Quick Start Guide

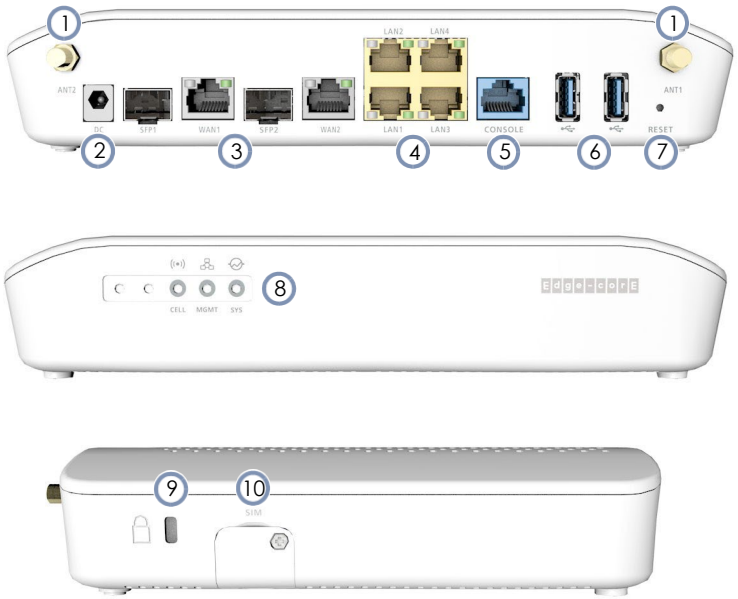
SD-WAN Edge CPE

SDW102 | SDW102-L

Package Contents

1. SDW102/SDW102-L SD-WAN Edge CPE
2. (Optional) AC power adapter with international socket converters
3. (Optional) 2 x LTE antennas
4. 2 x SFP port covers
5. Screw kit—2 screws and 2 plugs
6. QR code card

Overview



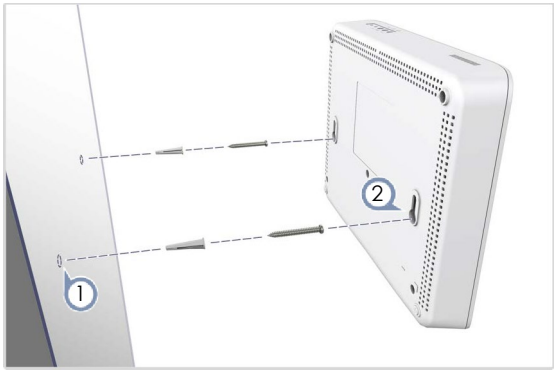
1. LTE antenna connectors (SDW102-L only)
2. DC power input
3. 2 x 1G Combo SFP/RJ-45 WAN Ports:
   - Green LED: On/Blinking (RJ-45 link/traffic)
   - Orange LED: On/Blinking (SFP link/traffic)
4. 4 x 1G RJ-45 LAN Ports:
   - Green LED: On/Blinking (link/traffic)
   - Orange LED: On (1G speed), Off (10/100M speed)
5. Console port
6. 2 x USB 3.0 ports
7. Reset button:
   - A quick press restarts the system.
   - Press and hold for 5 seconds resets to factory defaults.
8. System LED Indicators:
   - CELL (SDW102-L only): On (LTE ready)
   - MGMT: On (controller managed), Blinking (controller sync)
   - SYS: On (power OK)
9. Kensington lock slot
10. SIM card slot (SDW102-L only)

Installation

Warning: For indoor use only. The device, AC power adapter, and all connected cables are not for outdoor use.
Avertissement: Pour une utilisation en intérieur uniquement. L'appareil, l'adaptateur secteur et tous les câbles connectés ne sont pas destinés à une utilisation en extérieur.

1 Mount the Device

a. Mounting on a Wall



1. At the installation location on the wall, set two screws in the wall 160 mm (6.3 in.) apart. Use the wall plugs and screws included in the screw kit.

