MaxiCharger Single Charger

Installation and Operation Manual

Version 2.2

UL Model

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1 Using This Manual

This manual describes the installation and use of the MaxiCharger Single Charger. Prior to installation, read through this manual to get familiar with the instructions of this charger to ensure a successful installation and smooth operations.

NOTICE

The illustrations in this manual are for reference only; actual products or screens may vary.

NOTE

Les illustrations utilisées dans le présent manuel n'est donné qu'à titre d'exemple ; les produits ou écrans réels peuvent être différents.

1.1 Signal Word

DANGER

Indicates an imminently hazardous situation with a high risk level which, if the danger is not avoided, will cause death or serious injury.

DANGER

Indique une situation dangereuse imminente avec un niveau de risque élevé qui, si le danger n’est pas évité, causera la mort ou des blessures graves.

WARNING

Indicates a potentially hazardous situation with a moderate risk level which, if the warning is not obeyed, can cause death or serious injury.

AVERTISSEMENT

Indique une situation potentiellement dangereuse avec un niveau de risque modéré qui, si l’avertissement n’est pas respecté, peut causer la mort ou des blessures graves.



CAUTION

Indicates a potentially hazardous situation with a medium risk level which, if the caution is not obeyed, may cause minor or moderate injury or damage to the equipment.



ATTENTION

Indique une situation potentiellement dangereuse avec un niveau de risque moyen qui, si la prudence n'est pas respectée, peut entraîner des blessures mineures ou modérées ou des dommages à l'équipement.



NOTICE

Provides helpful information such as additional explanations, tips, and comments.



NOTE

Fournit des informations utiles telles que des instructions supplémentaires, des conseils et des commentaires.

1.2 Terminology

Term	Definition
AC	Alternating current
EV	Electric vehicle
MCB	Miniature circuit breaker
RFID	Radio-frequency identification, a method of charging authentication

1.3 Revision History

Version	Date	Descriptions
V1.0	2025.05	Initial version
V2.0	2025.09	Overall update
V2.1	2025.10	Added some information
V2.2	2026.03	Added instructions regarding the compatible transformers

2 Safety

The safety messages herein cover situations Autel is aware of. Autel cannot know, evaluate or advise you as to all of the possible hazards. You must be certain that any condition or service procedure encountered does not jeopardize your personal safety.

- Read and follow all warnings and instructions before installing and operating the charger.
- This charger should only be installed by a licensed electrician in accordance with all local codes and ordinances.
- This charger must be grounded through a permanent wiring system or an equipment-grounding conductor.
- Do not install or use this charger near flammable, explosive, harsh, or combustible materials, chemicals or vapors.
- Children should be supervised when around this charger.
- Do not insert fingers or foreign objects into the electric vehicle connector.
- Do not use the charger if the flexible power cord or EV cable is frayed, broken, or damaged, or if it fails to operate.
- Do not use the charger if the enclosure or the EV connector is frayed, broken or otherwise damaged, or fails to operate.
- Use 90 °C wire copper conductors or refer to local ordinances.
- Do not operate the charger outside its operating range.
- Incorrect installation and testing of the charger could potentially damage the vehicle's battery, components, and/or the charger itself.
- Handle the charger with care during transportation. Do not subject it to strong force or impact or pull, twist, tangle, drag or step on the equipment, to prevent damage to it or any components.
- Neutral must be bonded to Ground upstream at the transformer or panel for each separately derived system.
- When the current of your charger is set lower than the maximum rating, choose the correct current value from the Amperage Label and affix it over the existing label on the charger.

GFCI Protection

Ground Fault Protection

The Autel charger is fully compliant with UL certification requirements and is equipped with a built-in Ground Fault Circuit Interrupter (GFCI). This device is designed to enhance user safety by detecting ground faults (unintended electrical paths to ground) and immediately interrupting the circuit. In the event of a ground fault, the Autel charger will stop operation and signal a fault condition.

Compatibility with GFCI Breakers

The Autel charger can also be installed on an existing GFCI breaker without any issue. In fact, the use of a GFCI breaker is recommended as an added layer of electrical safety.

Les messages de sécurité ci-après couvrent les situations dont Autel a connaissance. Autel ne peut pas connaître, évaluer ou vous conseiller sur tous les dangers possibles. Vous devez être certain que toute condition ou procédure de service rencontrée ne compromet pas votre sécurité personnelle.

- Lisez et suivez tous les avertissements et toutes les instructions avant d'installer et d'utiliser la borne de recharge.
- Cette borne de recharge ne doit être installée que par un électricien agréé, conformément à tous les codes et règlements locaux.
- Cette borne de recharge doit être mise à la terre par un système de câblage permanent ou un conducteur de mise à la terre de l'équipement.
- N'installez ni n'utilisez cette borne de recharge à proximité de matériaux, de produits chimiques ou de vapeurs inflammables, explosifs, agressifs ou combustibles.
- Les enfants doivent être surveillés lorsqu'ils se trouvent à proximité de cette borne de recharge.
- N'insérez pas vos doigts ou des objets étrangers dans le connecteur du véhicule électrique.
- N'utilisez pas la borne de recharge si le câble d'alimentation flexible ou le câble VE est effiloché, cassé ou autrement endommagé, ou s'il ne fonctionne pas.
- N'utilisez pas la borne de recharge si le boîtier ou le connecteur VE est effiloché, cassé ou autrement endommagé, ou s'il ne fonctionne pas.
- Utilisez des conducteurs en cuivre à 90°C ou consultez les réglementations locales.
- Ne faites pas fonctionner la borne de recharge en dehors de sa plage de fonctionnement.
- Une installation et un test incorrects de la borne de recharge peuvent potentiellement endommager la batterie du véhicule, ses composants et/ou la borne de recharge elle-même.
- Manipulez la borne de recharge avec précaution pendant le transport. Ne la soumettez pas à une force ou à un choc important, ne la tirez pas, ne le tordez pas, ne l'emmêlez pas, ne la traînez pas et ne marchez pas dessus, afin d'éviter de l'endommager ou d'endommager l'un de ses composants.
- Le neutre doit être relié à la terre en amont du transformateur ou du tableau pour chaque système dérivé séparément.
- Lorsque le courant de votre chargeur est réglé en dessous de la valeur nominale maximale, choisissez la valeur de courant correcte sur l'étiquette d'ampérage et collez-la sur l'étiquette existante sur le chargeur.

Protection GFCI

Protection contre les défauts à la terre

La borne de recharge Autel est entièrement conforme aux exigences de certification UL et est équipé d'un Disjoncteur différentiel (GFCI) intégré. Cet appareil est conçu pour améliorer la sécurité de l'utilisateur en détectant les défauts à la terre (chemins électriques non intentionnels vers la terre) et en interrompant immédiatement le circuit. En cas de défaut à la terre, la borne de recharge Autel cessera de fonctionner et signalera un état de défaut.

Compatibilité avec les Disjoncteurs GFCI

La borne de recharge Autel peut également être installée sur un disjoncteur GFCI existant sans aucun problème. En fait, l'utilisation d'un disjoncteur GFCI est recommandée comme couche supplémentaire de sécurité électrique.

3 Introduction

This charger is designed to charge plug-in hybrid electric vehicles (PHEVs) or fully electric vehicles (EVs). It will provide you with reliable, intelligent, and scalable charging solutions.

This manual will instruct you how to install and use this charger.

Intended Use

This charger is intended for the AC charging of EVs. It is intended for both indoor and outdoor use.

Models

Models	Descriptions
Model 1	Chargers with an LCD (liquid crystal display)
	Chargers with a digital tube display
Model 2	Chargers without a display



DANGER

- If you use the charger in any way other than described in this manual or other related documents, possible death, injury and damage to property can occur.
- Use the charger only as intended.

