



## PUBLIC SAFETY LTE

# RBS 6000 SERIES MACRO BASE STATIONS

More and more first responders and public safety agencies are considering wireless broadband for access to mission critical data and are looking for a reliable broadband connection, anywhere they operate, or wherever the next incident will be. The Ericsson RBS 6000 Series Base Stations meet the challenge for reliable, wide-area Public Safety LTE coverage.

### ERICSSON LTE TECHNOLOGY LEADERSHIP

Ericsson is the world's leading provider of technology and services to telecom operators. As the undisputed leader in LTE development and standardization, Ericsson is the most trusted, most proven provider of standards-compliant LTE technology. Motorola Public Safety LTE networks are designed using the proven performance of Ericsson LTE platforms to deliver mission critical broadband services to those responsible for protecting lives and property.

### NEXT GENERATION SITE

The enhanced Node B (eNodeB or eNB) is the base station component of the standards-defined LTE network. Motorola Public Safety LTE networks use the Ericsson RBS 6000 platform, a complete eNB package available in outdoor, indoor and open rack configurations. Designed for smart simplicity, the RBS 6000 Series features intelligent power and management systems, ensuring optimal operation, minimal maintenance and significantly lower power consumption to control operating costs.

### FIELD-PROVEN PLATFORM

The RBS 6000 platform is the latest evolution of Ericsson's highly successful RBS Series base site equipment. With years of proven in-service performance, public safety organizations can take comfort in knowing that their networks have passed the test of serving millions of users prior to being asked to provide mission-critical services to first responders in high stress situations.



## ERICSSON RBS 6101 OUTDOOR MACRO BASE STATION FEATURES AND CAPABILITIES

With its site in a cabinet design, the RBS 6101 is built for outdoor use and delivers cost-effective coverage and capacity unrivaled in the industry. The outdoor cabinet and compact footprint make it an ideal selection for ground level or rooftop installations. It is to be used as main-remote configurations with Remote Radio Units (RRUs). The weather tight cabinet and integrated climate control system protect the electronics and keep the cabinet within operating limits. Battery backup can be supported with a weather tight unit underneath or beside the base station.

- Outdoor weather tight cabinet design
- Climate system keeps the cabinet temperature within specified limits
- Flexible channel sizes from 5 to 20 MHz
- Up to 4x4 MIMO support, expansion possible with additional radios
- 4 way receive diversity
- Remote Electrical Tilt (RET) support
- VSWR antenna supervision
- Tightly integrated network and site management system
- Full IP connectivity
- Gigabit Ethernet transport network interface
- Integrated power system for efficient on-demand power
- External battery backup options available
- Encrypted backhaul for bearer and control plane traffic



## SPECIFICATIONS

### PUBLIC SAFETY LTE BAND OPERATION

Transmitter Frequency Range	Band 14 (758 - 768 MHz) Band 20 (791 - 821 MHz) Band 26 (859 - 880 MHz) Band 28 (758 - 803 MHz)
Receiver Frequency Range	Band 14 (788 - 798 MHz) Band 20 (832 - 862 MHz) Band 26 (814 - 835 MHz) Band 28 (703 - 748 MHz)
Channel Bandwidth	5, 10, 15 or 20 MHz
Transmitter Power Output	Up to 2x40W on 2 Port Radios Up to 4x40W on 4 Port Radios

### PHYSICAL AND ENVIRONMENTAL

Cabinet Size (W x D x H)	27.5 x 27.5 x 57 in 700 x 700 x 1450 mm
Cabinet Weight	397lb (180 kg) fully equipped, excluding batteries
Site Power	110-250 VAC, -48 VDC
Operating Requirements	Temperature: -33° to +50° C For a DC-powered RBS, cold start up has a lower limit of -25° C Relative humidity: 15-100%

