancy costs

UNIQUE MICRO DESIGN

...Engineering IoT Solutions

1/200 Wellington Rd Clayton VIC 3168

03 9582 7000   www.umd.com.au   sales@umd.com.au
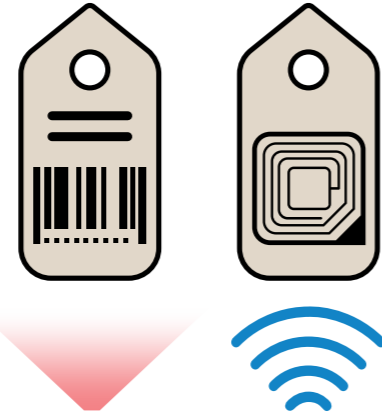
UMD Smart Stock™ Basic Operations

1
ATTACH RFID TAG TO BARCODE LABEL

Attach RFID Tag to rear of existing label (eg. Swing tag) Can use a variety of RFID tag options:
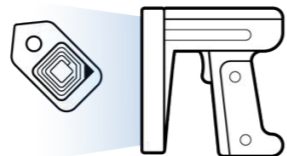
• Reusable EAS/RFID
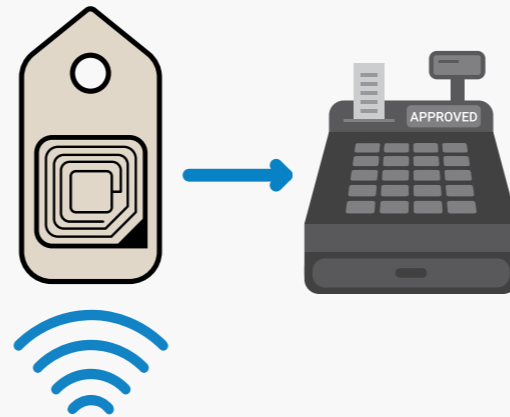• Inlays
• Smart Labels

2
READ BARCODE > PROGRAM RFID TAG

Read Barcode and program RFID tags using a handheld RFID/Barcode reader running UMD's TagIt application.

Handheld updates REAP Cloud with the tag's EPC and Barcode.

3
SCAN RFID TAG > POS

Sale conducted with RFID scanned at POS using UR20 RFID Pad Reader. RFID converted Barcode and injected into POS using REAP IoT device. REAP Cloud updates inventory.
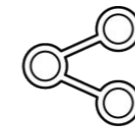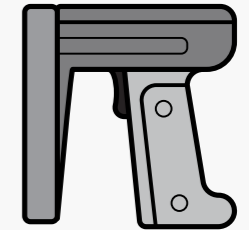
4
INVENTORY > REAP CLOUD

REAP Cloud has Real Time copy of inventory data which can be shared:

• Omni-channels
• Marketing / Loyalty
• Brands / Suppliers

5
MANAGE

Push data to RFID Reader running UMD's Collect handheld application:

• Stock-take inventory
• Find specific items (Find It mode)
• Identifying misplaced items

Smart Stock Prerequisite:

• Works with the GS1 (GTIN) barcode inventory items (Also known as APN, EAN barcodes).

• GS1 barcode are printed in GTIN format, and is a global standard.

• Uses the GS1 standard to encode the RFID via the EPC SGTIN format, which effectively "serialises" the item.

• Serialisation ensures each item is globally unique.

• A Wifi network is required for Internet connection to access the Smart-Stock REAP Cloud Service.

• A Barcode based POS System with USB interface.

• Connects to the POS system via this USB port, and looks like a Barcode scanner to the POS system.

REAP RFID Smart Stock: Starter Kit

RFID & Barcode RFID Handheld Reader

• UMD can provide a range of RFID handheld readers

by leading vendors

• Chainway, Honeywell, iData, Urovo, Zebra

RFID Desktop Pad Reader

• Denso UR21 and antenna

UMD Smart (Wifi) IoT Cable

• Convert RFID / EPC into a Barcode

• Updates REAP Cloud Service

UMD REAP Cloud Service

• Only need Internet connected Browser

• Upload existing SKU data

RFID Tags

• An Extensive range of RFID tags are available

from leading vendors

• Alien, Avery-Dennison, Confidex etc