Note: Drill 2.5 mm (±0.2 mm) holes for M3 self-tapping screws, or 4.5 mm (±0.2 mm) holes for nylon wall plugs.

2. With its ports facing down, slide the device's wall mounting slots down onto the screws so that the unit is secure.

b. Mounting on a Flat Surface

The device can also be placed on any flat surface, such as a desktop or shelf.

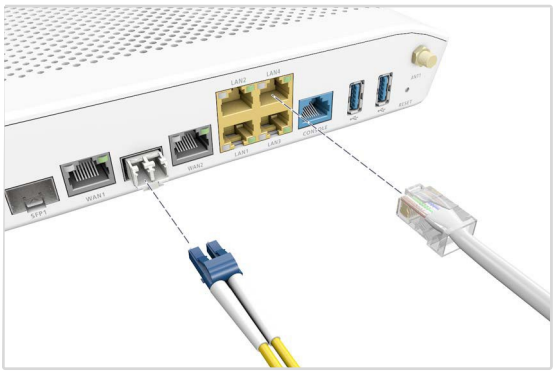
2 Connect Power

1. Connect the AC power adapter to the DC power jack on the device and then plug the adapter into a nearby AC power source.

3 Check the SYS LED

1. When operating normally, the SYS LED should be on green.

4 Connect Network Cables



1. For the 1000BASE-T RJ-45 ports, connect 100-ohm Category 5,5e or better twisted-pair cable.
2. For the SFP slots, first install SFP transceivers and then connect fiber optic cabling to the transceiver ports.

   The following transceivers are supported:

   - 1000BASE-SX (ET4201-SX)
   - 1000BASE-LX (ET4201-LX)
   - 1000BASE-ZX (ET4201-ZX)
   - 1000BASE-LHX (ET4201-LHX)

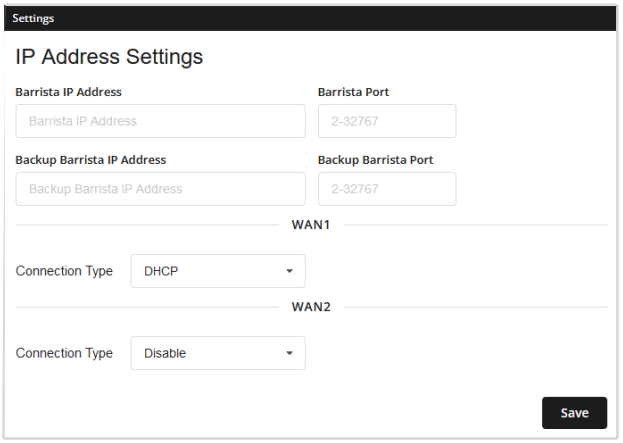
3. As connections are made, check the port status LEDs to be sure the links are valid.

   - On/Blinking Green — Port has a valid link. Blinking indicates network activity.

5 Install LTE Antennas and SIM Card (SDW102-L only)

1. Attach the two included LTE antennas to the connectors on the device.
2. Install a 2FF mini-SIM card into the slot on the side of the device.

6 Make Initial Configuration Changes



1. Connect a PC to one of the SD-WAN Edge CPE's LAN ports.
2. Log in to the web interface using the default management IP address 192.168.100.1 (username "admin" with password "admin").
3. Configure the Barrista controller IP address and port through one of the following methods.