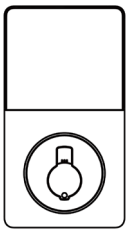
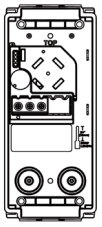
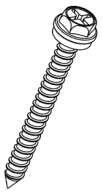
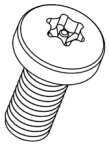
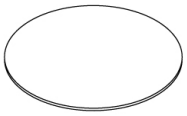
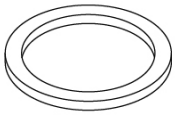
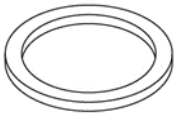


DANGER

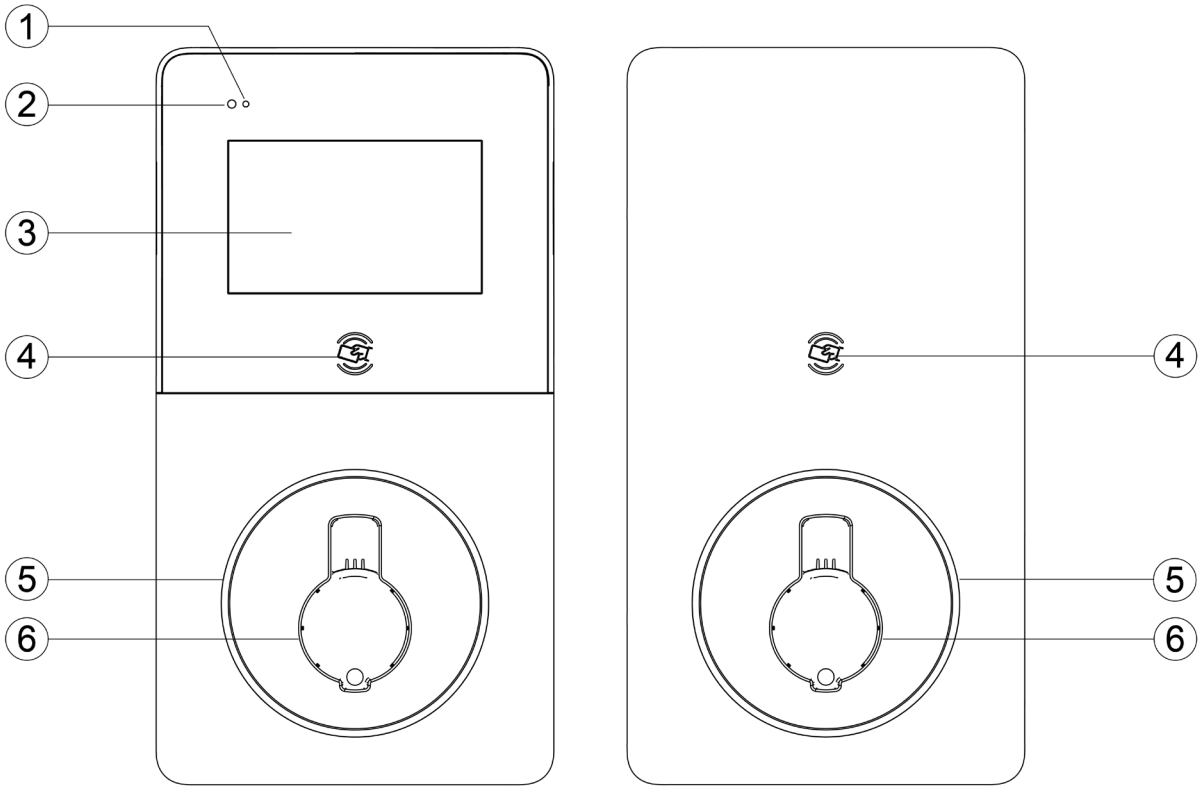
- Si vous utilisez le chargeur d'une manière autre que celle décrite dans ce manuel ou dans d'autres documents connexes, des risques de mort, de blessures et de dommages matériels peuvent survenir.
- Utilisez le chargeur uniquement comme prévu.

3.1 In the Box

Ensure that all parts are delivered according to the order. Check the packages for the following parts. The main unit differs among packages of chargers with an LCD, with a digital tube display and without a display.

Main Unit 1 PC		Wire Box 1 PC		Self-tapping Screw ϕ1/5” (5 mm) x $1^{3}/_{5}$” (40 mm) 2 PCS	
Wall Anchor ϕ5/16” (8 mm) x $1^{3}/_{5}$” (40 mm) 2 PCS		Screw ϕ1/5” (5 mm) x 2/5” (10 mm) 2 PCS		T25 Torx Screwdriver 1 PC	
Zip Tie 2 PCS		Screw Plug (2 for spare use) 4 PCS		Sealing Ring (M27) 2 PCS	
Blind Sealing Plug 1 PC		Sealing Ring (M32) 1 PC		Quick Reference Guide 1 PC	
Packing List 1 PC					

3.2 Product Overview



Model 1 **Model 2**

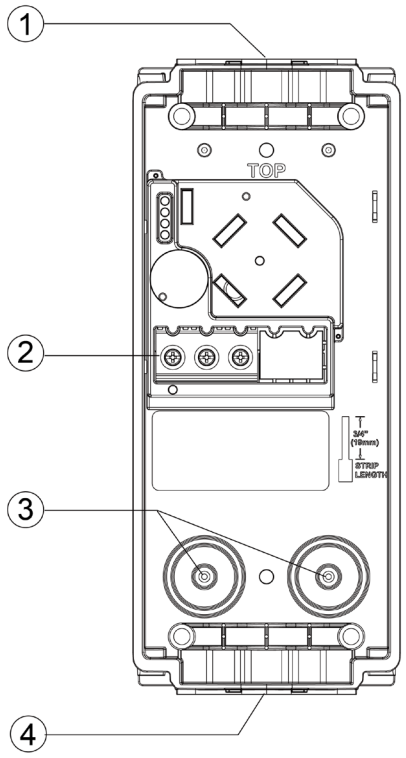
1. Energy Pulse Output (Infrared Ray)
2. Ambient Light Sensor – detects ambient brightness
3. Display (liquid crystal display or digital tube display)
4. RFID Reader (optional)
5. LED Indicator
6. Holster

NOTICE

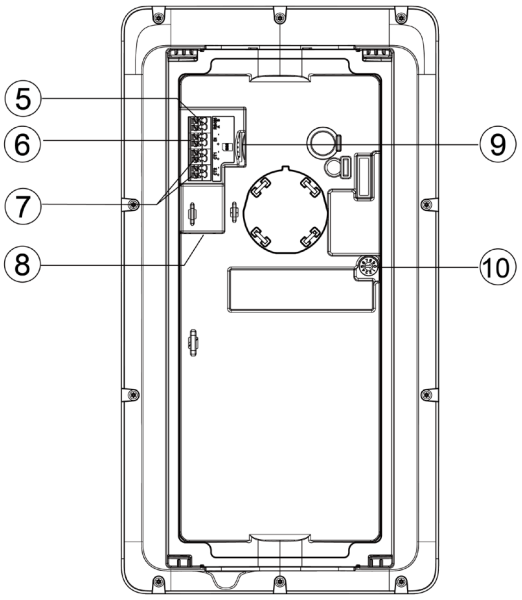
The illustration for chargers with an LCD and chargers with a digital tube display is the same, but the actual products differ slightly. Please refer to the actual products.

NOTE

L'illustration des bornes de recharge avec un écran LCD et des bornes de recharge avec un écran à tube numérique est identique, mais les produits réels diffèrent légèrement. Veuillez vous référer au produit réel.



Wire Box



Charger Rear View

1. Top Entries
2. AC Input Terminal Block
3. Rear Entries
4. Bottom Entry
5. RS-485 Ports (optional)
6. DI Ports (optional)
7. CT Ports (optional)
8. Ethernet Port (optional)
9. SIM Card Slot (optional)
10. Current Selector