### REGULATORY AND COMPLIANCE

EMC Compliance	2004/108/EC R & TTE directive 1999/5/EC EN 55022 Class B GSM: 11.21 FCC part 90
Product Safety Compliance, North America	ANSI/UL 60 950-1 / CSA C22.2 No. 60 950-1 ANSI/UL 60 950-22 / CSA C22.2 No. 60 950-22
	EN 60 950-1/IEC 60 950-1 Edition 2 EN 60 215/IEC 215 EN 60 529/IEC 529 UL 60 950-1, 2nd edition, Information Technology Equipment Including Electrical Business Equipment
	CSA C22.2 No. 60 960-1, Safety of Information Technology Equipment Including Electrical Business Equipment
	CSA 22.2 No. 1-M94, Audio, Video and Small Electronic Equipment

## ERICSSON ENCLOSURE 6135 OUTDOOR MACRO BASE STATION FEATURES AND CAPABILITIES

With its site in a cabinet design, the Enclosure 6135 is built for outdoor use and delivers cost-effective coverage and capacity unrivaled in the industry. The outdoor cabinet and compact footprint make it an ideal selection for ground level or rooftop installations. It is to be used as main-remote configurations with Remote Radio Units (RRUs). The weather tight cabinet and integrated climate control system protect the electronics and keep the cabinet within operating limits. Battery backup can be supported with a weather tight unit beside the base station.

- Outdoor weather tight cabinet design
- Climate system keeps the cabinet temperature within specified limits
- Flexible channel sizes from 5 to 20 MHz
- Up to 4x4 MIMO support, expansion possible with additional radios
- 4 way receive diversity
- Remote Electrical Tilt (RET) support
- VSWR antenna supervision
- Tightly integrated network and site management system
- Full IP connectivity
- Gigabit Ethernet transport network interface
- Integrated power system for efficient on-demand power
- External battery backup options available
- Encrypted backhaul for bearer and control plane traffic



## SPECIFICATIONS

### PUBLIC SAFETY LTE BAND OPERATION

Transmitter Frequency Range	Band 14 (758 - 768 MHz) Band 20 (791 - 821 MHz) Band 26 (859 - 880 MHz) Band 28 (758 - 803 MHz) Band 31 (462.5 - 467.5 MHz)
Receiver Frequency Range	Band 14 (788 - 798 MHz) Band 20 (832 - 862 MHz) Band 26 (814 - 835 MHz) Band 28 (703 - 748 MHz) Band 31 (452.5 - 457.5 MHz)
Channel Bandwidth	5, 10, 15 or 20 MHz
Transmitter Power Output	Up to 2x40W on 2 Port Radios Up to 4x40W on 4 Port Radios

### PHYSICAL AND ENVIRONMENTAL

Cabinet Size (W x D x H)	23.2 x 27.1 x 34.4 in 588 x 688 x 872 mm
Cabinet Weight	195 lb (88 kg) fully populated enclosure excluding customer equipment and installation kit
Site Power	200-250 VAC
Operating Requirements	Temperature: -33° to +50° C Relative humidity: 15-100%

### REGULATORY AND COMPLIANCE

EMC Compliance	EN 300 386 FCC CFR47 part 15 ICES 003 issue 4
Product Safety Compliance	EN 60 950-1/IEC 60 950-1 Edition 2 EN 60 215/IEC 215 EN 60 529/IEC 529 UL 60 950-1, 2nd edition, Information Technology Equipment Including Electrical Business Equipment
	CSA C22.2 No. 60 960-1, Safety of Information Technology Equipment Including Electrical Business Equipment
	CSA 22.2 No. 1-M94, Audio, Video and Small Electronic Equipment

## ERICSSON RBS 6301 OUTDOOR COMPACT BASE STATION FEATURES AND CAPABILITIES

The RBS 6301 is an outdoor site in a compact cabinet design delivering cost-effective coverage and capacity unrivaled in the industry. Featuring an extremely high degree of integration and modular practice, the RBS 6301 is an entire site including power in a single cabinet. It is to be used as a main-remote configurations with Remote Radio Units (RRUs). It can be ground-level or pole mounted.

Battery backup can be supported with a weather tight unit beside the base station.

