Huawei eLTE Rapid System

The eLTE Rapid system ensures that first responders can communicate fast — anytime, anywhere.

By integrating components into box-type containers, the system can be quickly and easily assembled.
Fast deployment
Complete broadband trunking installation in 15 minutes
No car-tuning for mainstream SUVs

Outstanding performance
100 users, 40 groups, and 20 videos
6 km coverage

Flexible networking
Satellite, fiber, and microwave backhaul

Ruggdized design
Military-level strength standard
Challenges in Daily Communications

Public Safety Management

Some networks may have “holes” in their coverage, which can lead to poor security during public events or regular patrols, or result in slow response to emergencies. You need a flexible network to fill those holes — one that’s easy to deploy, convenient to use, small, vehicle-mounted, and can record audio and video.

VIP Security

An emergency communications network must be deployed for moving motorcades. This will ensure that security personnel can fully share information, respond to emergencies, and make quick decisions.

Disaster Relief

Public safe communication may break down during natural disasters. In these cases, the rapid deployment system can provide timely status reports, quickly give rescue instructions, and organize local survivors to assist in rescue operations.
eLTE Rapid System Applications

The eLTE Rapid system can be deployed in a fixed place, and on a vehicle.

- Provides emergency communications such as trunking voice and data services for the surrounding area.
- Serves as a wireless image transmission system to fill coverage holes on a provisional basis and obtain entry images.
- Requires only 15 minutes to deploy the entire system.

- When deployed in a medium- or small-sized vehicle, such as an SUV, the system can provide emergency communications such as trunking voice and data services in the vicinity of a moving or parked vehicle.
- A vehicle does not need to be refitted to carry eLTE Rapid components.
- Serves as a mobile wireless image transmission system on moving emergency command or patrol cars.
Product Highlights — Fast Deployment

The eLTE Rapid system is usable out-of-the-box. It is so easy to install that you don’t need tools to manually install the system. Boxes are not interlocked, so they can be stacked easily. No on-site configurations are required. Parameter settings are unnecessary because group precoding has been done. Once the device is powered on, it automatically scans and calculates interference values, selects the optimal frequency band, and performs automatic configurations to avoid interference.

In emergencies, getting there can be the hardest hurdle. eLTE Rapid System boxes are well-designed for portability. Multiple, flexible transport methods include rugged SUVs, boxes rolled on casters, or boxes carried in backpacks when roads are impassable.
Product Highlights — Flexible Networking

Multiple backhaul methods such as satellites, microwaves, and optical fibers can quickly access remote emergency command systems. A command center can dispatch various on-site resources, including videos.

The eLTE Rapid System supports hierarchical networking between the upper-level and lower-level networks. The eLTE common and single site networks can be configured in hierarchical mode as a unified network to expand network coverage for the enterprise network or to fill holes in coverage.

- A hierarchical network can be a star topology in which one dispatcher serves as the upper-level dispatcher and other dispatchers serve as lower-level dispatchers.
- Users can roam among all levels of networks.
- The upper-level dispatcher can dispatch users in a lower level network directly.
- Communication is supported between upper-level and lower-level networks, or among lower-level networks.
- The upper-level and lower-level dispatchers can work in hierarchical mode, or independently when the communication link between upper-level and lower-level dispatchers is disconnected.
Product Highlights — Outstanding Performance

The eLTE Rapid system is a broadband multimedia enterprise network solution based on LTE technology. It supports 400 MHz and 1.8 GHz frequency bands and provides multimedia communications such as trunking voice, data services, resource locating, SMS, and video services. It provides excellent trunking performance. One eLTE Rapid system supports concurrent use by 100 users, 40 groups, and 20 video channels.

The eLTE Rapid system can be installed on medium- or small-sized vehicles, including all mainstream SUVs. No vehicle refit is required. For static communication, the coverage can reach 6.3 km, and while the vehicle is moving, the coverage can reach 3.7 km. One-key switchover between static and motion states is supported.

The eLTE Rapid system offers a wide range of applications for voice, video, and data services to accelerate response time.

• GPS location tracking allows efficient tracking of workers, vehicles, and business assets to enhance safety and productivity.
• Remote de-activation can delete data from a device that has been lost or stolen to keep the information safe.
• Group circling helps dispatch adjacent available resources as quickly as possible.
• Dynamic regrouping can combine multiple terminals with multiple static group calls.
Product Highlights — Ruggdized design

The eLTE Rapid system can endure road-shock, high heat, and is cold-endurable meeting military standards for strength and requirements for transportation in various road conditions. Each eLTE Rapid box is weighted properly and the barycenter setting prevents the stack of boxes from damaging devices inside.

The eLTE Rapid system include a laptop, a main box, a RF box, a power supply box, an antenna box, and on-board accessories. The power supply box can supply power for at least 4.5 hours. A diesel generator also can supply power to the eLTE Rapid system. As a result, the Rapid system can operate without mains supply. A main box and a power supply box can work properly without a shield in light rain or high wind for a short period of time. The RF and antenna boxes can work continually and properly in the rain.
eLTE Rapid Product Family — Main Equipment

Specifications

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<thead>
<tr>
<th>Performance</th>
<th>Operating band</th>
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<tbody>
<tr>
<td></td>
<td>1785 MHz to 1805 MHz</td>
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<tr>
<td></td>
<td>380 MHz to 450 MHz</td>
</tr>
<tr>
<td>Maximum number of users</td>
<td>100</td>
</tr>
<tr>
<td>Maximum number of simultaneous voice calls</td>
<td>40</td>
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<tr>
<td>Number of simultaneous video calls</td>
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<th>Environment</th>
<th>Operating temperature</th>
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<tr>
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<td>–20°C to +50°C</td>
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<tr>
<td>Humidity</td>
<td>5% to 95% (non-condensing)</td>
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<tr>
<td>Atmospheric pressure</td>
<td>80 kPa to 106 kPa</td>
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<tr>
<th>Power Consumption</th>
<th>Input Voltage</th>
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<tr>
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<td>110 V AC to 220 V AC</td>
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<td>System Consumption</td>
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<th>Reliability</th>
<th>System MTBF</th>
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<tr>
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<td>100,000 h</td>
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<tr>
<td>System MTTR</td>
<td>0.5 h</td>
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Huawei eLTE Rapid System

eLTE Rapid Product Family — Terminals

EP680 broadband trunking handset

EP680 is the world’s first portable terminal for LTE broadband trunking. It supports multiple concurrent services on enterprise networks. For example, P2P calls, group calls, SMS, MMS, broadband data access, and video dispatching services. The EP680 uses the traditional walkie-talkie design, but is more compact, durable, and reliable to meet enterprise application requirements.

EP820 large-screen smart terminal

EP820 is a high-end, portable, large-screen terminal developed by Huawei for broadband trunking. It is a powerful trunking terminal for enterprise networks and supports multiple concurrent services such as P2P calls, group calls, SMS, MMS, broadband data access, and video dispatching services. EP820 has a 4.5-inch touch screen and can be used widely in fields without special requirements such as public security, energy, and transportation.

EV750 vehicle-mounted terminal

EV750 is an integrated, vehicle-mounted terminal for broadband trunking. It is a powerful terminal used in enterprise networks and supports multiple concurrent services such as P2P calls, group calls, SMS, MMS, broadband data access, and video dispatching services.

EG860 outdoor CPE

EG860 is an outdoor broadband wireless router based on LTE for enterprise broadband data access. It supports LTE wireless network access through network ports or Wi-Fi to implement data service conversion. It can be used for fixed or mobile data collection and wireless HD video surveillance.