

Hardware CPE Spec Guide

SmartWAN CPE Specifications

Product portfolio

The SmartWAN CPEs are available in the following models:

1. **LW1000**: Mini router, with five fixed Ethernet ports.

 | LW1X05: 20Mbps SmartWAN, 50Mbps Internet, 2G/3G/4G modem and Wireless LAN optional.

2. **LW2000**: Tabletop. Comes in three different sub models.

 | LW2X02: 30Mbps SmartWAN, 60Mbps Internet, 5 ports of fixed GE RJ45, 2G/3G/4G modem and Wireless LAN optional.

 | LW2X08: 100Mbps SmartWAN, 350Mbps Internet, 2 ports of fixed GE Combo, 4 ports of fixed GE RJ45, 2G/3G/4G/5G modem and Wireless LAN optional.

 | LW2X09: 250Mbps SmartWAN, 500Mbps Internet, 2 ports of fixed GE Combo, 4 ports of fixed GE RJ45, 2G/3G/4G/5G modem and Wireless LAN optional.

3. **LW3000**: 1U Rack-mount. Comes in four different sub models.

 | LW3001v2: 100Mbps SmartWAN, 350Mbps Internet, 2 ports of fixed GE Combo, 4 ports of fixed GE RJ45.

 | LW3002v2: 250Mbps SmartWAN, 500Mbps Internet, 2 ports of fixed GE Combo, 4 ports of fixed GE RJ45.

 | LW3003v3: 400Mbps SmartWAN, 1Gbps Internet, 6 ports of fixed GE RJ45, 1 Pluggable Interface Module.

 | LW3007v3: 800Mbps SmartWAN, 2Gbps Internet, 6 ports of fixed GE RJ45, 1 Pluggable Interface Module.

4. **LW7000**: 2U Rack-mount. Comes in two different sub models.

 | LW7007: 1.5Gbps SmartWAN, 5Gbps Internet, 4 Pluggable Interface Module.

 | LW7009: 3Gbps SmartWAN, 7Gbps Internet, 4 Pluggable Interface Module.

5. **LWV series:** With SmartWAN software image, SD-WAN capability can be enabled on virtual machine or Cloud.

6. **Mobile series:** Support for Windows, android, macOS and iOS. For more details, refer to the respective documents.

Note: Bandwidth testing complies with RFC 2544 IMIX test with bidirectional traffic and an average packet size of 500 bytes.

Key hardware specifications

Item	LW1000	LW2000	LW3000	LW7000
Services and Slot Density				
Traffic ports	5 x 10/100/1000Mbps RJ45, 4 x LAN + 1 x WAN	LW2X02: 5 x 10/100/1000Mbps RJ45 LW2X08/09: 4 x 10/100/1000Mbps RJ45, 2 x 1 Gbps Combo	LW3001v2: 4 x 10/100/1000Mbps RJ45, 2 x 1 Gbps Combo LW3002: 4 x 10/100/1000Mbps RJ45, 2 x 1 Gbps Combo LW3003v3/07v3: 6 x 10/100/1000Mbps RJ45, 1 Pluggable Interface Module (PIM) slots. PIM Options: 4 x 1 Gbps SFP 2 x 10 Gbps SFP	4 Pluggable Interface Module (PIM) slots. PIM Options: 2 x 10 Gbps SFP, 4 x 10 Gbps SFP, 8 x 1 Gbps SFP, 8 x 1 Gbps RJ45, 4 x 1 Gbps SFP & 4 x 1 Gbps RJ45
Bypass	N/A	N/A	1 Pair of Gen3	PIM Options: 2 Pair of Gen3 with 4 x 1 Gbps SFP & 4 x 1 Gbps RJ45
CPU	MIPS MT7621	LW2X02: Marvell 3720 LW2X08: NXP LS1043A LW2X09: Intel Denverton C3558	LW3001v2: NXP LS1043A LW3002: Intel Denverton C3558 LW3003v3: Intel Core i3-6100 LW3007v3: Intel Core i7-6700	LW7007: Intel Core i7-8700 LW7009? Intel Core i9-9900K

