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LTE communication module MM-M540 (Cat.4) MM-M510 (Cat.1)



有線から無線化へ
IoT/M2Mソリューション向け
組込み通信モジュール

The MM-M540 is compatible with Cat.4, and the MM-M510 is compatible with Cat.1.
These Japanese-made modules can be selected to suit the communication needs of your IoT/M2M solution.

[●Important Notice to Customers Using the LTE Communication Module MM-M500](#)

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Features

The “MM-M540 (Cat.4) and MM-M510 (Cat.1)” are LTE communication modules that can use SIM cards provided by domestic carriers (NTT Docomo network, KDDI network) and various MVNOs. Two models are available: the MM-M540 (Cat.4) for high-speed, high-capacity communication, and the MM-M510 (Cat.1) for low-speed communication and at a lower cost. You can choose not only the SIM card but also the module according to your needs.

Furthermore, we offer a wide range of functions, including interfaces tailored to specific applications, and high reliability thanks to domestic development and production, providing an environment for our customers to deliver IoT/M2M solutions.



It can be used to make devices wireless in various fields.

LTE communication modules are incorporated and used to enable wireless connectivity in various types of equipment, including video surveillance equipment and facility management equipment.



We offer two models to choose from, depending on your environment and intended use.

The lineup includes two models: the MM-M540 for high-speed, high-capacity communication, and the MM-M510, a more affordable model for low-speed communication.

高速・大容量通信タイプ MM-M540	↓ 下り最大	150Mbps	↑ 上り最大	50Mbps
低速通信タイプ MM-M510	↓ 下り最大	10Mbps	↑ 上り最大	5Mbps

A variety of functions

Supported bands

Supports platinum band

In addition to the 2GHz frequency band, it also supports the 800MHz band, known as the platinum band, which allows radio waves to travel further and provides better connectivity.



Voice calls (VoLTE)

In addition to data communication, it supports VoLTE (Voice over LTE) voice call service. You can use it for a variety of voice-based services.

Interface

Providing the optimal

interface

The optimal interface (USB, Ethernet, UART) for your application is available.

Location

Location

positioning function

The device itself supports location positioning functions (GPS, GLONASS).

Reliable Japanese quality & support

High quality and reliability are achieved through domestic development and production. We also provide reliable domestic support for our products.

セイコーソリューションズ製モジュール3大特長

01



国内開発・国内生産※

- ◆日本製品質をご提供
- ◆日本国内の協力先工場による製造

※SM-M100除く

02



販売実績※

- ◆販売台数（累積）は、70万台を突破
- ◆自社製品への搭載
- ◆様々な業界・用途での利用
監視カメラ、セキュリティシステム、
防災装置など

※2025年12月現在、弊社モジュール製品すべての販売台数となります。

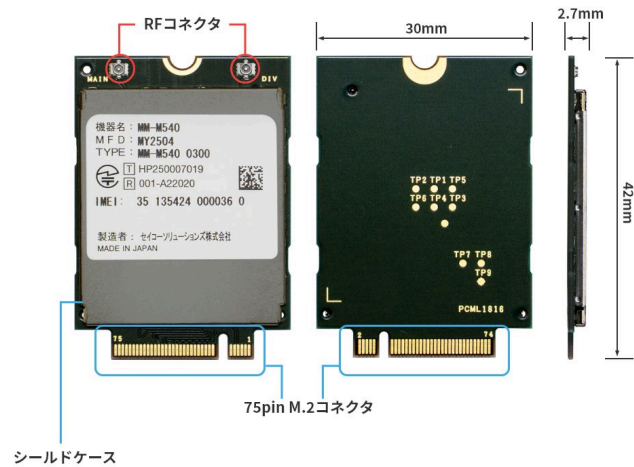
03



ご購入後の日本語サポート

- ◆開発時サポート（無線設計レビューなど）
- ◆各種お問い合わせ対応
- ◆1年の無償保証期間（有償サポート契約により延長可能）
- ◆1台からの不具合解析（1次解析）が可能