- Entire site in a cabinet design
- Flexible channel sizes from 5 to 20 MHz
- Up to 4x4 MIMO support, expansion possible with additional radios

- 4 way receive diversity
- Remote Electrical Tilt (RET) support
- VSWR antenna supervision
- Tightly integrated network and site management system
- Full IP connectivity
- Gigabit Ethernet transport network interface
- Integrated power system for efficient on-demand power
- Battery backup options available
- Encrypted backhaul for bearer and control plane traffic



## SPECIFICATIONS

### PUBLIC SAFETY LTE BAND OPERATION

Transmitter Frequency Range	Band 14 (758 - 768 MHz) Band 20 (791 - 821 MHz) Band 26 (859 - 880 MHz) Band 28 (758 - 803 MHz)
Receiver Frequency Range	Band 14 (788 - 798 MHz) Band 20 (832 - 862 MHz) Band 26 (814 - 835 MHz) Band 28 (703 - 748 MHz)
Channel Bandwidth	5, 10, 15 or 20 MHz
Transmitter Power Output	Up to 2x40W on 2 Port Radios Up to 4x40W on 4 Port Radios

### PHYSICAL AND ENVIRONMENTAL

Size (W x D x H)	16.26 x 21.2 x 43.9 in 413 x 536 x 1115 mm
Weight	265 lb (<120 Kg) full equipped main unit (without transmission equipment)
Site Power	-48 VDC, 100 - 250 VAC
Operating Requirements	Temperature: -33° to +50° C Relative humidity: 10 - 100%

### REGULATORY AND COMPLIANCE

EMC Compliance	EN 301 489-1, 8, 23 FCC CFR47 part 15B ICES 003 B
Product Safety Compliance	EN 60 950-1/IEC 60 950-1 Edition 2 EN 60 215/IEC 215 EN 60 529/IEC 529 UL 60 950-1, 2nd edition, Information Technology Equipment Including Electrical Business Equipment  CSA C22.2 No. 60 960-1, Safety of Information Technology Equipment Including Electrical Business Equipment  CSA 22.2 No. 1-M94, Audio, Video and Small Electronic Equipment

## ERICSSON RBS 6201 INDOOR MACRO BASE STATION FEATURES AND CAPABILITIES

The RBS 6201 is an indoor site in a cabinet design delivering cost-effective coverage and capacity unrivaled in the industry. Featuring an extremely high degree of integration and modular building practice, the RBS 6201 is an entire site, including transmission and power in a single cabinet. It is to be used as main-remote configurations with Remote Radio Units (RRUs). Battery backup can be supported with a unit underneath or with a unit beside the base station.

- Entire site in a cabinet design
- Flexible channel sizes from 5 to 20 MHz
- Up to 4x4 MIMO support, expansion possible with additional radios

- 4 way receive diversity
- Remote Electrical Tilt (RET) support
- VSWR antenna supervision
- Tightly integrated network and site management system
- Full IP connectivity
- Gigabit Ethernet transport network interface
- Integrated power system for efficient on-demand power
- Battery backup options available
- Encrypted backhaul for bearer and control plane traffic



## SPECIFICATIONS

### PUBLIC SAFETY LTE BAND OPERATION

Transmitter Frequency Range	Band 14 (758 - 768 MHz) Band 20 (791 - 821 MHz) Band 26 (859 - 880 MHz) Band 28 (758 - 803 MHz)
Receiver Frequency Range	Band 14 (788 - 798 MHz) Band 20 (832 - 862 MHz) Band 26 (814 - 835 MHz) Band 28 (703 - 748 MHz)
Channel Bandwidth	5, 10, 15 or 20 MHz
Transmitter Power Output	Up to 2x40W on 2 Port Radios Up to 4x40W on 4 Port Radios

### PHYSICAL AND ENVIRONMENTAL

Size (W x D x H)	23.6 x 19 x 56.5 in 600 x 483 x 1435 mm
Weight	474lb (215 kg)
Site Power	-48 VDC, +24VDC, 100-250 VAC
Operating Requirements	Temperature: +5° to +50° C Relative humidity: 5-85%

