



MIM

Machine Identification Module (MIM)[™]
Enabling M2M Applications

Cinterion® Machine Identification Module (MIM)™

Enabling M2M Applications

We believe in a future of billions of connected machines and a secure Internet of Things that improves the way we live and do business. Gemalto offers unique competence in combining wireless M2M modules with Machine Identification Modules (MIM)™, MIM services, an application enablement platform, and a flexible subscription management offer. Gemalto M2M technology is integrated to improve business processes, productivity and security for diverse vertical markets including: automotive, tracking and tracing, industrial mobile computing, metering and smart grid, payment systems, healthcare, security systems, routers and gateways, remote maintenance and control and more.

Until now, in order to ensure the security and reliability of embedded communication systems, M2M devices relied on the same consumer grade SIM cards used in cell phones. However, M2M solutions are deployed in extreme environments of excessive heat, cold, moisture and vibration where standard SIMs have been proven unsuitable. Gemalto's new ruggedized MIM cards are specially designed and M2M optimized for reliability in the most extreme condition. MIMs ensure that mobile network operators can claim and retain a significant stake in this new market by providing miniaturized and robust security technology while providing new opportunities for M2M integrators, OEMs and implementers. For instance, MIMs:

- > Resist extremes of vibration, temperature, and humidity for a wider range of applications in demanding environments
- > Provide a long life span to function reliably for the life of the enterprise application
- > Offer a small footprint for easier integration in M2M applications (miniaturization)
- > Are adapted to industrial manufacturing processes and exigencies with optimized processes for mounting and tracking and tracing throughout the component's life span

The complex logistics of M2M solution design and integration requires special attention to process and specific details that ensure a fast and cost effective time to market. MIMs simplify integration saving both time and money during implementation while safeguarding mobile network operators' stake in this growing market. Already field proven, this unique platform is powered by an advanced Operating System and features extended memory management and data retention for up to 17 years. Available in several form factors, the MIM platform is contributing to M2M system success around the world by offering a dedicated component with the right combination of operating system intelligence, longevity and flexibility. Offered only by Gemalto, MIMs have been selected by many M2M hardware providers as the best wireless solution of its kind.

In addition, Gemalto provides an auto-grade MIM specifically engineered to address the automotive industry's need to track and trace all parts and components that go into vehicles. Gemalto facilities were among the first to be certified ISO/TS 16949 compliant in order to meet automotive industry standards.

Gemalto M2M Support includes:

From design to implementation, Gemalto Global Services (GGS) ensure service continuity for all types of projects. We help our customers strengthen business strategy by providing custom wireless solutions plus a robust and future proof product infrastructure.



- > 500 software engineers to deliver SIM/MIM and server solutions in 20 countries across 5 continents
- > 15 years expertise in development and integration of SIM/MIM and server solutions
- > Stable and skilled teams in all regions to efficiently implement customer solutions
- > Excellence in execution – on time delivery, strong project management

Cinterion® MIM Features

SOLUTION'S KEY FEATURES

- > Field-proven solution
- > Designed for industry applications
- > Extended life span
- > Highly secure

OPERATOR BENEFITS

- > Simplified SIM logistics and reduced costs
- > Helps mobile operators claim and retain a significant stake in this new market
- > Warranty extension according to customer specifications
- > Multi network support – 2G / 3G / LTE






M2M ACTOR'S VALUE

- > Easy to integrate
- > M2M industrial qualification
- > Avoid SIM manual manipulation (Full M2M Quad)
- > Optimizes the logistics, powered by flexible personalization services
- > Automotive certifications and quality procedures (e.g. AECQ100, TS 16949)

ASSOCIATED TECHNOLOGY

- > Java™ Card OS
- > Advanced EEPROM endurance
- > eXtended Life mechanism
- > Global Platform
- > GSM Standards
- > MIM Services
- > Subscription Management Services, eUICC
- > Application Enablement Platform

MIM Product Range

Product family	Domestic Quad	Industrial ^{Plug} 85	Industrial ^{Plug} 105	Industrial Quad	Automotive Quad
Drivers	Miniaturization	Fit any equipment	Fit any equipment	Industrial grade	Auto grade
	M2M consumer electronics	M2M industrial	M2M industrial Extended endurance	M2M industrial Extended endurance	Automotive std Extended endurance
					
Temperature resistance range	-25 °C / +85 °C	-25 °C / +85 °C	-40 °C / +105 °C	-40 °C / +105 °C	-40 °C / +105 °C
Reliability	•	••	••	••	•••
M2M qualification (JEDEC)			•	•	•
eXtended Life mechanism	As an option	•	•	•	•
Enhanced silicon		•	•	•	•
Burn-in					•
Data retention	10 y / 25 °C	10 y / 85 °C	10 y / 85 °C	10 y / 85 °C	17 y / 80 °C
Automotive req compliancy					AEC Q100 / TS 16 949

All products are Java Card, Global Platform, GSM standard compliant.

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