   - DHCP: Automatic configuration.
   - Static: Manually set the IP address, subnet mask, default gateway, and DNS servers.
   - PPPoE: Set the PPPoE username and password.
   - Set the LTE SIM PIN, APN name (SDW102-L only)

4. Click "Save" to confirm the configuration and enable the SD-WAN Edge CPE to communicate with the Barrista controller.

Hardware Specifications

Chassis	
Size (WxDxH)	232.8 x 183.2 x 45.2 mm (9.17 x 7.21 x 1.78 in.)
Weight	SDW102: 696.6 g (1.54 lb) SDW102-L: 751.8 g (1.66 lb)
Temperature	Operating: 0 °C to 40 °C (32 °F to 104 °F) Storage: -20 °C to 70 °C (-4 °F to 158 °F)
Humidity	Operating: 10% to 90% (non-condensing)
Interfaces	
Network	WAN: 2 x 1G Combo SFP/RJ-45 LAN: 4 x RJ-45 10/100/1000BASE-T
USB	2 x USB 3.0
Console	RS-232 serial, RJ-45 port
Power	
AC Power Adapter	AC Input: 100–240 VAC, 50-60 Hz DC Output: 12 VDC, 3 A
Power Consumption	36 Watts Maximum
Regulatory Compliances	
Radio (SDW102-L only)	EN 301 908-1 V11.1.1 2016-07 (LTE) PLMN10 (LTE)
Emissions	CE Mark EN 55032, Class B EN 61000-3-2, Class B EN 61000-3-3 FCC Class B CNS 15936 47 CPR FCC Part 15:2016, Subpart B, Class B ANSI C63.4:2014 CISPR 32.2015 + COR1:2016, Class B AS/NZS CISPR 32:2015, Class B Canada Std. ICES-003:2022 Issue 7, Class B VCCI Class B
Immunity	EN 55024:2010+A1:2015 EN 301489-1 v2.1.1 (SDW102-L only) EN 301489-52 v1.1.0 (LTE) (SDW102-L only) EN 301489-19 (GPS) (SDW102-L only)
Safety	UL 62368-1 & CAN/CSA C22.2 No. 62368-1-14 CB IEC/EN 60950-1 & IEC/EN 62368-1 BSMI Safety Standard CNS15598-1
Taiwan RoHS	CNS 15663

Safety and Regulatory Information

FCC Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CE Mark

CE Mark Declaration of Conformance for EMI and Safety (EEC)

This information technology equipment complies with the requirements of the Council Directive 2014/30/EU on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility and 2014/35/EU for electrical equipment used within certain voltage limits. For the evaluation of the compliance with these Directives, the following standards were applied:

RFI Emission:

- Limit according to EN 55032:2015/A1:2020, Class B
- Limit for harmonic current emission according to EN 61000-3-2:2019/A1:2021, Class B
- Limitation of voltage fluctuation and flicker in low-voltage supply system according to EN 61000-3-3:2013/A1:2019

Immunity:

- Product family standard according to EN 55024:2010/A1:2015
- Product family standard according to EN 55035:2017/A11 A1:2020
- Electrostatic Discharge according to IEC 61000-4-2:2008 ED. 2.0
- Radio-frequency electromagnetic field according to IEC 61000-4-3:2020 ED. 4.0
- Electrical fast transient/burst according to IEC 61000-4-4:2012 ED. 3.0
- Surge immunity test according to IEC 61000-4-5:2017 ED. 3.1
- Immunity to conducted disturbances, Induced by radio-frequency fields: IEC 61000-4-6:2013 ED. 4.0
- Power frequency magnetic field immunity test according to IEC 61000-4-8:2009 ED. 2.0
- Voltage dips, short interruptions and voltage variations immunity test according to IEC 61000-4-11:2020 ED. 3.0

LVD:

- EN 62368-1:2014/A11: 2017

CE

The Declaration of Conformity (DoC) can be obtained from www.edge-core.com -> support -> download.

Japan - VCCI Class B

この装置は、クラスB機器です。この装置は、住宅環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。 VCCI ― B

Laser Safety

Warning: Fiber Optic Port Safety:

CLASS I LASER DEVICE

When using a fiber optic port, never look at the transmit laser while it is powered on. Also, never look directly at the fiber TX port and fiber cable ends when they are powered on.