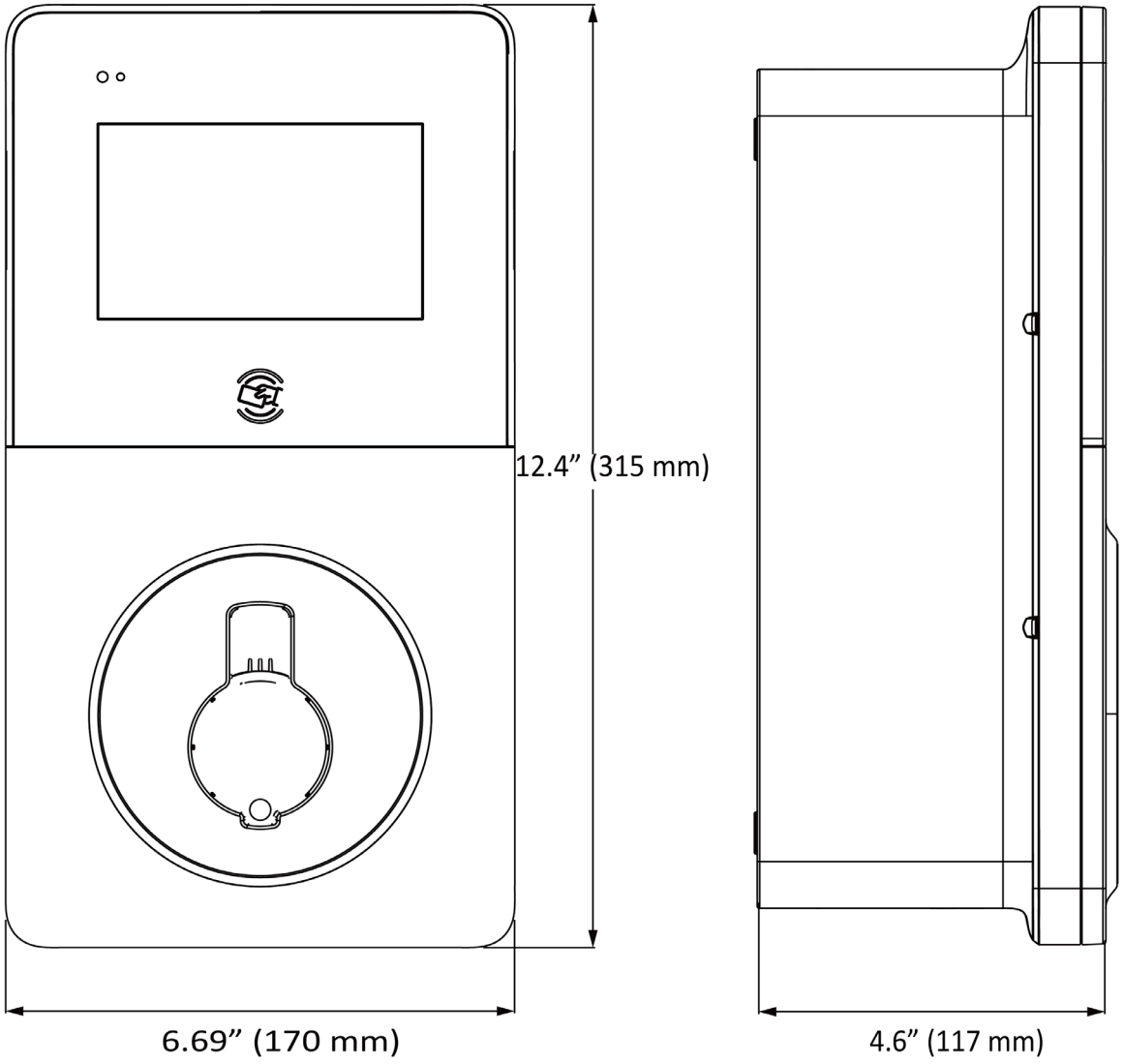
NOTICE

The illustration of the rear view of the charger is only for reference; components differ among different chargers with different configurations.

NOTE

L'illustration de la vue arrière de la borne de recharge est uniquement à titre de reference ; les composants varient selon les bornes de recharge avec différentes configurations.

3.3 Product Dimensions



Front View **Side View**

NOTICE

The dimensions of model 2 are the same as those of model 1; the illustrations here take model 1 as an example.

NOTE

Les dimensions du modèle 2 sont identiques à celles du modèle 1 ; les illustrations ici prennent le modèle 1 comme exemple.

3.4 Technical Specifications

NOTICE

The table below shows the case of chargers with full configurations.

NOTE

Le tableau ci-dessous présente le cas des chargeurs avec des configurations complètes.

Item	Description
Charging Mode	Mode 3
Input/Output Power Rating and Current	12kW (240VAC 50A) Output amperage adjustable via mobile app, from 6A to 50A, support 16A, 24A, 32A, 40A, 48A, 50A via the DIP switch
Input/Output Voltage	208/240 VAC 50/60 Hz
Input Power Connections	L1, L2, input power connections and Earth Ground, support high-leg delta wiring configuration
Input Cord	Hardwired
Connector Type	SAE J1772 or NACS
Charging Cable Length	➢ 19 ft. (5.8 m) ➢ 25 ft. (7.5 m)
Ground Fault Detection	20 mA CCID
Protection	Overcurrent, overvoltage, undervoltage, overtemperature, integrated surge protection
Card Reader	➢ ISO 15693 ➢ ISO 14443 A/B
Metering Accuracy	±1%, NTEP/CTEP Certified
Vehicle Communication	➢ ISO 15118-2 ➢ ISO 15118-20

Authentication Methods	➢ Autocharge ➢ Plug & Charge ➢ RFID ➢ QR Code ➢ Phone Call ➢ PIN Code ➢ Bank Card (Kiosk payment terminal) ➢ Freevend
Enclosure Ratings	➢ NEMA 4X ➢ IK10
Operating Altitude	6561.7 ft. (2000 m)
Operating Temperature Range	–31 to +122 °F (–35 to +50 °C) (Derate when above +113 °F (+45 °C))
Storage Temperature Range	–40 to +158 °F (–40 to +70 °C)
Dimensions (H x W x D)	12.4” x 6.7” x 4.6” (315 x 170 x 117 mm)
Package Dimensions (H x W x D)	19.3” x 14.4” x 9.3” (490 x 365 x 235 mm)
Weight	➢ Approx. 5.2 kg (with 19-foot cable) ➢ Approx. 5.7 kg (with 25-foot cable)
Status Indication	➢ 5-inch, 800 x 480 touch screen + LEDs ➢ Digital tube + LEDs ➢ LEDs
User Interface	➢ Autel Charge APP ➢ Autel Config APP ➢ Autel Charge Cloud
Connectivity	➢ 4G ➢ Wi-Fi ➢ Ethernet ➢ RS-485 (Modbus, expand smart energy meter, etc.) ➢ Wi-SUN ➢ Bluetooth

Communication Protocols	➢ OCPP 1.6J ➢ OCPP 2.0.1
Current Control Method	➢ App ➢ Hardware DIP switch (Dial)
Software Update	OTA updates via web portal
Safety Standards	➢ UL 2594 ➢ UL2231-1 ➢ UL2231-2 ➢ UL 1998 ➢ CSA C22.2. NO.280
Codes and Standards	➢ FCC Part 15 Class B ➢ ENERGY STAR ➢ OpenADR 2.0b ➢ NEC Article 625
Lifespan	10 + years

4 Installation

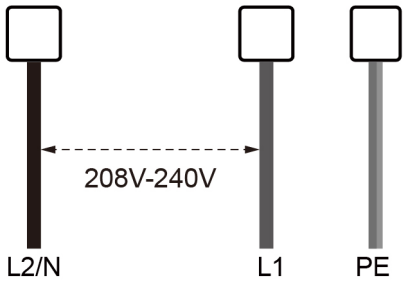
4.1 Installation Preparations

4.1.1 Electrical Design

Compatible Transformers

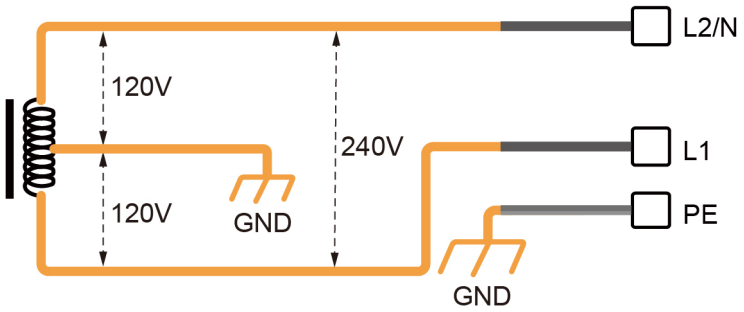
The instructions for the transformers adapted to the chargers are as follows.

Input voltage

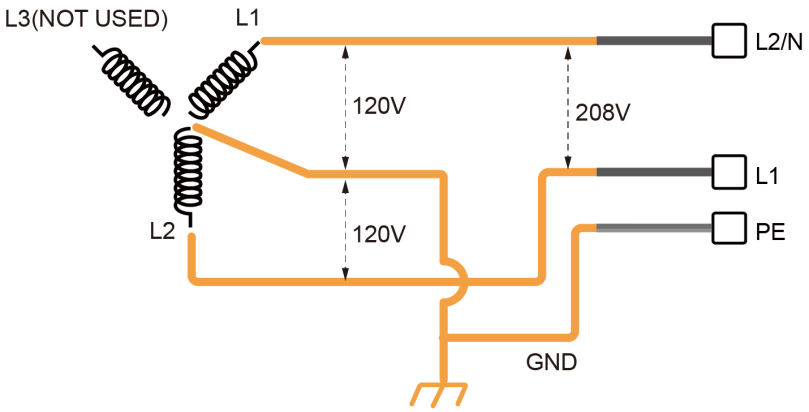


208V AC 50/60Hz
240V AC 50/60Hz

Compatible Transformers



Single-Phase Center-Tapped Transformer



208V Three-Phase Wye-Connected

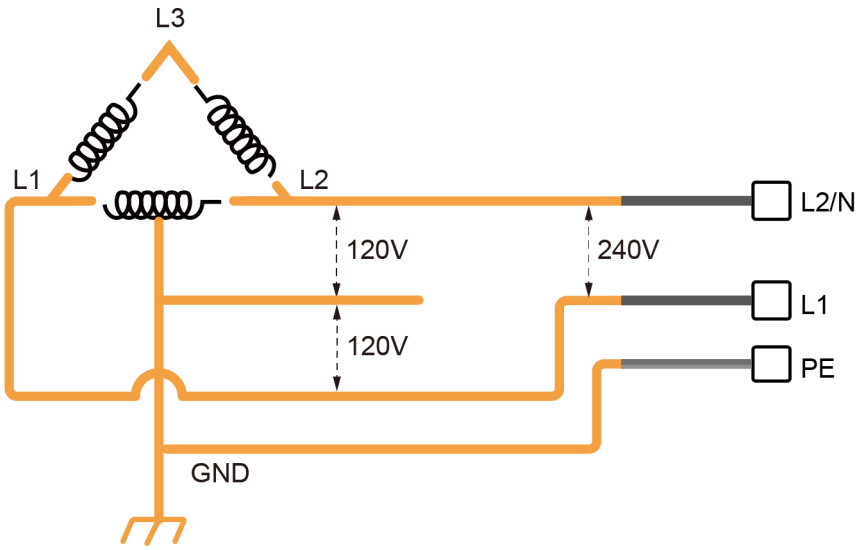
.

