

# Connecting you to the Internet of Things

SIM cards, Data plans and Managed Services for IoT and M2M devices.



M2M One are Australia's leading supplier of SIM Cards, Managed Data Plans and Custom IP Networking for Machine to Machine (M2M) and Internet of Things (IoT) devices.

Our goal is to help our customers and partners accelerate development and manage deployment of their connected fleet.

All of our services are backed by the industry leading CISCO Jasper online Control Centre and operate on Australia's largest mobile network offering the greatest level of population and land mass coverage available.

With M2M One you have unrestricted access to 3G, 4G/LTE, Cat-M1 & NB-IoT networks with no shaping, coverage limitations or permanent roaming blocks.

# Why partner with M2M One?



**No Contracts. No Minimums** 



**Instant SIM Activation** 



**Real-Time Data Reporting** 



No more Bill-Shock



**Expert IoT Support** 

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# **M2M Sim Cards**



M2M One stock a wide variety of SIM Card form factors to make sure our customers have the perfect fit for their application.

Whatever your SIM requirements - let M2M One connect you to The Internet of Things.

	M2M Standard Form Factors			M2M Specialist Form Factors	
	M2M Standard SIM	M2M Micro SIM	M2M Nano SIM	M2m Industrial Strength SIM	M2m Solderable SIM Chip
Form Factor	2FF	3FF	4FF	2FF or 3FF	MFF2
Dimensions	25mm x 15mm	15mm x 12mm	12.3mm x 8.8mm	25mm x 15mm	6mm x 5mm
Environment	Normal Conditions	Normal Conditions	Normal Conditions	Extreme Conditions	Extreme Conditions
Operational Temperature	-25°C to +85°C	-25°C to +85°C	-25°C to +85°C	-40°C to +105°C	-40°C to +105°C
Anti-Corrosion	N/A	N/A	N/A	Yes	Yes
Endurance	Average 500,000 write/erase cycles	Average 500,000 write/erase cycles	Average 500,000 write/erase cycles	Average 500,000 write/erase cycles	Average 500,000 write/erase cycles
Data Retention Time	Average 5 to 7 Years	Average 5 to 7 Years	Average 5 to 7 Years	Average 10 Years	Average 10 Years
Flash Memory	64KB	64KB	64KB	64KB	64KB
Vibration Standard	N/A	N/A	N/A	Complies to ETSI TS 102.671	Complies to ETSI TS 102.671
Package	Plug-In Card (Uses SIM Tray)	Plug-In Card (Uses SIM Tray)	Plug-In Card (Uses SIM Tray)	Plug-In Card (Uses SIM Tray)	SON8/VQFN8 for automated assembly
Typical Application	Most M2M applications, including Vehicle Tracking, Vending & Payments	Small form factor M2M applications, including mHealth, GPS, Tablets & Dispatch Units.	Smallest form factor M2M applications, including Tablets, Mobile Payment & Terminals.	Industrial M2M applications, including smart metering, mining & remote applications.	Industrial M2M applications, including smart metering, mining & remote applications.
Price ex-GST	\$3.00	\$3.00	\$3.00	\$5.00	\$5.00 Minimum order of 500

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# **M2M Data Plans**



When you've selected a SIM card with the right form factor for your device, the next step is selecting a data plan that offers you flexibility and scalability with a price point that allows you to be competitive in your market.

M2M One offer data plans with no commitment, no contract and the ability to move between any plan in our portfolio at any point in the month.

Whatever your M2M Data requirements - let M2M One connect you to The Internet of Things.

# M2M Group Data Plans (Flexible Pool)

Added flexibility to maximize your devices data usage!

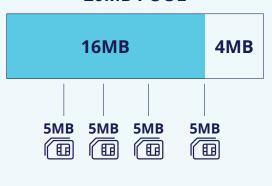
How does it work?

The group plan is the perfect option to keep a fixed monthly cost even with devices that have varying usage patterns.

With group data plans every SIM on the same plan type groups its data to create an effective "pool" of data across your fleet - for example 4 x 5MB SIM cards gives you a pool of 20MB.

If you exceed the limit of the pool you can move your SIMs to a larger plan for the remainder of the month and just pay the difference for the larger plan rather than pay excess usage.

#### **20MB POOL**



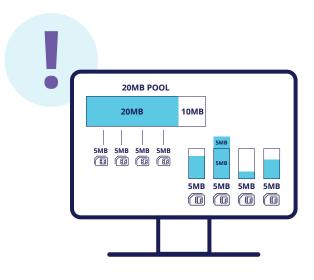
## **Smart data management**

Never worry about excess usage again!

M2M One provide customers with a suite of tools to help manage and control data usage so you never have to worry about bill-shock again!

Our online platform enables you to set-up data thresholds that can either notify you or automatically suspend services that breach data limits.