Avertissment: Ports pour fibres optiques - sécurité sur le plan optique:

DISPOSITIF LASER DE CLASSE I

Ne regardez jamais le laser tant qu'il est sous tension. Ne regardez jamais directement le port TX (Transmission) à fibres optiques et les embouts de câbles à fibres optiques tant qu'ils sont sous tension.

Warnhinweis: Faseroptikanschlüsse - Optische Sicherheit:

LASERGERÄT DER KLASSE I

Niemals ein Übertragungslaser betrachten, während dieses eingeschaltet ist. Niemals direkt auf den Faser-TX-Anschluß und auf die Faserkabelenden schauen, während diese eingeschaltet sind.

Warnings and Cautionary Messages

Warning: This product does not contain any serviceable user parts.
Warning: Installation and removal of the unit must be carried out by qualified personnel only.
Warning: When connecting this device to a power outlet, connect the field ground lead on the tri-pole power plug to a valid earth ground line to prevent electrical hazards.
Warning: This device uses lasers to transmit signals over fiber optic cable. The lasers are compliant with the requirements of a Class 1 Laser Product and are inherently eye safe in normal operation. However, you should never look directly at a transmit port when it is powered on.
Warning: When selecting a fiber SFP device, considering safety, please make sure that it can function at a temperature that is not less than the recommended maximum operational temperature of the product. You must also use an approved Laser Class 1 SFP transceiver.
Warning: This equipment is not suitable for use in location where children are likely to be present.

Caution: Wear an anti-static wrist strap or take other suitable measures to prevent electrostatic discharge when handling this equipment.
Caution: Do not plug a phone jack connector in the RJ-45 port. This may damage this device.
Caution: Use only twisted-pair cables with RJ-45 connectors that conform to FCC standards.

Avertissement: Ce produit ne contient aucun composant susceptible d'être réparé par l'utilisateur.
Avertissement: L'installation et la dépose de l'unité ne doivent être réalisées que par du personnel qualifié.
Avertissement: Lorsque vous branchez cet appareil sur une prise électrique, la terre de la fiche à trois pôles doit être branchée sur une ligne mise à la terre pour écarter tout danger électrique.
Avertissement: Cet appareil utilise des lasers pour transmettre des signaux sur un câble à fibre optique. Ces lasers répondent aux exigences des produits laser de classe 1 et sont sans danger intrinsèque pour les yeux, sous réserve de leur utilisation normale. Vous ne devrez cependant jamais regarder directement un port de transmission lorsque ce dernier est sous tension.
Avertissement: Lorsque vous utilisez un dispositif fibre de type SFP, en ce qui concerne la sécurité, assurez- vous qu'il puisse fonctionner à une température inférieure à la température maximale de fonctionnement recommandée du produit. Utilisez également un émetteur-récepteur laser SFP de classe 1 agrée
Avertissement: Cet équipement ne peut pas être utilisé dans des endroits où des enfants sont susceptibles d'être présents.

Attention: La manipulation de cet équipement requiert le port d'un bracelet antistatique ou l'utilisation d'autres mesures pour éviter toute décharge électrostatique.
Attention: Ne branchez pas un connecteur téléphonique dans le port RJ-45. Vous risqueriez d'endommager l'appareil.
Attention: Ne branchez que des fils torsadés par paires conformes aux normes FCC sur les connecteurs RJ-45.

警告和注意訊息

警告: 本產品不包括任何可由用戶維修的零件。
警告: 安裝或拆卸本裝置時，必須由合格的人員進行操作。
警告: 將本裝置連接至電源插座時，將三極電源插座上的基地場導線連接至有效的接地線，以防止出現電氣危險。
警告: 本交換器採用光纖鐳射方式來傳輸信號。本產品的鐳射符合 1 級鐳射產品的要求，在正常操作情況下本質上對眼睛是安全的。但在通電狀態下，切勿用眼睛直視傳輸埠。
警告: 選擇 SFP 光纖裝置時，出於安全考量，請確保該裝置的正常運轉溫度不低於本產品建議的最高運轉溫度。此外，應使用獲得認可的鐳射 1 級 SFP 收發器。
警告: 本設備不適合在兒童可能會出現的場所使用。