specification



Model	MM-M540	MM-M510
Communication method	FDD-LTE	FDD-LTE
Communication specifications	UE-Category4(Rel10)	UE-Category1(Rel10)
Communication speed	Download speed: 150Mbps Maximum upload speed: 50Mbps	Download speed: 10Mbps Maximum upload speed: 5Mbps
Supported frequency band	docomo: 2.1GHz(Band1) / 800MHz(Band19) / 1.8GHz(Band3) KDDI: 2.1GHz(Band1) / 800MHz(Band18)	
mount	M.2 Type3042-S3-B	
antenna	External antennas x 2 (main antenna / sub-antenna)	
RF connector	MHF4 x 2	
SIM format	External SIM interface, chip SIM (MFF2)	
interface	USB, UART, Ethernet (SGMII), GPIO, SIM	

Supported Features	Voice call service (VoLTE) / SMS / Firmware updates (FOTA) / GNSS positioning function (GPS, GLONASS)
GNSS	GPS / GLONASS
Positioning method	Stand-Alone (positioning controlled by AT commands)
Power supply voltage	DC3.7V
Operating environment	Temperature: -20 to +60° C / Humidity: <85%RH (non-condensing)
External dimensions	Approximately 30mm (width) x 42mm (depth) x 2.7mm (height)
mass	7g or less
Country of origin / Destination	Made in Japan / Domestically in Japan

*Specifications are subject to change without notice.

antenna

This antenna can be used in combination with commercially available antennas from multiple manufacturers.
Please use this as a reference for selecting the optimal antenna for your equipment. (As of December 2025)

Model Name	Manufacturer	Connector end
DP-BRO	Nippon Antenna Co., Ltd.	SMA-P
WH-08/2G-L	Nippon Antenna Co., Ltd.	SMA-P
DP-BRO-RE	Nippon Antenna Co., Ltd.	SMA-P
DP-BRO-MI2	Nippon Antenna Co., Ltd.	SMA-P
DP-BRO-MI2G	Nippon Antenna Co., Ltd.	SMA-P
WH-MI2-S	Nippon Antenna Co., Ltd.	SMA-P
MDP-INF-MI2	Nippon Antenna Co., Ltd.	SMA-P
WH-SI-S	Nippon Antenna Co., Ltd.	SMA-P
FMSP800W-H2.5M-WPMIMO	Nissei Co., Ltd.	SMA-P
FMSP800W-H5.5M-BPMIMO	Nissei Co., Ltd.	SMA-P
FMM800W-4T-2.5M-BP	Nissei Co., Ltd.	SMA-P
FMM800W-4T-5M-BP	Nissei Co., Ltd.	SMA-P
FMM800W-4T-10M-BP	Nissei Co., Ltd.	SMA-P
FMSP800W-D-2.5M-BPMIMO	Nissei Co., Ltd.	SMA-P
FMSP800W-D-100MHF4L	Nissei Co., Ltd.	MHF4L
FMM800W-SMAP-L	Nissei Co., Ltd.	SMA-P
T17-058-1069	Staff Co., Ltd.	SMA-P
T17-058-1070	Staff Co., Ltd.	SMA-P
T20-030-1184	Staff Co., Ltd.	SMA-P

T18-077-1107 T18-077-1108	Staff Co., Ltd.	SMA-P
T18-029-1102 T18-029-1103	Staff Co., Ltd.	SMA-P
T18-079-1128	Staff Co., Ltd.	SMA-P
T18-078-1127	Staff Co., Ltd.	SMA-P
T19-060-1189 T19-060-1190	Staff Co., Ltd.	SMA-P
T13-023-1043	Staff Co., Ltd.	U.FL
T18-051-1141	Staff Co., Ltd.	U.FL

[Contact Information]

Nippon Antenna Co., Ltd.: https://cloud.swcms.net/nippon-antennaPublic/ja/inquiry/inquiry_02.html

Nissei Co., Ltd.: <https://www.nisseiantenna.com/contact.php>

Staff Co., Ltd.: <https://www.staf.co.jp/contact.html>

[Terms of Use]

1. Purpose The purpose

of this list is to provide customers with this information and to make it easier for them to use this product.

2. Ownership and License The copyright

and all rights to this list belong to our company, and we grant you a free license to use this list.

3. Scope of Use

Your use of this list is limited to your own personal use or for the promotion of this product.