NOTICE

- For a wye-connected secondary, any two-phase conductors can supply 208V to the charger, such as combinations of L1 & L2, L1 & L3, or L2 & L3. Each selected phase must measure 120V relative to neutral.
- A current-carrying neutral conductor is not required.
- Unused phase conductors (e.g., L3 as illustrated) must remain open. Connection to neutral bus bars or earth ground is strictly prohibited.
- The system neutral point (typically functioning as the neutral conductor) shall be connected to a single-point earth ground, with the grounding point generally established at the breaker panel.

NOTE

- Pour un secondaire connecté en étoile, deux conducteurs de phase quelconques peuvent fournir 208 V à la borne de recharge, par exemple les combinaisons L1 et L2, L1 et L3, ou L2 et L3. Chaque phase sélectionnée doit mesurer 120 V par rapport au neutre.
- Un conducteur neutre transportant du courant n'est pas requis.
- Les conducteurs de phase non utilisés (par exemple, L3 comme illustré) doivent rester ouverts. Toute connexion aux barres omnibus neutres ou à la terre est strictement interdite.
- Le point neutre du système (fonctionnant généralement comme conducteur neutre) doit être connecté à une mise à la terre en un point unique, le point de mise à la terre étant généralement établi au niveau du panneau de disjoncteurs.



240V Three-Phase Delta-Connected

NOTICE

- In a delta-connected system, any two phases can be used.
- Consult the transformer manufacturer's specifications to confirm that the single-tapped phase can deliver the required power output.

NOTE

- Dans un système connecté en triangle, deux phases quelconques peuvent être utilisées.
- Consultez les spécifications du fabricant du transformateur pour confirmer que la phase à prise médiane peut fournir la puissance de sortie requise.

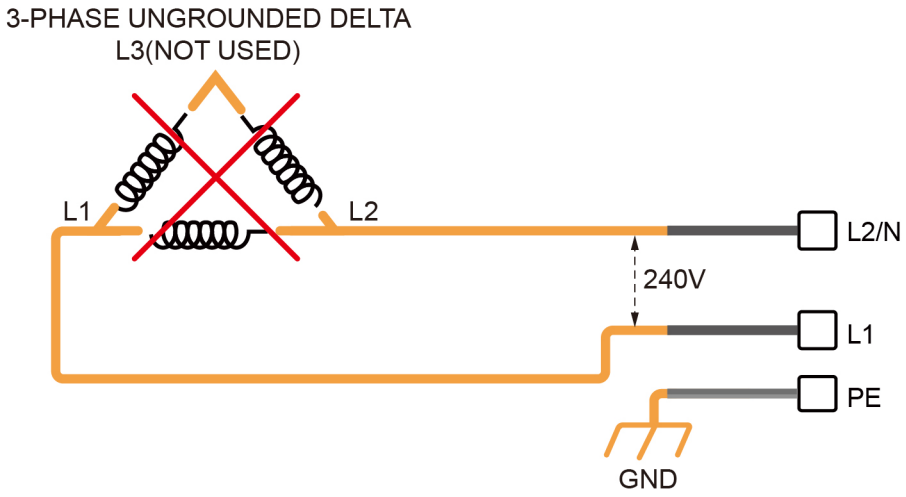
CAUTION

Three-phase delta transformer secondaries lacking a centre tap on one phase are prohibited for use, as they cannot provide the neutral point required for earth grounding.

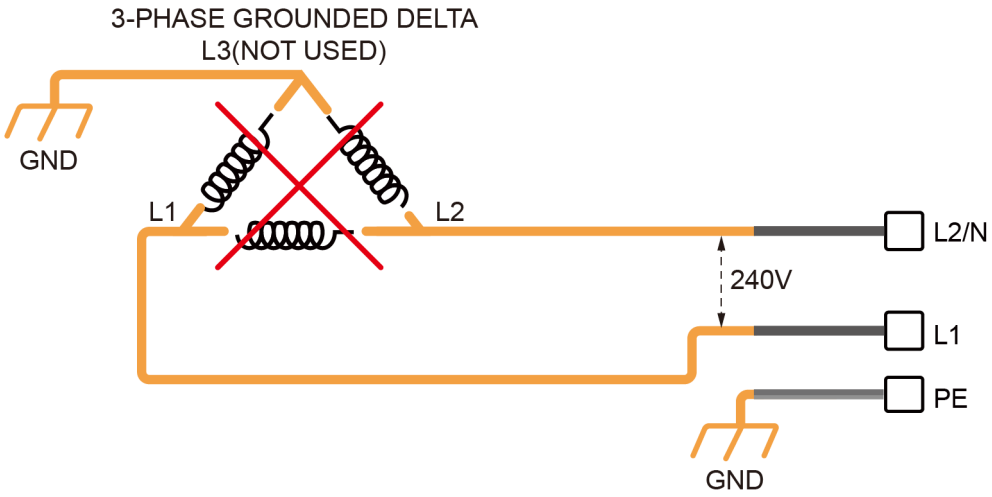
ATTENTION

Les secondaires de transformateur triangle triphasé sans prise médiane sur une phase sont interdits, car ils ne peuvent pas fournir le point neutre requis pour la mise à la terre.

Incompatible Transformers



Three-Phase Ungrounded Delta



240V Corner Grounded Delta

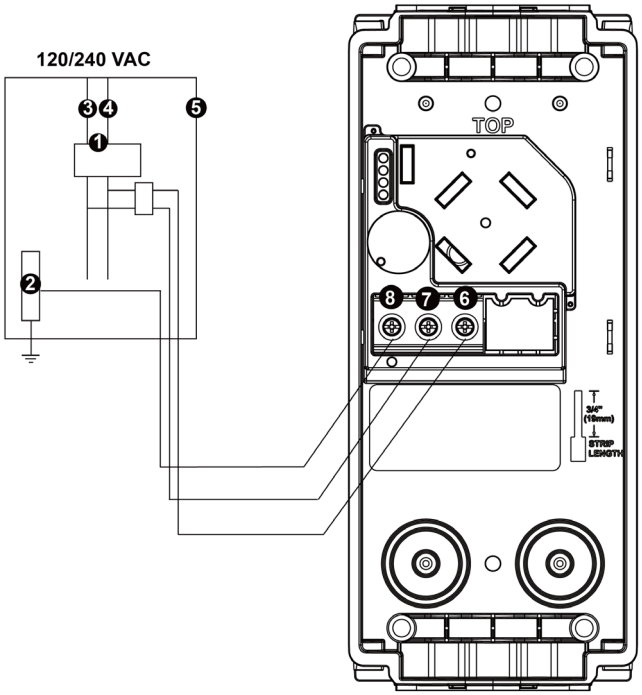
Upstream Wiring

Chargers are considered continuous load devices (EVs draw maximum load for long durations); therefore, electrical branch circuits must be sized at 125% of the load for North American installations, in accordance with National Electric Code (NEC) requirements. (For other regions, refer to local code.) For the MaxiCharger Single Charger, use a 60 A circuit breaker when the current is set to 48 A. When the current is set to 50 A, use a 70 A circuit breaker in order that you can buy one conveniently.

Wiring must be sized in accordance with NEC requirements for continuous load devices. Typically, 4 – 6 AWG (13.3 – 21.2 mm^2) insulated electrical wire is used, depending upon the rating of the circuit and the distance between the electrical panel and the charger.

