

EM720

Product Description

Issue 02

Date 2014-09-10



Copyright © Huawei Technologies Co., Ltd. 2014. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademarks and Permissions

and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied. The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base

> Bantian, Longgang Shenzhen 518129

People's Republic of China

Website: http://www.huawei.com

Email: support@huawei.com Product Description Contents

Contents

| About This Document f | 音误! | 未定义书 | 书签。 |
|---------------------------------------|---|-------|-----|
| 1 Product Positioning and Features | •••••• | ••••• | 1 |
| 1.1 Product Positioning | | | 1 |
| 1.2 Product Features | | | 1 |
| 1.3 Product Appearance | | | 1 |
| 2 Application Scenarios | · • • • • • • • • • • • • • • • • • • • | ••••• | 3 |
| 2.1 Overview | | | 3 |
| 2.2 Application Scenarios | | | 3 |
| 2.2.1 Broadband Data Access | | | 3 |
| 2.2.2 OTG | | | 3 |
| 3 Technical Specifications | ••••• | ••••• | 5 |
| 3.1 Hardware Technical Specifications | | | 5 |
| 3.2 Software Technical Specifications | | | |
| 4 Product List | | | |
| 5 Agranyms and Abbraviations | | | |

Product Positioning and Features

1.1 **Product Positioning**

Professional terminal devices play an important role in ensuring communication in key tasks or projects. In the Big Data Era, various personal terminals bring increasing demands on network access. The EM720 terminal device provided by Huawei facilitates the dealing with difficult working environments.

1.2 Product Features

- Broadband multimedia access terminal developed based on the TD-LTE technology, meeting the industry's requirements on data services
- Supports Wi-Fi access: A personal electronic device with the Wi-Fi function can access LTE networks using EM720.
- Supports the UL 64QAM modulation scheme, which significantly improves the throughput of UL users.
- Can be controlled and managed by using the PC configuration tool.
- Provides a large battery capacity and can charge other electronic devices.

1.3 Product Appearance

Figure 1-1 Front view of EM720



Huawei Ltd.

Page 1 of 9

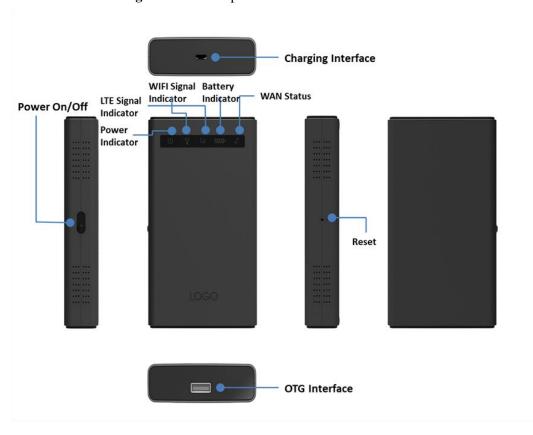


Figure 1-2 EM720 product overview

Application Scenarios

2.1 Overview

EM720 is a multimedia broadband data access terminal based on the TD-LTE technology. It allows a user to perform professional multimedia data accessing.

2.2 **Application Scenarios**

2.2.1 **Broadband Data Access**

A common electronic device can access an LTE private network through the Wi-Fi hotspot of EM720, to use broadband applications.

LTE Network eNodeB

Figure 1-3 EM720 application

2.2.2 OTG

Currently, most personal electronic devices have large screens, which consume much power. As a result, the standby time and operating time of the devices are limited. EM720 has a 6000 mAH capacity, and can charge electronic devices through a USB port, ensuring the operating time of user devices.