Item	LW1000	LW2000	LW3000	LW7000
Memory	DDR3 256MB	LW2X02: DDR3 1GB LW2X08: DDR4 2GB LW2X09: DDR4 8GB	LW3001v2: DDR4 2GB LW3002: DDR4 8GB LW3003v3: DDR4 4GB/8GB LW3007v3: DDR4 8GB/16GB	LW7007: DDR4 16GB/32GB LW7009: DDR4 64GB
NAND storage	32MB Flash	LW2X02: 4GB EMMC LW2X08: 16GB EMMC LW2X09: 16GB/32GB EMMC	LW3001v2:16GB EMMC LW3002: 32GB EMMC LW3003v3/07v3: 32GB SSD	60GB SSD
4G LTE	Optional LTE-AE / LTE-NA	Optional LTE-AE / LTE-NA	N/A	N/A
5G NR	N/A	Optional with LW2X08/09	N/A	N/A
WIFI	Optional: 802.11b/g/n	Optional: 802.11b/g/n	N/A	N/A
Serial console port	N/A	1 RJ-45	1 RJ-45	1 RJ-45
Management port	N/A	1 RJ-45 10/100/1000	1 RJ-45 10/100/1000	1 RJ-45 10/100/1000
Fans	N/A (fanless)	LW2X02/08: N/A (fanless) LW2X09: 1	LW3001v2: 2 LW3002: 2 LW3003v3/07v3: 4	3
Power Specifications				
Power supply option	External AC-DC power adapter	External AC-DC power adapter	Internal AC power adapter	Internal AC power adapter
Redundant power supply support	N/A	N/A	Optional with LW3002/03v3/07v3	Yes
AC input voltage	100-240V	100-240V	100-240V	100-240V
Typical power consumption	24W	LW2X02/08: 24W LW2X09: 60W	LW3001v2: 65W LW3002: 60W LW3003v3/07v3: 250W	300W
Physical Specifications (For reference only)				
Size (W x D x H)	160 x 110 x 30 mm	LW2X02: 275 x 175 x 44 mm LW2X08: 275 x 174 x 44 mm LW2X09: 240 x 199 x 44 mm	LW3001v2: 430 x 294 x 44.5 mm LW3002: 430 x 300 x 44.5 mm LW3003v3/07v3: 440 x 500 x 44 mm	550 x 440 x 88 mm
Weight (G.W. / N.W.?)	1.0Kg / 0.5Kg	LW2X02: 2.4Kg / 1.3Kg LW2X08: 2.4Kg / 1.3Kg LW2X09: 3.8Kg / 2.8Kg	LW3001v2: 6.4Kg / 3.5Kg LW3002: 8.4kg / 5.6kg LW3003v3/07v3: 14Kg / 10Kg	21.5Kg / 18.5Kg

Item	LW1000	LW2000	LW3000	LW7000
Package size (W x D x H)	313 x 277 x 73 mm	LW2X02/08: 350 x 260 x 105 mm LW2X09: 300 x 240 x 100 mm	LW3001v2: 535 x 410 x 180 mm LW3002: 560 x 530 x 215 mm LW3003v3/07v3: 615 x 547 x 188 mm	740 x 580 x 260 mm
Operating/Storage Condition				
Temperature	0 to 40? (Operating) -20 to 70? (Storage)	0 to 40? (Operating) -20 to 70? (Storage)	0 to 40? (Operating) -20 to 70? (Storage)	0 to 40? (Operating) -20 to 70? (Storage)
Humidity	10 to 85%RH(Operating) 5 to 95%RH (Storage)	10 to 85%RH(Operating) 5 to 95%RH (Storage)	10 to 85%RH(Operating) 5 to 95%RH (Storage)	10 to 85%RH(Operating) 5 to 95%RH (Storage)
Regulatory Compliance				
EMC	N/A	LW2X09: CE; FCC	CE; FCC	CE; FCC

