

In-Vehicle

# X7R

# Mobile Data Terminal







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## 7-inch IP54 Rugged Mobile Data Terminal

X7R is a rugged IP54 grade mobile data terminal specifically designed for intelligent transportation like Fleet Management System. Based on Rockchip RK3368 ARM Cortex-A9 octa-core processor, our X7R has a higher and more reliable performance in-vehicle applications. This device integrates a variety of wireless communication modules such as Wi-Fi, Bluetooth, 4G cellular and GPS. The rugged enclosure provides more capabilities not only in a wide range of temperatures but also in harsh environments subject to shock and vibration. Its design also allows it to own a good ingress protection rating of IP54. The pigtail cable is designed for more extension data communications, such as RS232, RS422, RJ45, USB, CAN Bus, GPIOs, etc. The X7R works with the Android 6.0 Marshmallow operating system and we provide BSP support for it.

## Keeping the Devices Connected With Outer World

X7R equips with wireless as well as cellular modules which keep the device connected with the outer world. The wireless module features with built-in Wi-Fi supporting the latest Wi-Fi standards – 802.11a/b/g/n/ac. In addition, the cellular module which is integrated with 4G/3G capabilities further enhances the network connectivity.

## High-Performance Computing

X7R is powered with RK3368 ARM Cortex-A9 Octa-Core processor 1.5 GHz with 2GB DDR3 supported RAM, 8GB eMMC ROM (16GB), and a G+G Multi-touch panel. This hardware configuration enables the device to perform any computing task excellently.

## Advantages of World's Best Navigation Systems

With the radio navigation system, a user can navigate across the globe. X7R offers onboard GPS+BEIDOU modules. Besides, it also optionally supports GLOSNASS.

## Diversified Extendibility

X7R can be extended via I/O ports such as RS232, RS422, RJ45, USB, CAN Bus, GPIOs, etc. With the extension of these data communications, this device supports high compatibility.

## Built For Extreme Environments

The X7R is ready for your toughest environments, with dust-and-water tight IP54 sealing, sealed connectors, and extreme temperature, shock and vibration testing.

## CE/FCC Approved

X7R meets the standards of various well-known regulatory bodies thus making the product internationally recognized.

## Leading OS with Comprehensive Support

X7R supports the industry's leading operating system – Android. The built-in version of Android is Marshmallow which offers an Open Ecosystem, Customizable UI, Custom ROMs, optimized graphics and Multi-language support. We provide BSP support for it.

## Support Graphics-Intensive Applications

X7R is equipped with PowerVR G6110 GPU supporting OpenGL ES1.1/2.0/3.1. With the excellent computing power of X7R, the Graphic processing unit results in an outstanding user experience and heavily supports today's graphic-intensive applications.

## Superior Mounting Flexibility

X7R offers multiple mounting options. It supports VESA as well as RAM mountings which makes it fit for different scenarios.



**Reliable consult service, necessary technical support together with 12-month standard warranty are guaranteed with Saintway's experienced technical team**  
**For more information, visit <https://www.waysion.com>**

# Specification

Core	
Processor	Rockchip RK3368 Octa-core A53, 1.5GHz
Graphic	Integrated PowerVR G6110 GPU, support OpenGL ES 1.1/2.0/3.1, OpenCL, DirectX9.3
RAM	2GB DDR3
ROM	8GB eMMC (16GB)
OS	Android 6.0
Display	
LCD panel	7-inch LCD
Resolutions	1024 × 600
Brightness	500 cd/m <sup>2</sup> (typical)
Contrast Ratio	800:1
View Angle (°)	75/75(L/R), 70/75(U/D)
Touch panel	G+G multi-touch capacitive touch panel
Wireless	
WiFi	IEEE 802.11 a/b/g/n/ac 2.4GHz & 5GHz
Bluetooth	Ver 4.0
Cellular	4G optional (LTE, UMTS, GSM)
NFC	Support for: – ISO/IEC 18092 – ISO/IEC 21481 – ISO/IEC 14443 Type A, Type B, and Generic B Prime cards (CE mode only for B Prime cards) – Japanese Industrial Standard (JIS) (X) 6319-4 – ISO/IEC 15693 standards. – Extended data rates up to 848 kbps for all
Positioning	Integrated GPS+BEIDOU (GLONASS optional)
Multimedia	
Video	Encode: 1080P video encoding for H.264 and VP8, MVC Decode: 4K H.265/H.264 video decoder, 1080P multi video decode
Audio	MP3, WMA, OGG, APE, FLAC, AAC etc.