注意: 應佩戴防靜電腕帶或採取其他有效措施，以防止在操作本設備時出現靜電放電。
注意: 切勿將電話插頭插入 RJ-45 埠。否則可能導致裝置損壞。
注意: 請僅使用帶有 RJ-45 連接器的符合 FCC 的雙絞線。

NCC Statement (Taiwan)

低功率電波輻射性電機管理辦法

第十二條　經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條　低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

BSMI (Taiwan)

警告使用者:
為避免電磁干擾，本產品不應安裝或使用於住宅環境。

電氣方面的安全性

- 為避免可能的電擊造成嚴重損害，再搬動產品之前，請先將產品電源線暫時從電源插座中拔掉。

- 當您要加入硬體裝置到系統中或者要移除系統中的硬體裝置時，請務必先連接該裝置的訊號線，然後再連接電源線。可能的話，在安裝硬體裝置之前先拔掉產品的電源供應器電源線。
- 當您要從主機板連接或拔除任何的訊號線之前，請確定所有電源線已事先拔掉。
- 請確定電源供應器的電壓設定已調到本國 / 本區域所使用的電壓標準值。若您不確定您所屬區域的供應電壓值為何，那麼請就近詢問當地的電力公司人員。
- 如果電源供應器已損壞，請不要嘗試自行修復。請將之交給專業技術服務人員或經銷商來處理。

操作方面的安全性

- 在使用產品之前，請確定所有的排線、電源線都已正確地連接好。若您發現有重大的瑕疵，請盡速連絡您的經銷商。
- 為避免發生電氣短路情形，請務必將所有沒用到的螺絲、迴紋針及其他零件收好，不要遺留在主機板上或產品主機中。
- 灰塵、溼氣以及劇烈的溫度變化都會影響主機板的使用壽命，因此請盡量避免放置在這些地方。
- 請勿將產品主機放置在容易搖晃的地方。
- 若在本產品的使用上有任何的技術性問題，請和經過檢定或有經驗的技術人員聯絡。

使用注意事項

- 在您開始操作本系統之前，請務必詳閱以下注意事項，以避免因為人為的疏失造成系統損傷甚至人體本身的安全。
- 使用前，請檢查產品各部份組件是否正常，以及電源線是否有任破損，或是連接不正確的情形發生。
- 如果有任何破損情形，請盡速與您的授權經銷商連絡，更換良好的線路。
- 產品放置的位置請遠離灰塵過多，溫度過高，太陽直射的地方。
- 保持機器在乾燥的環境下使用，雨水、溼氣、液體等含有礦物質將會腐蝕電子線路。
- 使用時，請務必保持周遭散熱空間，以利散熱。
- 使用前，請檢查各項周邊設備是否都已經連接妥當再開機。
- 避免邊吃東西邊使用，以免污染機件造成故障。
- 請避免讓紙張碎片、螺絲及線頭等小東西靠近產品之連接器、插槽、孔位等處，避免短路及接觸不良等情況發生。
- 請勿將任何物品塞入產品內，以避免引起機件短路或電路損毀。
- 產品開機一段時間之後，散熱片及部份 IC 表面可能會發熱、發燙，請勿用手觸摸，並請檢查系統是否散熱不良。
- 在安裝或移除周邊產品時請先關閉電源。
- 電源供應器如果發生損壞，切勿自行修理，請交由授權經銷商處理。
- 產品的機殼、鐵片大部份都經過防割傷處理，但是您仍必須注意避免被某些細部鐵片尖端及邊緣割傷，拆裝機殼時最好能夠戴上手套。
- 當你有一陣子不使用產品時，休假或是颱風天，請關閉電源之後將電源線拔掉。