Our dedicated team of account managers will also phone or email you as soon as your group data has exceeded its pooled allowance with a recommendation to remove or minimize any excess usage charges.



# **M2M Data Plans**



#### **NB-IoT SIM Cards and Data Plans**

Connect your device to the largest IoT network in Australia with M2M One.

NB-IoT plans from M2M One utilise Cellular Low Power Wide Area Networking (LPWAN) and are designed specifically to support IoT deployments looking for massive national scale.

## Why choose an NB-IoT service from M2M One?



#### **Superior Coverage**

NB-IoT provides extended coverage and greater in-building and basement penetration for traditionally difficult locations.



#### **Low Operating Costs**

With competitive data plans and reduced messaging frequency, NB-IoT becomes a cost-effective communication method for IoT.



#### **Lower Power Consumption**

NB-IoT supports low-powered operating modes and single polling to drastically increase device battery life.



#### **Managed Growth**

M2M One's advanced management platform and team of experienced support staff proactively help you to optimize costs and scale as your business grows.

## What is NB-IoT?

NB-IoT is a low-power, wide-area cellular network (LPWAN) technology which uses 200KHz of bandwidth to transfer data. Generally, the maximum upload data transfer rate is around 62.5kb per second. The slightly slower data transfer rate is offset by lower power consumption and device affordability.



# **M2M Data Plans**



## Should I Be Using NB-IoT For My Deployments?

NB-IoT is designed for simple devices which infrequently send data, and require a longer battery life.

If you have widely-deployed devices in the field (such as gas, electricity or water meters, environmental sensors, or building automation) that do not need to send frequent updates, this may be a suitable technology for your requirements.

Check the diagram below for more information on whether NB-IoT or LTE-M are the most suitable option for your deployment.

## Two Leading LPWA Technologies

**NB-IoT** 5G ready LTE-M 5G ready

- Focused on very low data rates
- Ideal for simpler static sensor applications
- · Highest bandwidth of any LPWA technology
- Ideal for fixed and mobile applications

**Batch Communication LATENCY Real-Time Communication** Ø St. 



Meter



**Pipeline** Management



Home **Automation** 



**Building** Automation



**Smart** Grid



**Transportation** 



Home Security



**Patient** Monitoring



**Agriculture** 



Smart City



Street Lighting



**Tracking** 



Industrial Asset Management



Retail & POS



Wearables

20kbps

**SPEED** 

350kbps

# **M2M Data Plans**



Our goal is to keep you in control of your SIM fleet. We understand the frustrations associated with managing a sizable fleet of M2M SIM cards and services which is why we give all of our customers access to the industry leading CISCO Jasper Control Centre free of charge.

Take control of your fleet with real time usage information, SIM status reports, diagnostic tools and more

## Low use plans

Data plans ranging from 30KB to 3MB are ideal for low use M2M/IoT applications that send and receive small packets of data and transmit infrequently or by exception. A majority of these devices rely on data saving methods like using UDP as a transmission protocol or static routes to reduce their overall device traffic.



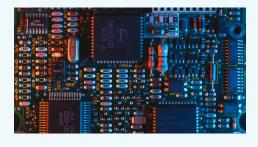
## Medium use plans

Data plans ranging from 5MB to 300MB are ideal for medium use M2M/IoT applications. Typically these devices send and receive larger packets of data and regularly. A majority of these devices will use the open internet as their primary communication method and tend to transmit using TCP.



## High use plans

Data plans ranging from 500MB to 20GB are ideal for high use M2M/IoT applications. These are devices that typically allow the user real time access to a remote location, transferring large files or streaming content.



## **Extreme use plans**

Data plans ranging from 25GB to 100GB are ideal for the highest bandwidth M2M/IoT applications. These are typically devices that are on 24/7 and transmit or stream high volumes of data and information.



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# **M2M Control Centre**



Data plans ranging from 30KB to 3MB are ideal for low use M2M/IoT applications that send and receive small packets of data and transmit infrequently or by exception. A majority of these devices rely on data saving methods like using UDP as a transmission protocol or static routes to reduce their overall device traffic.

#### View



Our control centre can act as an authoritative data store for all information relating to your SIM cards, instantly view:

- SIM identifiers like IMSI, MSISDN & ICCID.
- M2M One information like data plan & configuration.
- Store additional device information using custom fields.
- Attach "Cost Centres" to SIMs so you know exactly who to charge.

## **Monitor**



Never find yourself at the mercy of a rogue device again with real-time monitoring. Session information is sent to the control centre and uploaded instantly, allowing you to tracking your usage as it's happening.

- Monitor SIM usage and adjust data plans at any time if needed.
- Set up alerts to keep you up to date on your usage for the month.
- Monitor aggressive SIM behavior like multiple session attempts

## **Diagnose**



Having issues with a SIM or device in the field? Our control centre allows you unparalleled diagnostic information and fail safe controls.

