Industrial 1200MbpsWiFi5 5G/4G Router

Model: WL226

SimpleIntroduction

Thisdocumentdescribestheelectricalcharacteristics, RFperformance, dimensionsandapplicationenvironment oftheWL226. Undertheintroductionofthisdocument, endusersordeveloperscanquicklyunderstandthe hardwarefunctionsofWL226.

WL226isaWifi5 5G/4G Router. ItaccessestheInternetthrough 5G/4Gmobilecommunicationdial-upor 1000Mbps WANport, thensharestheInternetnetworkthroughwirelessWiFi5and 1000MbpswiredLAN.

ProductFeature

- UsingMT7621AMIPSdual-coreCPU, mainfrequencyisupto 880MHZ
- UsingindependentWIFI5chip, MT7612EandMT7603E, wirelessrateisupto 1200Mbps
- Using 16MBNorFlash+256MBDDR3 RAM, Maxupto 32MBFlash+512MBDDR3 RAM
- 1 GigabitWANPort+2GigabitLANPorts, supportAutoMDI/MDIX, 1 USB2.0 Port
- Built-inoneM.2/Mini-PCIEinterface, support 5Gmobileconnection
- 1 SIMcard , supportSIM/USIMcard
- Support 9V-36VPowersupply
- Externalhigh-gainWIFIantenna, wirelesssignal 360 degreeswithoutdeadangle

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ProductDatasheet

Introductiontothehardwareinterface

Ports	1*10/ 100/ 1000MbpsWANPort(AutoMDI/MDIX) IEEE 802.3/802.3u/802.ab
	2*10/ 100/ 1000MbpsLANPort(AutoMDI/MDIX) IEEE 802.3/802.3u/802.ab
SIMslot	1* SIMslot, SupportSIM/USIM
USBPort	1*USB2.0 port
Power	12V 2A power adapter, support 9v-36v voltage
Button	1*Resetbutton
Antennas	2*OmnidirectionalExternal 5dbiWifiantennas
	4*OmnidirectionalExternal 5dbi 5G/4Gantennas

Introductiontothehardwareplatform

Processor	MT7621AMIPSDualCoreCPU, 880MHZmainfrequency
WIFIchipset	MT7612E+MT7603E, IEEE 802. 11n/g/b/a/ac, maxspeedupto 1200Mbps
RAM	DDR3 256MB (Max.512MB)
Flash	NorFlash 16MB (Max. 32MB)
	NANDFlash (ReservedDesign)Max. 1GB

5G/4Gmobilecommunicationfunction

Thisproducthasbuilt-inoneM.2/MiniPCIEinterface, whichcanbeusedtoexpand 5G/4Gmobilecommunication functions. Thebuilt-inM.2/PCIEinterfacesupportsUSB3.0 andUSB 2.0 buses. 5Gmobilecommunication supportsNSAorSA.

Powersupplyandpowerconsumptiondescription

Item	TestingCondition	Minimum	Rating	Maximum
Workingvoltage(V)	TA = 25°C	9	12	35
Absoluteoperatingvoltage(V)	TA = 25°C	8		36
WorkingCurrency(A)	VIN=12V TA = 25°C	0.3	0.9	1.5

Pleaseusethestandardpoweradaptertosupplypowertothisproduct. Ifyoudonotusethestandardpower supply, pleasesupplypowertothisproductinstrictaccordancewiththeabovepowerspecificationsand parameters,

otherwisetheproductwillbedamaged. Ifthebatteryorvehiclepowersupplyisusedforpower supply, pleasemakeanti-staticandantisurgecountermeasures.