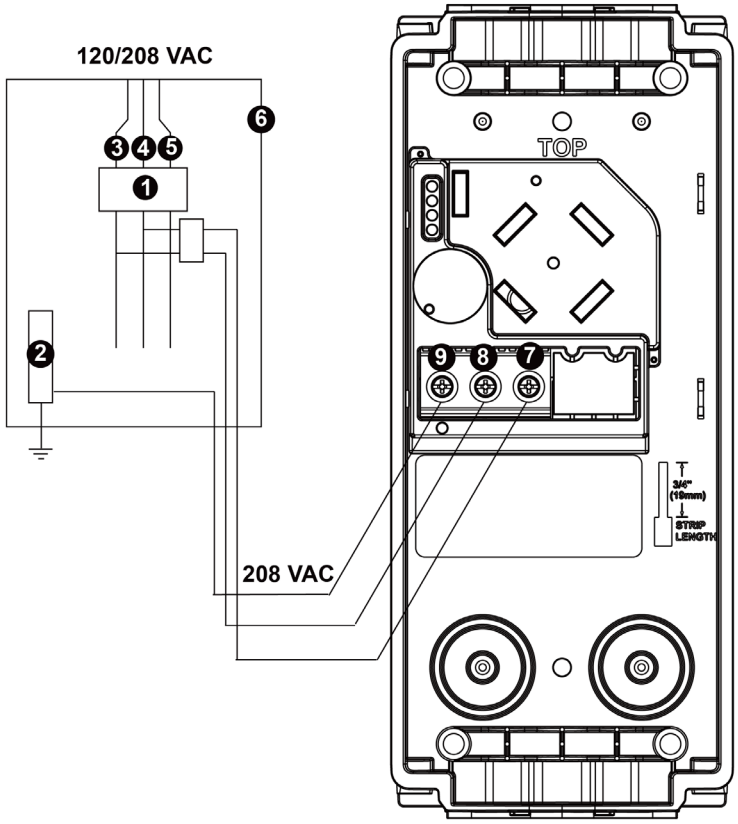
240 VAC Panel

1. Main Breaker
2. PE Bus
3. L1
4. L2
5. Local Service or Sub Panel
6. L2/N
7. L1
8. Ground/PE



208 VAC Panel

1. Main Breaker
2. PE Bus
3. L1
4. L2
5. L3
6. Local Service or Sub Panel
7. L2/N
8. L1
9. Ground/PE



Grounding Requirements

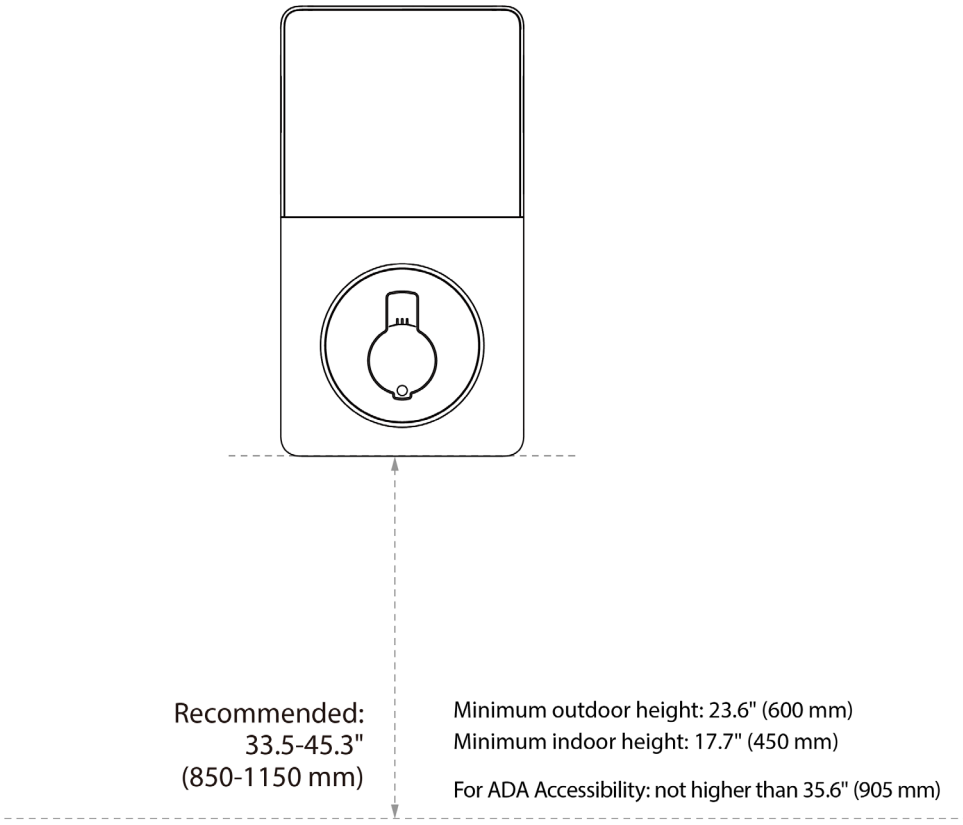
The charger must be connected to a grounded, metal, and permanent wiring system. An equipment-grounding conductor must be run with circuit conductors and connected to an equipment-grounding terminal or lead on the charger.

A grounding conductor, compliant with applicable codes, must be grounded at the service equipment or, when supplied by a separate system, at the supply transformer.

Neutral is not used to power the charger but must be properly connected to ground, at the panel transformer, to provide necessary voltage reference relative to ground.

4.1.2 Installation Requirements

- Install the charger on a flat and vertical surface capable of supporting its weight (e.g., a finished wall or pedestal).
- Install the charger in a location that allows the charging cable to remain within its bending tolerance.
- Position the charger in a location where it is not vulnerable to being damaged.
- Ensure the electrical panel supports a circuit with a new, dedicated, and non-GFCI two-pole circuit breaker, in accordance with local codes and ordinances.
- See below for the installation height.



CAUTION

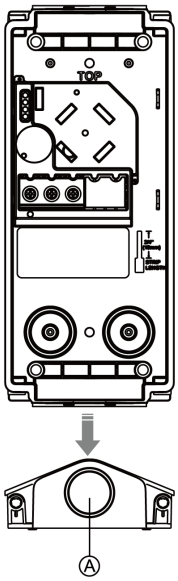
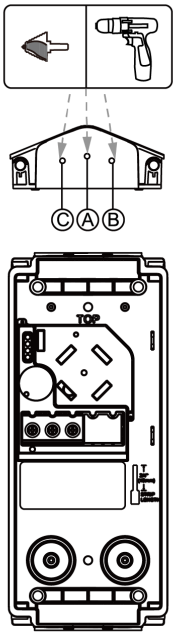
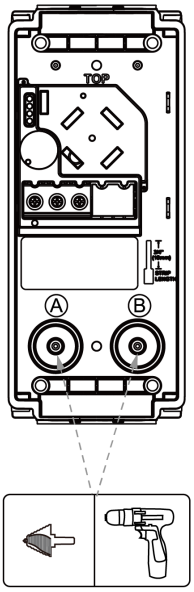
A supplement surge protection breaker must be installed at the service panel if the installation area experiences frequent thunderstorms.

ATTENTION

Un disjoncteur supplémentaire de protection contre les surtensions doit être installé sur le panneau de service si la zone d'installation connaît des orages fréquents.

4.1.3 Cable Entry Options

The recommended cable entry options are described below. The preparation work varies depending on the entry options.

Entry Options / Methods	Bottom Entry	Top Entry	Rear Entry
			
Method 1	**Hole A:** Power supply cable and data cable **Diameter of entry hole:** ϕ1 1/7" (29 mm); can be extended to ϕ1 3/8" (35 mm) **Size of conduit:** 3/4"; 1" when the diameter of the entry hole is ϕ1 3/8" (35 mm)	**Hole A:** Power supply cable and data cable **Diameter of entry hole:** ϕ1 1/7" (29 mm); max ϕ1 3/8" (35 mm) **Size of conduit:** 3/4"; 1" when the diameter of the entry hole is ϕ1 3/8" (35 mm)	**Hole A:** Power supply cable and data cable **Diameter of entry hole:** ϕ1 1/7" (29 mm); max ϕ1 3/8" (35 mm) **Size of conduit:** 3/4"; 1" when the diameter of the entry hole is ϕ1 3/8" (35 mm)
Method 2	N/A	**Hole B:** Power supply cable **Hole C:** Data cable **Diameter of entry holes:** ϕ1 1/7" (29 mm) **Size of conduits:** 3/4"	**Hole A:** Power supply cable **Hole B:** Data cable **Diameter of entry holes:** ϕ1 1/7" (29 mm) **Size of conduits:** 3/4"

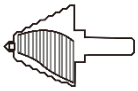
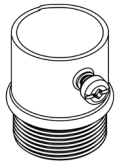
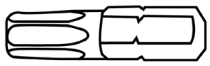
NOTICE

- The entry options mentioned above are only applicable to wall mounting. If you mount the charger on an ASP101 pedestal or CMS, please refer to the related installation guide.
- The recommended wire size of the power supply cable is 4 – 6 AWG (13.3 – 21.2 mm^2). Please only use 90 °C copper conductors or follow local regulations.
- For top entry or rear entry, use a power drill with a $1^1/_7$” (29 mm) step bit to drill two entry holes with a diameter of $1^1/_7$” (29 mm) or a $1^3/_8$” (35 mm) step bit to drill one entry hole with a diameter of $1^3/_8$” (35 mm).

NOTE

- Les options d'entrée mentionnées ci-dessus ne s'appliquent qu'au montage mural. Si vous fixez la borne de recharge sur un socle ASP101 ou un CMS, consultez le guide d'installation correspondant.
- La taille de fil recommandée pour le câble d'alimentation est de 4–6 AWG (13,3 à 21,2 mm^2). Utilisez uniquement des conducteurs en cuivre de 90 °C ou respectez les réglementations locales.
- Pour l'entrée par le haut ou l'entrée par l'arrière, utilisez une perceuse électrique avec une mèche étagée de 11/7” (29 mm) pour percer deux trous d'entrée d'un diamètre de 11/7” (29 mm) ou une mèche étagée de 13/8” (35 mm) pour percer un trou d'entrée d'un diamètre de 13/8” (35 mm).

4.1.4 Recommended Tools

Tape Measure		Marker	
Wire Stripper		Step Bit $1^1/_7$” (29 mm) or $1^3/_8$” (35 mm)	
Power Drill		Drill Bit 5/16” (8 mm); 1/4” (6 mm) (optional)	
Torque Driver 18 lbf·in (2 Nm)		Phillips Bit (PH2)	
Multimeter		Conduit Fitting 3/4” or 1”	
Flathead Screwdriver		Torx Bit (TR25)	
Phillips Screwdriver		Spirit Level	

NOTICE

The tools mentioned above are not included in the package. Ensure they are readily available prior to installation.