### REGULATORY AND COMPLIANCE

EMC Compliance	2004/108/EC R & TTE directive 1999/5/EC EN 55022 Class B GSM: 11.21 FCC part 90
Product Safety Compliance	EN 60 950-1/IEC 60 950-1 Edition 2 EN 60 215/IEC 215 EN 60 529/IEC 529 UL 60 950-1, 2nd edition, Information Technology Equipment Including Electrical Business Equipment  CSA C22.2 No. 60 960-1, Safety of Information Technology Equipment Including Electrical Business Equipment  CSA 22.2 No. 1-M94, Audio, Video and Small Electronic Equipment

## ERICSSON BASEBAND (BB) 6620 REMOTE RADIO BASE STATION FEATURES AND CAPABILITIES



The BB 6620 is a self-maintained 19-inch unit baseband. Each unit can be installed in any 19-inch rack or cabinet or in an RBS. It is generally configured with Remote Radio Units (RRUs), which are designed to be located near the antenna. An optical cable connects each RRU to the main unit. Optical cables are available in standard lengths, ranging from a few meters to several hundred meters.

- Flexible channel sizes from 5 to 20 MHz
- Up to 4x4 MIMO support, expansion possible with additional radios
- 4 way receive diversity (dependent on radio selection)

- Remote Electrical Tilt (RET) support
- VSWR antenna supervision
- Tightly integrated network and site management system
- Full IP connectivity
- Gigabit Ethernet transport network interface
- Integrated power system for efficient on-demand power
- Battery backup options available
- Encrypted backhaul for bearer and control plane traffic

## SPECIFICATIONS

### PUBLIC SAFETY LTE BAND OPERATION

Transmitter Frequency Range	Band 14 (758 - 768 MHz) Band 20 (791 - 821 MHz) Band 26 (859 - 880 MHz) Band 28 (758 - 803 MHz) Band 31 (462.5 - 467.5 MHz)
Receiver Frequency Range	Band 14 (788 - 798 MHz) Band 20 (832 - 862 MHz) Band 26 (814 - 835 MHz) Band 28 (703 - 748 MHz) Band 31 (452.5 - 457.5 MHz)
Channel Bandwidth	5, 10, 15 or 20 MHz
Transmitter Power Output	Up to 2x40W on 2 Port Radios Up to 4x40W on 4 Port Radios

### PHYSICAL AND ENVIRONMENTAL

Baseband Unit Size (W x D x H)	19 x 13.78 x 1.75 in 483 x 350 x 44.45 mm
Remote Radio Unit Size (W x D x H)	11.75 x 5.45 x 13.8 in 298 x 138 x 351 mm
Baseband Unit Weight	14.5 lb (<6.5 kg)
Remote Radio Unit Weight	< 29 lb (< 13 kg)
Site Power	-48 VDC
Operating Requirements	Temperature: +5° to +50° C Relative humidity: 5-85%

### REGULATORY AND COMPLIANCE

EMC Compliance	International 3GPP TS37.113 Europe : ETSI EN 301 489-1 North America: FCC CFR 47 Part 15B IC ICES-003B
Product Safety Compliance	EN 60 950-1/IEC 60 950-1 Edition 2 EN 60 215/IEC 215 EN 60 529/IEC 529 UL 60 950-1, 2nd edition, Information Technology Equipment Including Electrical Business Equipment  CSA C22.2 No. 60 960-1, Safety of Information Technology Equipment Including Electrical Business Equipment  CSA 22.2 No. 1-M94, Audio, Video and Small Electronic Equipment



**MOTOROLA SOLUTIONS**



Motorola Solutions, Inc. 500 West Monroe Street, Chicago, IL 60661 U.S.A. [motorolasolutions.com/LTE](http://motorolasolutions.com/LTE)

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. The Ericsson three stripes logotype is a registered trademark of Telefonaktiebolaget L M Ericsson. All other trademarks are the property of their respective owners. © 2018 Motorola Solutions, Inc. All rights reserved. 03-2018