User Interface	
Speaker	Built-in speakers(1.5W, 4Ω) x 2
Onboard I/O ports	1 x SD card slot(up to 128GB)
	1 x SIM card slot
	1 x USB Host (Type A)
	1 x OTG(mini-B type)
	1 x microphone jack
	1 x earphone jack
Extended I/O ports (on pigtail cable)	1 x RJ45
	1 x CAN Bus 2.0B(optional)
	1 x RS422(RS485 optional)
	3 x RS232
	4 x GPIO(3 x DI, 1 x DO)
	1 x USB Host (Type A) 1 x DC in
Function Key	Panic, Brightness+, Brightness-, Home Volume+, Volume-, Menu, Reset
Power light	LED light

Power Supply	
DC In	12V DC (9~36V)

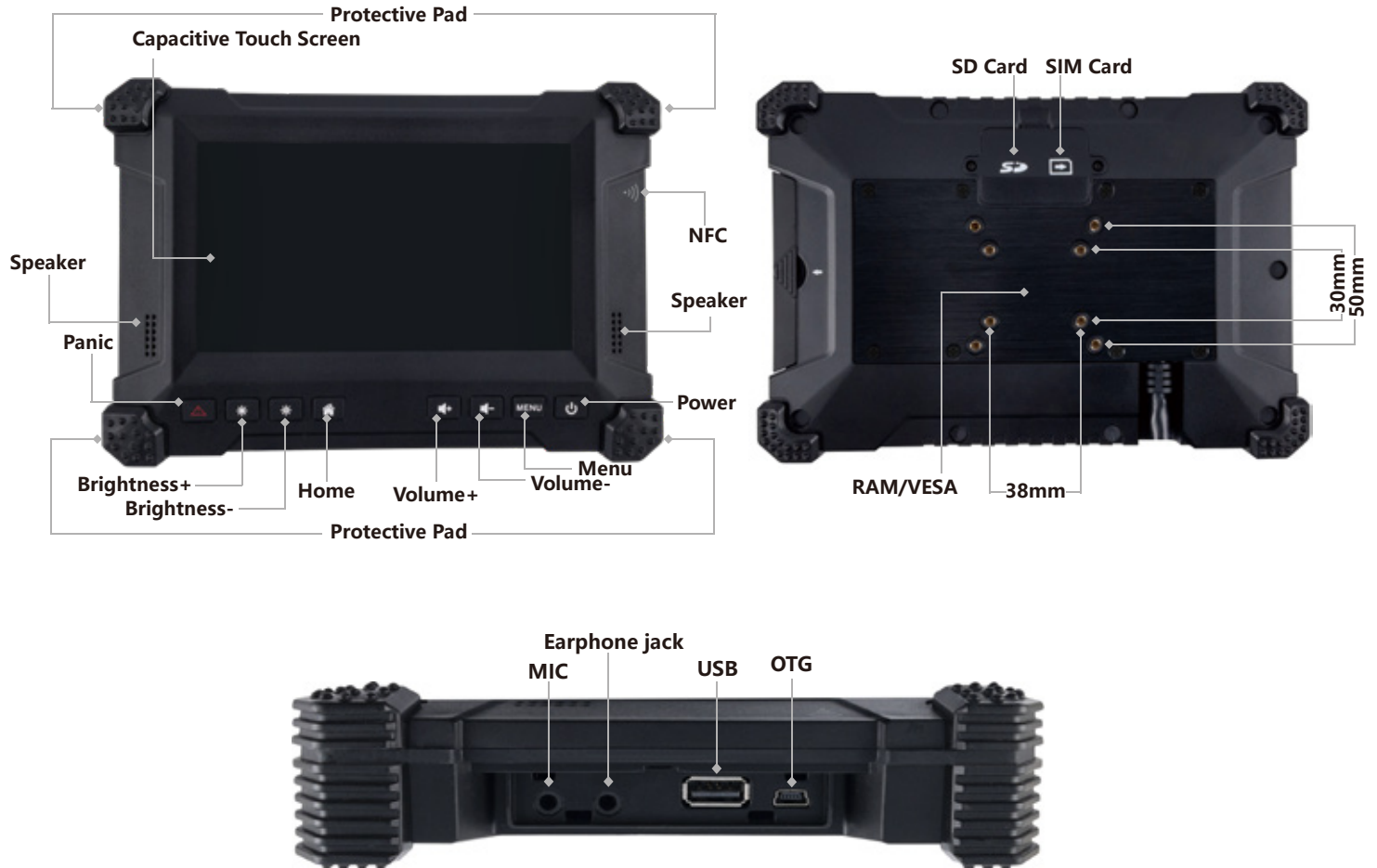
Power Consumption	
Normal mode	≤6W
Charging mode	≤10W

Environment	
Operating Temp	-20°C~70°C
Storage Temp	-20°C~80°C
IP Rating	IP54

Mechanical	
Dimensions	231(W)x159(H)x43(D) mm
Weight	1.13kg
Mount	50x50mm VESA or 38x30mm RAM or M6 mounting

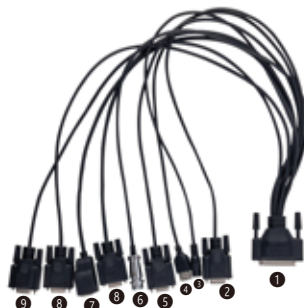
Accessories	
Standard	AC/DC adaptor or car power adaptor(optional)
Optional	Extended cable

## Interface



## Accessories

Pigtail Connecting Cable



- ① HDP44P MALE
- ② RS232
- ③ DC in
- ④ USB
- ⑤ RS422/RS485
- ⑥ GPIO
- ⑦ RJ45
- ⑧ RS232
- ⑨ CAN BUS



Power Adaptor