You may not use this list for any commercial purpose other than your own personal use or the promotion of this product, such as copying, modifying, reprinting, selling, or distributing it.

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we determine that your use of this list is not for your own personal use or the promotion of this product, you must immediately cease using it.

4. Compliance Requirements

When using this list, customers must comply with all applicable laws and regulations and must not use the products or services in a way that damages our company, the products, or the special services provided by the company.

Using antennas other than those listed may violate the provisions of the Radio Law.

5. Disclaimer

You use this list at your own risk, and we are not liable for any damages or losses whatsoever arising from your use of this list. We are also not liable for any damages or losses whatsoever even if there are errors in the contents of this list.

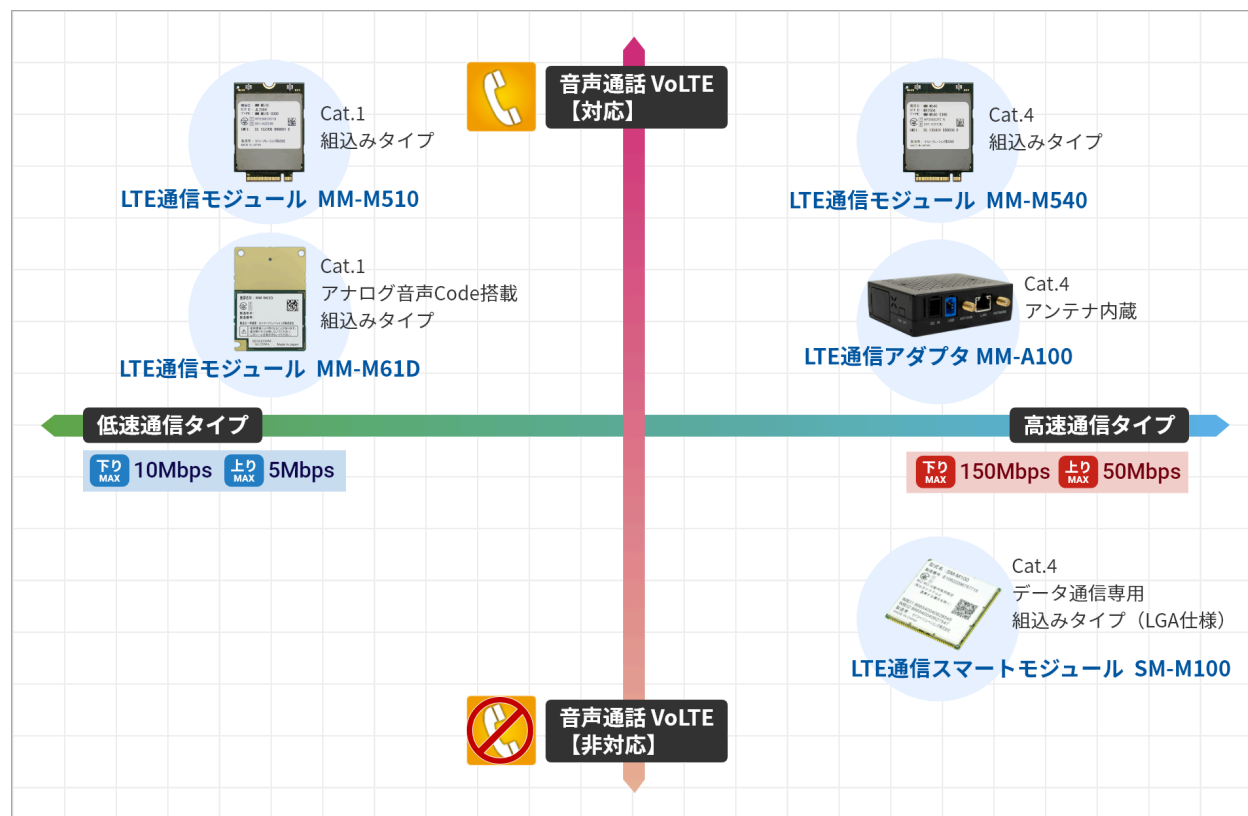
6. Other All

items on this list are provided free of charge, but we do not relinquish any copyright or rights.

