+44 20 8123 2220
info@marketpublishers.com

The Critical IoT: Will 5G Answer Vertical Industry Needs?

https://marketpublishers.com/r/C2975A0AAA3EN.html
Date: December 2017
Pages: 52
Price: US$ 3,300.00 (Single User License)
ID: C2975A0AAA3EN

Abstracts

This study reviews the prospects of critical IoT applications and the ability of 5G networks to fulfil mission-critical requirements.

The report details the key technological advances of LTE Advanced and 5G that will enable critical IoT applications.

It also presents the main target markets, notably automotive, industrial IoT and health, and their applications and requirements.

The development perspective of the critical IoT markets are also examined in detail, with market estimates up to 2030.

Finally, the impact of critical IoT is analysed, focusing on business models (new offerings) and value chains (new positions and power play).

+44 20 8123 2220
info@marketpublishers.com

Contents

1. EXECUTIVE SUMMARY

2. METHODOLOGY & DEFINITIONS

3. CRITICAL IOT TECHNOLOGIES

3.1. Critical requirements and environments
  3.1.1. Definitions
  3.1.2. Critical requirements
3.2. Technology Enabler
  3.2.1. New features developed as part of LTE Advanced
  3.2.2. What will be different with 5G?
  3.2.3. Roadmap of availability
3.3. Impacts on value chains and business models
  3.3.1. Context: the value chain of wireless communication industry
  3.3.2. A more complex value chain of connectivity providers
  3.3.3. More vertical-specific connectivity offerings
  3.3.4. New business models

4. THE MARKETS OF THE CRITICAL IOT

4.1. Overview
4.2. Industrial IoT
  4.2.1. Context
  4.2.2. Critical IoT services and requirements
  4.2.3. Potential for adoption
4.3. Automotive
  4.3.1. Context
  4.3.2. Critical IoT services and requirements
  4.3.3. Potential for adoption
4.4. Health
  4.4.1. Context
  4.4.2. Critical IoT services and requirements
  4.4.3. Potential for adoption

5. MARKETS AND FORECASTS

+44 20 8123 2220
info@marketpublishers.com

5.1. Market development factors
5.1.1. Analysis of growth drivers
5.1.2. Barriers to adoption
5.1.3. Vision of market development
5.2. Market Sizing
5.2.1. Global volume estimates
5.2.2. Vision in vertical industries

+44 20 8123 2220
info@marketpublishers.com

List Of Tables

LIST OF TABLES AND FIGURES

Table 1: Key critical requirements
Table 2: Critical IoT requirements addressed by LTE Advanced features
Table 3: Characteristics of LTE-M and NB-IoT
Table 4: Bands specified within Rel. 14 for discovery and direct communication
Table 5: Relay nodes function
Table 6: Critical IoT requirements addressed by 5G features
Table 7: Features paving the way for critical IoT
Table 8: Vertical requirements for critical IoT communications
Table 9: Communication performance of energy networks
Table 10: Connecting production tools: technological requirements
Table 11: Connecting employees: technological requirements
Table 12: Expected autonomous vehicle capabilities depending upon connectivity
Table 13: Automotive critical IoT requirements
Table 14: List of main regulations for connected cars
Table 15: Main deployments of the autonomous car
Table 16: Connectivity requirements of connected health scenarios
Figure 2: Roadmap of 3GPP Releases
Figure 3: Relaying traffic to and from the edge with Relay feature
Figure 4: V2V communication in LTE Rel.
Figure 5: The licensed-assisted access principles
Figure 6: Benefits of LTE in fully-unlicensed frequency bands
Figure 7: MulteFire roadmap
Figure 8: The different use of massive MIMO depending on the frequency bands
Figure 9: Considerations on massive MIMO
Figure 10: The three main use cases of 5G
Figure 11: Examples of 5G network slices [NGM15]
Figure 12: Allocation of both shared and dedicated resources across multiple slices
Figure 13: Value chain of the wireless communication industry
Figure 14: Opportunities of evolution of the value chain
Figure 15: EU manufacturing sector, activity breakdown and share in the EU economy
Figure 16: Siemens automated factory, in Amberg, Germany
Figure 17: Industrial IoT Use cases adoption over time
Figure 18: Leading motor vehicle manufacturers worldwide in 2014, based on global sales
Figure 19: ECall operating principle

+44 20 8123 2220
info@marketpublishers.com

Figure 20: Six levels of automation toward autonomous driving
Figure 21: Autonomous vehicle perception of its surroundings through sensors and networks
Figure 22: 5GAA members
Figure 23: Lack of consumer demand for fully self-driving vehicles (survey)
Figure 24: Robotics-assisted surgery scenario
Figure 25: World market estimate for Critical IoT/5G modules, in volume, 2025 – 2030
Figure 26: Market estimate by geographical area for Critical IoT/5G modules, in volume, 2025 – 2030
Figure 27: Key verticals market estimate for Critical IoT/5G modules, in volume, 2025 – 2030
Figure 28: CAGR of Critical IoT/5G modules (2025-2030) in selected vertical industries

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: The Critical IoT: Will 5G Answer Vertical Industry Needs?
Product link: https://marketpublishers.com/r/C2975A0AAA3EN.html
Price: US$ 3,300.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/C2975A0AAA3EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

**All fields are required

Custumer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970