Figure 1-4 EM720 OTG application



3 Technical Specifications

3.1 Hardware Technical Specifications

 Table 1-1 Hardware technical specifications

| Item | Specifications |
|------------------------------|------------------------------|
| Frequency | 1.8 GHz: 1785 to 1805 MHz |
| | 1.4 GHz: 1447 to 1467 MHz |
| Power | 1.8 GHz: 24±2 dBm |
| | 1.4 GHz: 24±2 dBm |
| Operating bandwidth | 1.8 GHz: 5 MHz/10 MHz/20 MHz |
| | 1.4 GHz: 5 MHz/10 MHz/20 MHz |
| Sensitivity | 5 MHz: -100 dBm |
| | 10 MHz: –97 dBm |
| | 20 MHz: –94 dBm |
| Wi-Fi antenna gain | 2dbi MAX |
| Wi-Fi antenna sensitivity | 54M: -68 dBm@10% PER |
| | 11M: -85 dBm@8% PER |
| | 6M: -88 dBm@10% PER |
| | 1M: -90 dBm@8% PER |
| Maximum Wi-Fi transmit power | 802.11b: 13 dBm |
| | 802.11g: 11 dBm |
| | 802.11n: 10 dBm@2.4 GHz |
| UE capability | Cat 4 |
| Maximum rate | UL 50 Mbit/s; DL 100 Mbit/s |
| Modulation scheme | UL: QPSK, 16QAM, and 64QAM |
| | DL: QPSK, 16QAM, and 64QAM |

Huawei Ltd.

| Item | Specifications |
|---------------------------------|---|
| Dimensions (H x W x D) | 121 mm x 70 mm x 23.5 mm (excluding the external antenna) |
| Battery | LI-ion, 3.7 V, 6000 mAH |
| Weight | 253 g |
| Input voltage | 5 V, 1.5 A |
| Output voltage | 5.2 V DC±10% |
| Output current | 1 A |
| Operating temperature | -10 ℃ to 45 ℃ |
| Operating humidity | 10% to 85% RH |
| Storage temperature | -20 ℃ to 60 ℃ |
| Side keys | Reset key and power key |
| Standby time | 14 hours (LTE standby, with Wi-Fi enabled) |
| Operating time | 10 hours (at –95 dB, with a single user uploading data) |
| Antenna | Built-in: LTE |
| | Built-in: Wi-Fi |
| External port | Micro USB 2.0 |
| Wi-Fi wireless standard | IEEE 802.11b: 11/5.5/3/2/1 Mbit/s (Auto Rate Sensing) IEEE 802.11g: 54/48/36/24/18/12/9/6 Mbit/s (Auto Rate Sensing) IEEE 802.11n: 300/150 Mbit/s (Auto Rate Sensing) |
| Wi-Fi radio frequency | 2412 MHz to 2472 MHz |
| Maximum Wi-Fi transmission rate | 300 Mbit/s |

| Item | Specifications |
|---------------|--|
| Wi-Fi channel | 1-14 |
| Certification | Model Approval Certificates by China Radio Management |
| | CE certificate |
| | RoHS |

3. 2 Software Technical Specifications

Table 1-2 Software technical specifications

| Category | Item | Specifications |
|------------------------------------|--|----------------|
| Software upgrade and configuration | Local software upgrade and configuration, and independent configuration file upgrade | Supported |
| SIM card | Physical/Virtual SIM card | Supported |

Product Description 4Product List

4 Product List

Table 1-3 EM720 product list

| Item | Quantity | Remarks |
|----------------------------|----------|--|
| EM720 | 1 | |
| Data cable | 1 | USB port on one end and mini USB port on the other end |
| Adapter | 1 | Charger: Input: 100 to 240 V AC, 50 to 60 Hz Output: 5 V DC, 2 A |
| Quick guide | 1 | Chinese and English versions |
| Certificate of conformance | 1 | |
| Product list | 1 | |

Page 8 of 9

5 Acronyms and Abbreviations

Table 1-4 Acronyms and abbreviations

| Item | Full Name |
|------|---|
| LTE | Long Term Evolution |
| EMC | Electromagnetic Compatibility |
| USB | Universal Serial Bus |
| LED | Light-Emitting Diode |
| RF | Radio Frequency |
| ROHS | The Restriction of the User of certain Hazardous |
| | Substances In electrical and Electronic Equipment |
| SAR | Specific Absorption Rate |
| TFT | Thin Film Transistor |
| WEEE | Waste Electrical and Electronic Equipment |

Huawei Ltd.