Unless otherwise specified, all matters shall be governed by copyright law and related regulations.

To use the antennas on this list with this product, you will need to separately prepare an adapter to convert the antenna end (such as an SMA connector) to an RF connector.

Positioning map



Please note

⚠ 安全に関するご注意

■ Please note the following points, as radio waves may affect electronic devices.

■ This product is prohibited for use on aircraft, so please turn off the power to any devices incorporating this product before boarding.

■ To prevent interference from radio waves with medical electronic equipment, please observe the following:

■ Please turn off the power to the device incorporating this product when using it in areas where its use is prohibited in medical facilities or near medical electrical equipment.

■ If you have an implanted cardiac pacemaker, please carry and use the device at least 15 cm away from the implantation site. Please note that there are many different pacemaker models; for detailed instructions on handling, please consult your healthcare provider or the manufacturer of your specific pacemaker.

Other notes regarding use

■ This product uses wireless technology, so it may not be usable in places where radio waves are difficult to reach, such as tunnels, underground areas, indoors, and mountainous areas behind buildings, even within the communication service area. It may also not be usable on high floors of high-rise buildings and apartments. Please note that communication may be interrupted if you move to an area with poor radio wave conditions during communication. ■ This product uses electronic components, so please be aware that communication may not be possible near devices that generate electromagnetic waves or magnetism, such as televisions, radios, amplifiers, speakers, and microwave ovens. ■ For use in special environments such as in vehicles, please contact us. ■ This product can only be used in the communication area provided by each carrier. It cannot be used outside of Japan. ■ To use this product, you need a contract with each carrier or an MVNO operator that uses each carrier's network. For details, please contact each carrier or MVNO operator. ■ LTE is a registered trademark of the European Telecommunications Standards Institute (ETSI). Other company names, product names, and service names mentioned are trademarks or registered trademarks of their respective companies. ■ The specifications and design shown are subject to change without notice. ■ No carriers or MVNO operators using these carriers provide any guarantees regarding this product. ■ This product is a module exclusively for M2M devices. If you intend to use it for purposes other than M2M, please contact your sales representative. ■ If you intend to use the voice communication function, please contact your sales representative. ■ MM-M540/MM-M510 does not support JAPAN Roaming™ (emergency inter-carrier roaming) (as of April 2026). * "JAPAN Roaming" is a trademark of the Telecommunications Carriers Association (TCA).

Related News

January 30, 2026 [Product Information](#)

Important Notice to Customers Using the LTE Communication Module MM-M500

January 8, 2026 [Sales ended](#)

Notice of discontinuation of sales for LTE communication module "MM-M500"

June 28, 2019 [News and Events](#)

The MM-M500 has been listed as a device that has been confirmed to work with IIJ's IIJ Mobile Service/Type I.

Related Products



Wireless IoT Solution Services

We realize optimal IoT construction based on our long track record and comprehensive expertise.



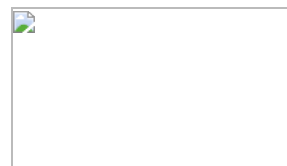
Wireless and mobile device contract development and manufacturing solutions

We undertake contract development and manufacturing of IoT/M2M products, utilizing our long-cultivated wireless and miniaturization technologies.



LTE communication module MM-M61D (Cat.1)

An LTE communication module for IoT/M2M solutions that features an analog voice interface and supports voice services.



LTE communication smart module SM-M100 (Cat.4)

■ For large-scale customers (minimum order quantity: 10,000 units or more)

- Communication modules for contract development of equipment
- Embedded type (LGA specification)



LTE communication adapter MM-A100 (Cat.4)

An LTE communication adapter incorporating an LTE communication module compatible with NTT Docomo and KDDI networks.



LTE-compatible IoT router SkyBridge series

Supports LTE/3G networks (WAN side). A wireless router for IoT/M2M applications that can be used with both wired and wireless connections.



IoT platform SVIRE

We provide information collected from devices, visualized and delivered via communication and the cloud.



AI-powered predictive service LUiNa

We provide easy and highly accurate anomaly detection and prediction using your existing time-series data. This solution supports a wide range of applications, from advanced

system monitoring to IoT data utilization.

Inquiries about LTE communication modules

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