IntroductiontoWIFIwirelessparameters

WIFIEVMstandard

	Modedescription	Indexparameter
EVMstandard(dBm)	802. 1 1B 11Mbps	≤ - 1 5 dB
	802. 1 1G 54 Mbps	≤ -25 dB
	802. 1 1N HT20@ MCS7	≤ -28 dB
	802. 1 1N HT40@ MCS7	≤ -28 dB
	802. 11ACVHT20@ MCS8	≤ -30 dB
	802. 11ACVHT40@ MCS9	≤ -32 dB
	802. 11ACVHT80@ MCS9	≤ -32 dB
	802. 1 1AX HE20@MCS 1 1	≤ -35 dB
	802. 1 1AX HE40@MCS 1 1	≤ -35 dB
	802. 1 1AX HE80@MCS 1 1	≤ -35dB

WIFI2.4G

CompatiblewithIEEE 802. 1 1 b/g/n/ac/ax, supports 20MHz, 40MHz, modulationmethod 1024-QAM / OFDMA, adopts2T2RMU-MIMOantennatechnology, andthehighestconnectionrateisupto 573.5Mbps. Thefollowing isanexplanationof 2.4GWIFI'spowerfrequency, receivingsensitivity, andtransmittingpower.

Item	Instruction	MaximumValue	Rating	MinimumValue
Working Frequency(MHz)		2484		2412
Receiving sensitivity(dBm)	802. 1 1B 11Mbps	-86	-87	-88
	802. 1 1G 54 Mbps	-69	-71	-73
	802. 1 1NHT20@ MCS7	-67	-69	-71

	802. 1 1NHT40@ MCS7	-65	-67	-69
	802. 11ACVHT20@ MCS8	-63	-65	-67
	802. 11ACVHT40@ MCS9	-61	-63	-65
	802. 1 1AX HE20@MCS11	-62	-64	-66
	802. 1 1AX HE40@MCS11	-60	-62	-64
Transmit power(dBm)	802. 1 1B 11Mbps	22	21	20
	802. 1 1G 54 Mbps	20	19	18
	802. 1 1NHT20@ MCS7	19	18	17
	802. 1 1NHT40@ MCS7	19	18	17
	802. 11ACVHT20@ MCS8	18	17	16
	802. 11ACVHT40@ MCS9	18	17	16

WIFI5.8G

CompatiblewithIEEE 802. 1 1 a/ac/ax, supports 20MHz, 40MHz, 80MHz, modulationmethod 1024-QAM / OFDMA, adopts 2T2RMU-MIMOantennatechnology, andthehighestconnectionrateisupto 1201Mbps. The followingisanexplanationofthepowerfrequency, receivingsensitivity, andtransmittingpowerof 5.8GWIFI.

Item	Instruction	MaximumValue	Rating	MinimumValue
Working Frequency(MHz)		5825		5180
Receiving sensitivity(dBm)	802. 1 1G 54 Mbps	-69	-71	-73
	802. 1 1NHT20@ MCS7	-67	-69	-71
	802. 1 1NHT40@ MCS7	-65	-67	-69
	802. 11ACVHT20@ MCS8	-63	-65	-67
	802. 11ACVHT40@ MCS9	-61	-63	-65
	802. 11ACVHT80@ MCS9	-59	-61	-63
	802. 1 1AX HE20@MCS 1 1	-57	-59	-61
	802. 1 1AX HE40@MCS 1 1	-55	-57	-59
	802. 1 1AX HE80@MCS 1 1	-53	-55	-57
Transmit power(dBm)	802. 1 1G 54 Mbps	20	19	18
	802. 1 1NHT20@ MCS7	19	18	17
	802. 1 1NHT40@ MCS7	18	17	16
	802. 11ACVHT20@ MCS8	18	17	16
	802. 11ACVHT40@ MCS9	17	16	15
	802. 11AC VHT80@ MCS9	16	15	14

Introduction to structural parameters and accessories

Color	Gray
PackingList	WL226 1PCS
	Cat 5 Patchcable 1PCS
	MountingBrackets 1SET

Product working environment requirements

Workingtemperature	-20C - 60C
Storagetemperature	-40C - 70C
Workinghumidity	10% - 90%RH, Noncondensing
Storagehumidity	5% - 90%RH,Noncondensing

Software configuration information

DefaultIP	192.168.1.1
Username/ password	admin/admin
2.4GSSID	WIFI-2.4G
5.8GSSID	WIFI-5G

Theaboveisthegeneraldefaultconfigurationinformationoftheproduct. Pleaserefertotheproductdescription forotherdetailedsoftwarefunctions.