NOTE

Les outils mentionnés ci-dessus ne sont pas inclus dans l'emballage. Assurez-vous qu'ils sont disponibles avant.

4.1.5 Pre-configuration (Optional)

For the site with commercial chargers intended to be installed and activated via online ticket, pre-configuration should be performed on the Autel Operation and Maintenance Platform (O&M) before installation. Scan the QR code in section **chapter 5** for more details.

4.2 Installation Instructions

4.2.1 Installing the Charger

DANGER

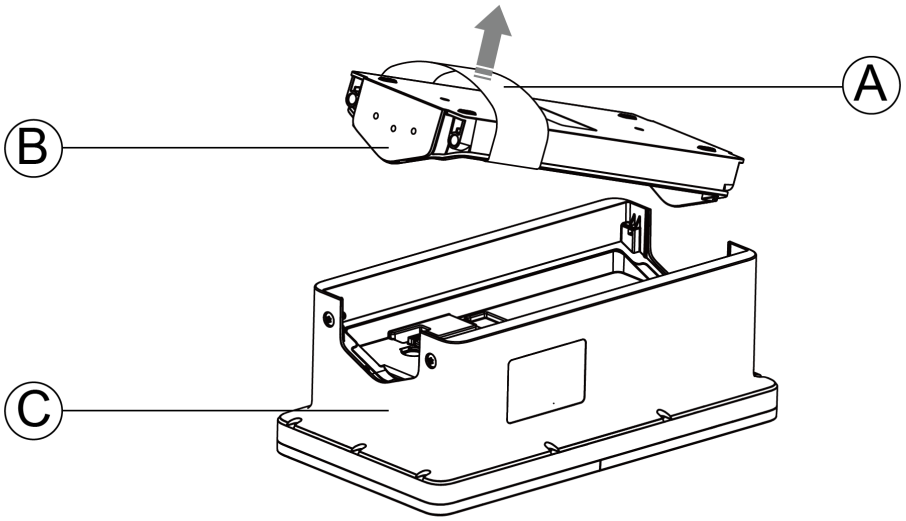
Risk of shock. Turn off the power to the outlet at the circuit breaker until the installation is completed.

DANGER

Risque de choc électrique. Coupez l'alimentation de la prise au niveau du disjoncteur jusqu'à ce que l'installation soit terminée.

STEP 1

Pull the pull strap (**A**) upwards to detach the wire box **(B)** from the main unit **(C)**.



NOTICE

Do not remove the pull strap before installing the wire box. If the pull strap is removed and the wire box is attached and secured to the main unit, it will be difficult to remove the wire box.

NOTE

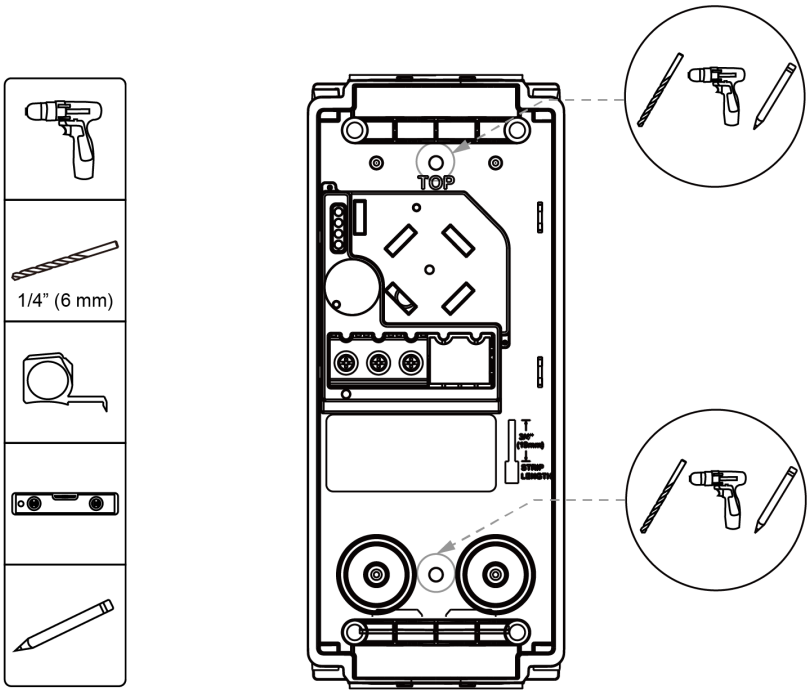
Ne retirez pas la sangle de traction avant d'installer la boîte de câblage. Si la sangle de traction est retirée et que la boîte de câblage est fixée et sécurisée à l'unité principale, il sera difficile de retirer la boîte de câblage.

STEP 2

Use a power drill to drill the cable entry hole(s) to an appropriate size based on the actual situation. For specific details, refer to section *4.1.3*.

STEP 3

1. Drill the two mounting holes on the wire box using a power drill with a drill bit of 1/4" (6 mm).
2. Place the wire box against the wall at a height of 33.5 – 45.3" (850 – 1150 mm). Level it using a spirit level.
3. Mark the two mounting holes on the wall using a marker and remove the wire box temporarily.



NOTICE

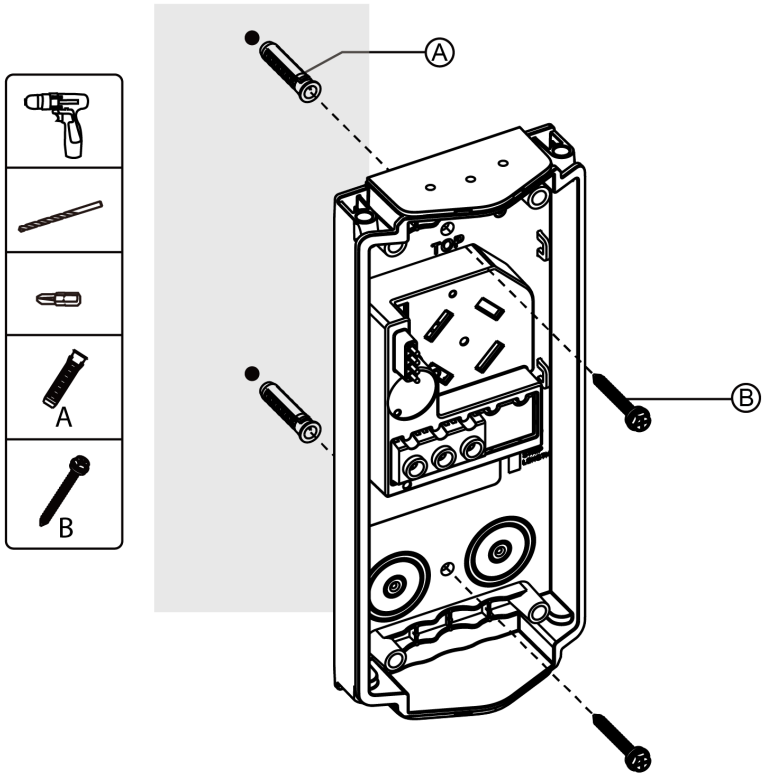
- For chargers without sealed mounting holes, skip step 1 in this section.
- For top entry and rear entry, refer to section *4.2.2* and drill the entry hole or holes based on the real situation.

NOTE

- Pour les chargeurs sans trous de montage scellés, ignorez l'étape 1 de cette section.
- Pour l'entrée par le haut et l'entrée par l'arrière, reportez-vous à *4.2.2* et percez le ou les trous d'entrée en fonction de la situation réelle.

STEP 4

1. Drill the two mounting holes with a depth of 2" (50 mm) and a diameter of 5/16" (8 mm).
2. Tap the two wall anchors (**A**) into the holes.
3. Place the wire box against the wall, aligning with the two holes. Then insert and torque the two ϕ1/5" (5 mm) x 13/5" (40 mm) self-tapping screws (**B**) using a power drill with a Phillips bit (PH2) to secure the wire box.



NOTICE

For rear entry, refer to the instructions on **Page 29** and route the power supply cable and data cable into the charger before securing it to the wall.

NOTE

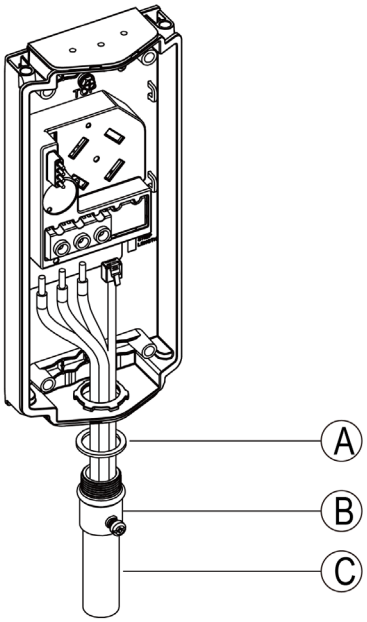
Pour l'entrée par l'arrière, reportez-vous aux instructions de la **Page 24** et faites passer le câble d'alimentation et le câble de données dans la borne de recharge avant de la fixer au mur.