- Diagnostic tools will tell you exactly where a SIM is failing.
- Historical session information lets you pinpoint issues.
- Send an SMS directly to your device from the control centre.
- Force the SIM to reconnect to the network.

#### **Automate**



Utilize the tools in our control centre to automate your work flow and make running your M2M project a breeze. Need to automatically suspend a SIM when it hits it's allowance or move it to a new plan, the choice is yours.

- Automatically suspend or change a SIMs profile.
- Create email notifications and workflows to manage SIM usage.
- Integrate directly with the control centre using powerful API calls.

# M2M IP Networking



#### Want to run your own private IP network but find the cost prohibitive?

At M2M One we understand that to run an efficient & secure operation sometimes your devices require more specialist networking services. Which is why we created M2M One IPX, a dedicated IP networking service, available as an additional service on all of our SIMs.

#### What is M2M One IPX?

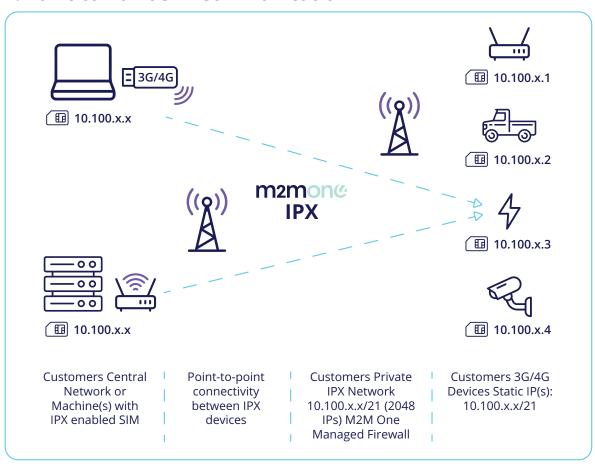
IPX is M2M One's IP Wide Area Network (IPWAN). A high quality, fully managed service that delivers static IP addresses ,secure access and custom routing to your M2M/IoT devices.

M2M One provides you with a subnet of IP address on a private APN - All traffic on this APN is completely firewalled off from the public internet and is typically barred from calling out over the public internet but this can be allowed if needed.

In order to communicate with SIMs on IPX you will need a way to access your subnet, this can be done in three different ways (See diagrams for more detail):

- 1. Point-to-Point SIM Communication Direct access from a modem or router between IPX SIMs
- 2. Software Based IPSEC VPN Client to Site access between a remote environment and IPX SIMs
- 3. Hardware Based IPSEC VPN Site to Site access between a fixed environment and IPX SIMs

#### 1. Point-to-Point SIM Communication



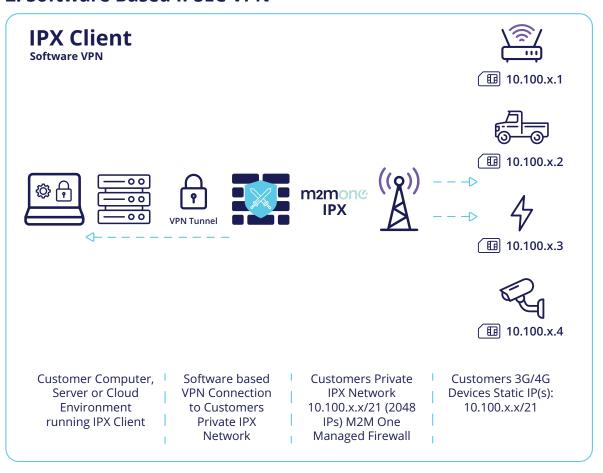
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#### 2. Software Based IPSEC VPN



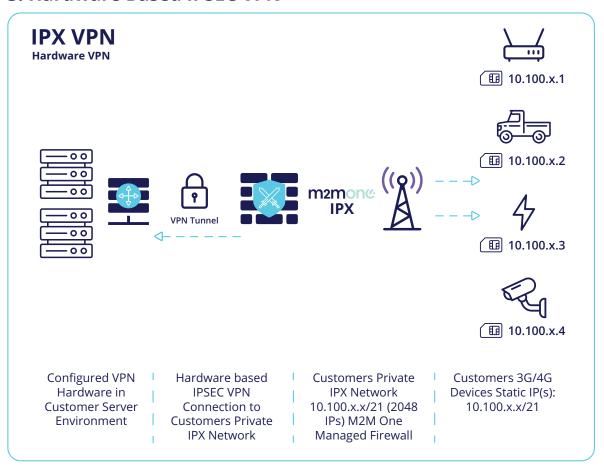
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## 3. Hardware Based IPSEC VPN





m2mone.com.au







Get started with Australia's leading provider of IoT SIM services today!