4G/LTE bands supported

Region	LTE-AE	LTE-NA
LTE Bands	B1(FDD 2100MHz) B3(FDD 1800MHz) B5(FDD 850MHz) B34(TDD 2000MHz) B38(TDD 2600MHz) B40(FDD 2300MHz) 2500MHz) B3(FDD 1800MHz) B8(FDD 900MHz) B39(FDD 1900MHz) B41(FDD 2300MHz) 2500MHz)	B2(FDD 1900MHz) B4(FDD AWS1700MHz) B5(FDD 850MHz) B12(FDD 700MHz)
Australia	Yes	
Canada		Yes
China	Yes	
Europe	Yes	
Japan	Yes	
Middle East	Yes	
South Africa	Yes	
South Korea	Yes	
Thailand	Yes	
United States		Yes

5G bands supported

Mode	Band
5G NR	5G NR Sub-6G: n1/2/3/5/7/8/20/28/41/66/71/77/78/79
5G UL MIMO	n77/78/79/41
EN-DC	4G+n77/78/79/41

Mode	Band
4G LTE	B1/2/3/4(66)/5/7/8/12(17)/13/14/20/25/26/28/29/30/38/39/40/41/42/43/46/48/71

Wireless LAN specifications

Item	2.4GHz
Models	LW1305, LW2302, LW2308, LW2508, LW2309, LW2509
Protocols	IEEE 802.11b/g/n
Channel bandwidth	20Mhz or 40Mhz
Concurrent clients	Up to 50
Wireless Security and Authentication	WPA/WPA2 personal or enterprise
Wireless Encryption	AES
WLAN antennas	External

Ordering information

SKU	SKU Description
LW1005	Basic type with external power supply, 5 Ethernet ports and cable
LW1305	LW1005, with 4G/LTE, 802.11b/g/n and antennas
LW1005-1U	LW1005, with 1U Rack-mount and Internal AC power adapter
LW2002	Basic type with external power supply, 5 Ethernet ports and cable
LW2302	LW2002, with 4G/LTE, 802.11b/g/n and antennas
LW2008	Basic type with external power supply, 4x RJ45 ports, 2x 1GE Combo ports and cable
LW2308	LW2008, with 4G/LTE, 802.11b/g/n and antennas
LW2508	LW2008, with 5G NR, 802.11b/g/n and antennas
LW2008-1U	LW2008, with 1U Rack-mount and Internal AC power adapter
LW2009	Basic type with external power supply, 4x RJ45 ports, 2x 1GE Combo ports and cable
LW2309	LW2009, with 4G/LTE, 802.11b/g/n and antennas
LW2509	LW2009, with 5G NR, 802.11b/g/n and antennas
LW3001v2	Basic type with 4x RJ45 ports, 2x 1GE Combo ports and cable
LW3002	Basic type with 4x RJ45 ports, 2x 1GE Combo ports and cable
LW3003v3	Basic type with 6x RJ45 ports and cable
LW3007v3	Basic type with 6x RJ45 ports and cable
LW7007	Basic type with cable
LW7009	Basic type with cable
PIM-4XGE-SFP	4x 1GE SFP PIM for LW3000
PIM-2X10GE-SFP	2x 10GE SFP PIM for LW7000
PIM-4X10GE-SFP	4x 10GE SFP PIM for LW7000
PIM-8XGE-SFP	8x 1GE SFP PIM for LW7000
PIM-8XGE-RJ45	8x 1GE RJ45 PIM for LW7000, with two pairs G3 bypass
PIM-4XGE-RJ45-4XGE-SFP	4x 1GE SFP + 4x 1GE RJ45 PIM for LW7000, with two pairs G3 bypass