4.2.2 Cable Connection

Prepare conduits and conduit fittings in advance based on the real situation and use them as instructed. The instruction here is for the situation where the power supply cable and data cable enter the charger from the same entry hole.

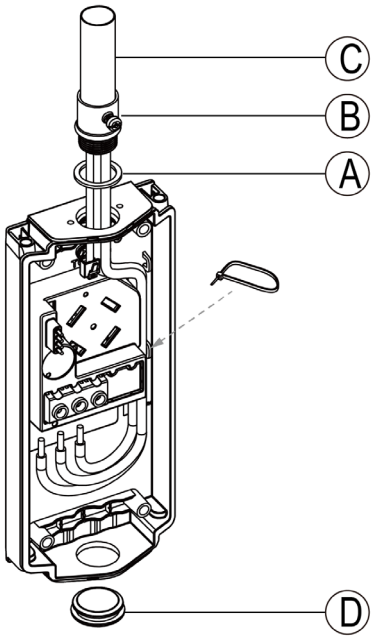
Bottom entry:

Route the power supply cable and data cable (if available) through the conduit **(C)**, the conduit fitting **(B)**, and the sealing ring **(A)** into the charger from the bottom.



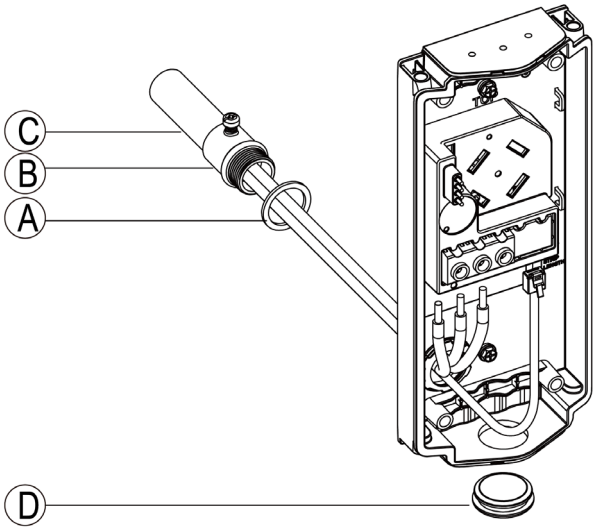
Top entry:

1. Route the power supply cable and data cable (if available) through the conduit **(C)**, the conduit fitting **(B)**, and the sealing ring **(A)** into the charger from the top.
2. Insert the blind sealing plug **(D)** to seal the entry on the bottom.



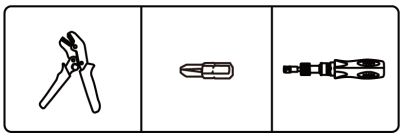
Rear entry:

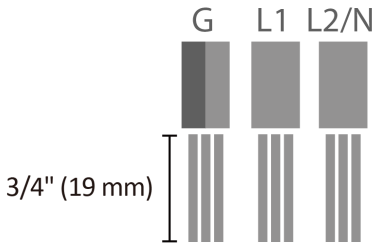
1. Route the power supply cable and data cable (if available) through the conduit **(C)**, the conduit fitting **(B)**, and the sealing ring **(A)** into the charger from the rear.
2. Insert the blind sealing plug **(D)** to seal the entry on the bottom.



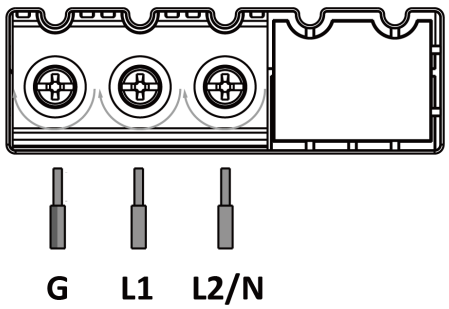
4.2.2.1 Power Cable Connection

1. Strip the wires to 3/4” (19 mm).
2. Connect the wires (L1, L2, and Ground) according to the diagram below and torque each terminal screw to 18 lbf·in (2 Nm).
3. Use the zip tie to organize the cables (top entry only). See the table above for details.





18 lbf·in (2 Nm)



NOTE

- Remove all metal shavings and debris from the conduit and cable installation using a vacuum cleaner to prevent damage to components or wiring insulation.
- Ensure all terminals are torqued to the specified values and properly torque-marked. Loose or misaligned connections may cause overheating or circuit breaker tripping.

NOTE

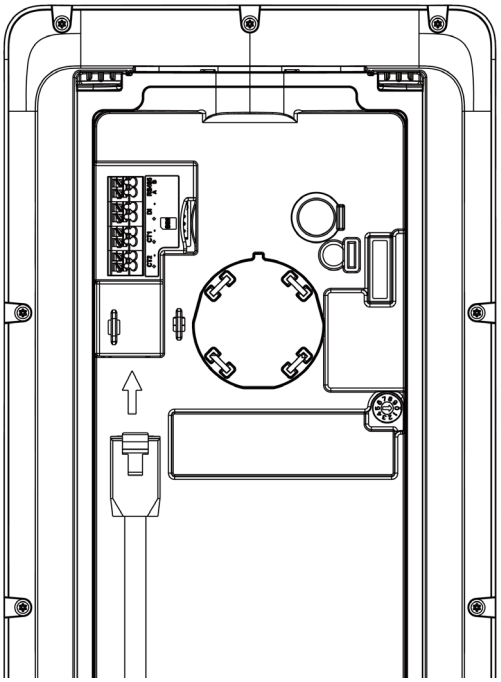
- Éliminez toutes les limailles métalliques et débris du conduit et de l'installation des câbles en utilisant un aspirateur pour éviter d'endommager les composants ou l'isolation des fils.
- Assurez-vous que toutes les bornes sont serrées aux valeurs de couple spécifiées et correctement marquées. Des connexions desserrées ou mal alignées peuvent provoquer une surchauffe ou le déclenchement du disjoncteur.

4.2.2.2 Internet Connection

This charger can be connected to the Internet via Ethernet, cellular network or Wi-Fi.

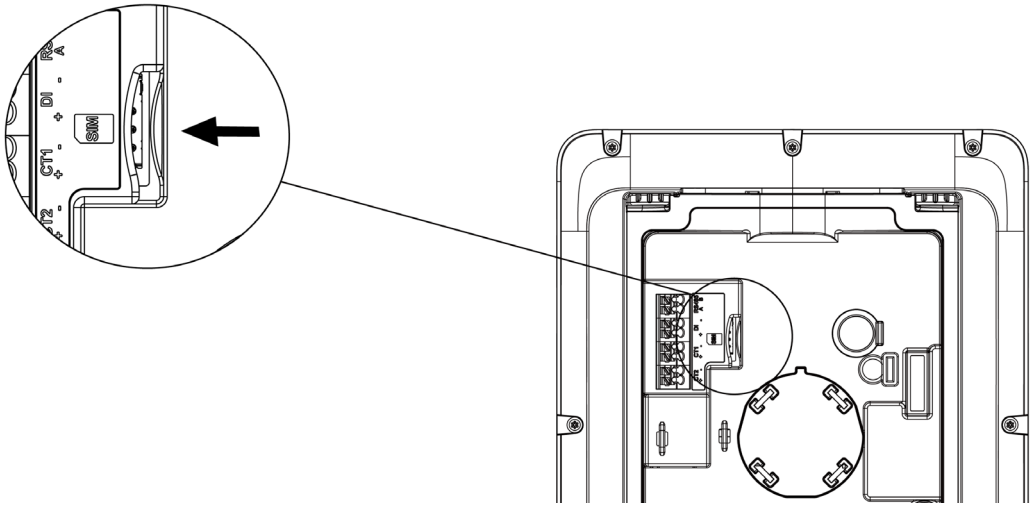
Ethernet Connection (Optional)

Plug the Ethernet cable into the RJ45 port at the back of the main unit.



Cellular Network Connection (Optional)

Insert the SIM card to the card slot. Ensure the card is placed correctly.



NOTICE

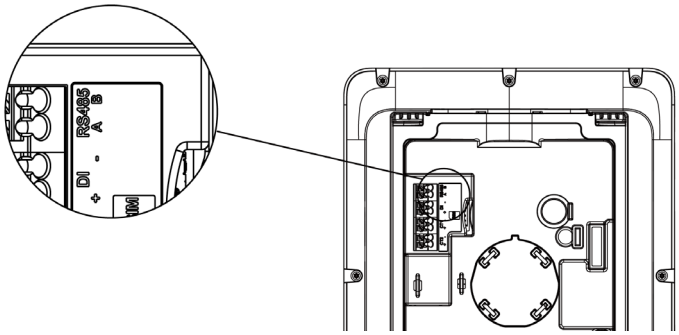
Insert the SIM card carefully to avoid damage.

NOTICE

Insérez la carte SIM avec précaution pour éviter tout dommage.

