Massive Machine Type Communication - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 120 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License $4750.00
- Team License (1-7 Users) $5250.00
- Site License $6500.00
- Corporate License $8750.00

Report description:

The Massive Machine Type Communication Market size is estimated at USD 2.82 billion in 2025, and is expected to reach USD 4.43 billion by 2030, at a CAGR of 9.42% during the forecast period (2025-2030).

Machine-type communication (MTC) is a fundamental technology to realize the concept of a fully connected world in the fifth-generation (5G) Internet of Things (IoT).

Key Highlights
- The development of the massive machine-type communication (MMTC) industry is being fueled by several key factors, such as the rising demand for fully automated processes, connected devices, wireless connectivity, rising investment in smart city projects, and investment and development in next-generation mobile network infrastructure. Smart cities are expanding globally as a result of urbanization, which is fueling market growth. According to UN forecasts, 404 million urban people in India, 212 million in Nigeria, and 292 million in China will be added to the current population by 2050.
- By 2023, the Japanese multinational holding corporation SoftBank planned to install 11,210 5G base stations. In addition, growing funding for smart city initiatives in this region, such as Asia-Pacific, contributes significantly to the expansion of mMTC implementation. The foundation of the smart city is massive machine-type communication, which permits machine-to-machine communication without requiring human input.
- Future 5G networks will likely be based on the heterogeneity of devices, technologies, and architectures, including IoT, UAVs, cloud and edge computing, etc. There would be a massive roll-out of IoT/MTCDs; these devices' simultaneous and unpredictable access will cause congestion and overload in 5G and beyond networks.
- However, the proliferation of MTC devices (MTCDs) propels serious challenges to the current cellular networks due to their huge number, particularly in ultra-dense scenarios like stadiums, concerts, hotspots, and flash crowds.

- The COVID-19 pandemic harmed the world economy. Lockdowns at the national level and social segregation standards in several nations severely impacted several businesses, including the mMTC sector. Since it was unclear how long the lockdowns would last, many 5G technology suppliers were under pressure, making it challenging for the major industry participants to predict when the mMTC market would recover.

Massive Machine Type Communication (MMTC) Market Trends

Energy Holds a Dominant Position in the Massive Machine Type Communication Market

- The characteristics of 5G wireless technology, such as massive machine type communication (MTC) and ultra-reliable and low-latency communication (URLLC), transform how energy utility companies operate. Distributed intelligence and control systems for substations to regular drone inspection of distribution and transmission lines utilizing 5G enhance smart grid projects to provide next-generation customer service.
- By the end of this decade, there will likely be 235 million tons of carbon emission annually, and electric energy consumption is expected to be 414TWh. A significant portion of global carbon emissions is from information and communication technology. Green communication is necessary for environmental protection to achieve energy efficiency in wireless networks. According to EIA, the United States Electric Power Sector emissions in 2023 were 1.09 billion metric tons of carbon dioxide (GtCO?).
- It is one of the challenges of 5G networks to improve the energy efficiency of battery-constrained devices and should adopt techniques for environmental protection. Energy harvesting is a technique to enable the devices to power their services through energy harvested from renewable energy sources like wind and sun. Energy harvesting and green communication are essential for the MTCDs and BSs and aggregating devices like smartphones, drones, etc.
- There are several natural sources for energy harvesting. However, it is required to efficiently harvest the energy from these sources. Electromagnetic radiation, vibration, temperature, sunlight, wind, motion differences, RF, and the like can harvest energy into UAVs and wireless devices (smartphones and MTCDs).

North America is Expected to Hold Significant Market Share

- The Massive Machine Type communication growth in North America is driven majorly by the high demand for faster connectivity and better internet experience. Some of the most significant investments in deploying Massive Machine Type Communication growth network infrastructure are materializing in North America. For instance, in May 2022, one of Canada's leading telecom firms, Telus, pledged to invest USD 70 billion in mobile network infrastructure nationwide by 2026.
- Market expansion in the region is anticipated to be aided by significant government spending in the region's healthcare system. For instance, In July 2023, U.S. Department of Agriculture (USDA) announced that USDA is expanding the access to health care for more than 5 million people staying in 39 states and investing as a America agenda.
- Additionally, the healthy development of the 5G-enabled Massive Machine Type Communication Market has been prompted by the rapidly rising demand for mobile phones that support faster data rates. For instance, according to Ericsson, North America will likely have approximately 411 million 5G subscriptions by 2027.
- Throughout the forecast period, it is anticipated that strong U.S. expenditures in developing smart cities, creating smart businesses, and building smart homes would help the North American regional market expand. USAID invests an initial USD 4 Million in global financing facility in a continued push to support health workers and bolster primary healthcare systems.
- Furthermore, in May 2022, the Biden administration encouraged governors and other officials to begin the application process as it prepares to disburse USD 45 billion to guarantee that every US citizen has high-speed internet by about 2028.

Massive Machine Type Communication (MMTC) Industry Overview

The Massive Machine Type Communication Market is semi-consolidated, with the presence of major players like Huawei Technologies Co., Ltd., Telefonaktiebolaget LM Ericsson, Nokia Corporation, Cisco Systems, Inc., and Panasonic Corporation. Players in the market are adopting strategies such as partnerships and acquisitions to enhance their product offerings and gain sustainable competitive advantage.

- March 2023 - Fibocom Wireless Inc., one of the leading global providers of IoT (Internet of Things) wireless solutions and wireless communication modules, announced its cooperation with Sony Semiconductor Israel (Sony), one of the leading providers of Cellular IoT chipsets, in launching the 5G LPWA module MS18 series, the Fibocom MS18 module series is designed to provide ultra-low power consumption and reliable wireless connectivity for the 5G massive IoT market.
- August 2023 - Nokia partnered with Japanese operator NTT to deploy private wireless network services to more than 3.2 million enterprises across Thailand to boost the adoption of Industry 4.0 technologies. The vendor stated that a suite of "as-a-service digital technologies" will enable Thai businesses to access use cases, including digital twins, video analytics, and machine vision.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

Table of Contents:

Massive Machine Type Communication - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 120 pages | Mordor Intelligence

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	$4750.00
	Team License (1-7 Users)	$5250.00
	Site License	$6500.00
	Corporate License	$8750.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2026-02-28
		Signature