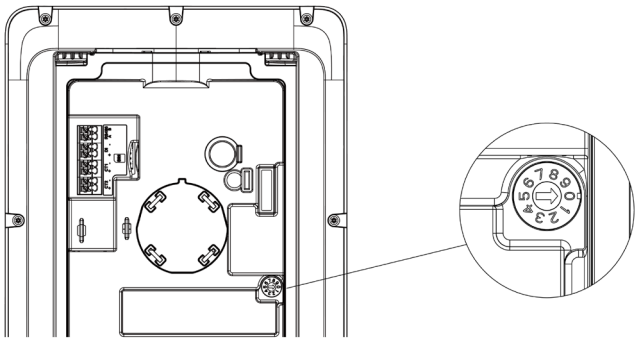
4.2.2.3 RS-485 Cable Connection (Optional)

1. Use a flathead screwdriver to press and hold the buttons above the connector holes on the RS-485 ports.
2. Connect the RS-485-A wire to the port marked **A** and the RS-485-B wire to the port marked **B**. Then release the buttons.



4.2.3 Adjusting the Rated Current (Optional)

The built-in current selector in this charger allows you to manually set a current lower than the maximum current when you install the charger on a circuit rated lower than the maximum rating for the charger.

Locate the current selector on the back of the main unit. Then use a flathead screwdriver with a tip size of 1/8” (3 mm) x 1/40” (0.6 mm) to adjust the DIP switch to the appropriate position according to the table below.	



CAUTION

To reduce the risk of fire, only connect the charger to a circuit with a branch circuit over-current protection of 125% of the selected maximum amperage setting of the device in accordance with ANSI/NFPA 70 (US) CSA C22.1 (Canada).



ATTENTION

Pour réduire le risque d'incendie, ne branchez la borne de recharge que sur un circuit doté d'une protection contre les surintensités de 125 % de l'intensité maximale sélectionnée pour l'appareil, conformément à la norme ANSI/NFPA 70 (États-Unis) et à la norme CSA C22.1 (Canada).

Position	Amperage	Circuit Breaker Rating
0	16	20
1	16	20
2	24	30
3	32	40
4	40	50
5	48	60
6	50	70
7	50	70
8	50	70
9	50	70



NOTICE

- When the DIP switch is at 0, the corresponding amperage is 16 A; when it is at 7, 8, and 9, the corresponding current is 50 A.
- The maximum current is limited by the power rating of a charger. For this model, the maximum current is 50 A.



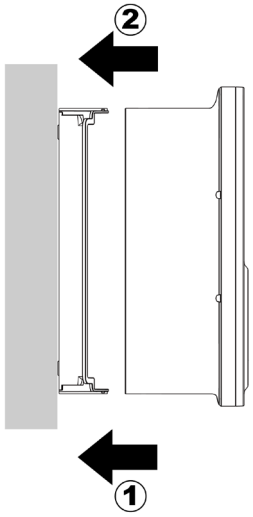
NOTE

- Lorsque le commutateur DIP est sur 0, l'intensité correspondante est de 16 A ; lorsqu'il est sur 7, 8 et 9, l'intensité correspondante est de 50 A.
- Le courant maximal est limité par la puissance nominale de la borne de recharge. Pour ce modèle, le courant maximum est de 50A.

4.2.4 Finishing Installation

STEP 1

Push the main unit onto the wire box. Ensure they are securely attached.



NOTICE

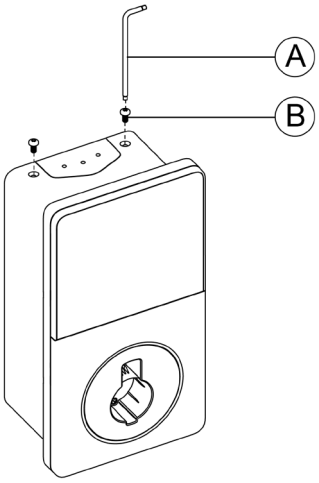
When pushing the main unit onto the wire box, fasten the bottom first and then the top. The installation is secure only when you hear two clicks from the bottom of the charger. After the installation, check the bottom to ensure the charger is free of leaks and gaps and that it is properly installed.

NOTE

Lorsque vous poussez l'unité principale sur le boîtier de câblage, fixez d'abord la partie inférieure, puis la partie supérieure. L'installation n'est sécurisée que lorsque vous entendez deux clics au bas de la borne de recharge. Après l'installation, vérifiez le fond pour vous assurer que la borne de recharge ne présente ni fuites ni lacunes et qu'elle est correctement installée.

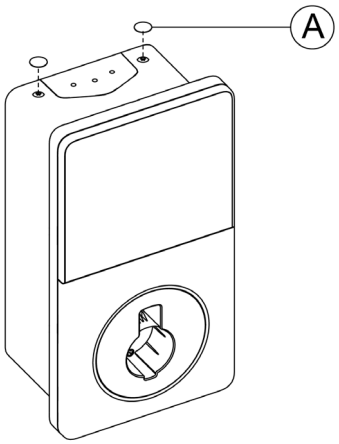
STEP 2

Install and torque the two M1/5” (5 mm) x 2/5” (10 mm) screws (**B**) using the T25 Torx screwdriver (**A**) to secure the charger.



STEP 3

Install the two screw plugs (**A**). Ensure the contact pins fit the contacts in the main unit.



5 Commissioning

- Ensure that the charger is installed according to the instructions in this manual.
- Ensure that all the screws are tightened to the correct torque after the wiring is completed and that there is no loosen screws at the terminal blocks.
- Ensure that there are no copper wire or debris left inside the charger before switching on the electrical power to the charger.
- Once all electrical connections are safely made, switch on the power to the circuit from the circuit breaker and wait for the power supply to come on. There will be a series of self-checks. Make sure that the charger works correctly and safely.



WARNING

Be careful when working with electricity.



AVERTISSEMENT

Soyez prudent lorsque vous travaillez avec de l'électricité.

Scan the QR code below to access the instructions for commissioning.

Or click the link below to access the commissioning guide.

https://strapicdn.autelenergy.com/autel_energy/media/Maxi_Charger_Single_Charger_Commissioning_Guide_UL_6a6c7069cf.pdf

6 Usage

6.1 Starting Charging

1. Remove the connector from the holster.
2. Plug the connector into an EV's charging port.
3. Choose one of the following ways to start a charging session:
   - Use the Autel Charge app by tapping **Start** on the Charging screen.
   - Tap your RFID card on the RFID reader.
   - If the Auto Start function is enabled in the Autel Charge app, the charger will automatically start charging once the connector is properly connected.
   - If you have set a charging schedule in the Autel Charge app, the charger will initiate a charging session automatically as scheduled.
   - If the charger has a display, tap on the touchscreen and authorize charging via QR code or RFID card.

NOTICE

Ensure that the EV is charging. If charging issues persist, try reconnecting the connector or contact Autel technical support.

NOTE

Assurez-vous que le VE est en train de se charger. Si vous pensez que le véhicule ne se charge pas correctement, essayez de rebrancher le connecteur ou contactez l'assistance technique d'Autel.

6.2 Stopping Charging

NOTICE

- If the connector is unplugged from the EV during a charging session, the charger will automatically disconnect the power supply. This stops all charging operations.
- When the vehicle is fully charged, the charger will automatically disconnect the power supply.

NOTE

- Si le connecteur est débranché du VE pendant une session de charge, la borne de recharge déconnecte automatiquement l'alimentation électrique. Toutes les opérations de charge sont alors interrompues.
- Lorsque le véhicule est complètement chargé, la borne de recharge déconnecte automatiquement.

1. To stop charging, choose any of the following ways:
   - Wait for the charging session to end and no further actions are required in the case of scheduled charging or Auto Start.
   - Tap the **Stop** button on the Charging Screen of the Autel Charge app.
   - Tap the RFID card on the RFID reader.
   - If the charger has a display, tap **Stop** on the Charging Screen.
2. Unplug the connector from the EV and return it to the holster.

6.3 LED Descriptions

LED Descriptions

Color	Light	Description
Yellow	**Solid Yellow**	➢ The charger is disabled after being activated. ➢ The charger is upgrading.
Green	**Solid Green**	The charger is available.
	Breathing Green	➢ The charger is being powered on. ➢ The charger is not activated.
	Flashing Green	The charger is being activated.
Blue	**Solid Blue**	➢ The connector is plugged into an EV and the charging process does not start yet. ➢ An EV finishes charging and the connector is not removed from the EV yet.
	Breathing Blue	Charging status.
Red	**Solid Red**	➢ Malfunction status. ➢ The charger is unavailable.
Cyan	**Solid Cyan**	The charger has been reserved.
	Cyan light flashes three times.	The charger's hotspot is opened manually.
Green & Yellow	**Solid Green & Yellow (Upper part is green.)**	The charger can be used for charging. The network is online and the OCPP is offline.
	Solid Yellow & Green (Upper part is yellow.)	The charger can be used for charging. The network is offline.
Purple & Yellow	**Solid Purple & Yellow (Upper part is purple.)**	The charger cannot be used for charging. The network is online and the OCPP is offline.
	Solid Yellow & Purple (Upper part is yellow.)	The charger cannot be used for charging. The network is offline.

6.4 Display Descriptions

NOTICE

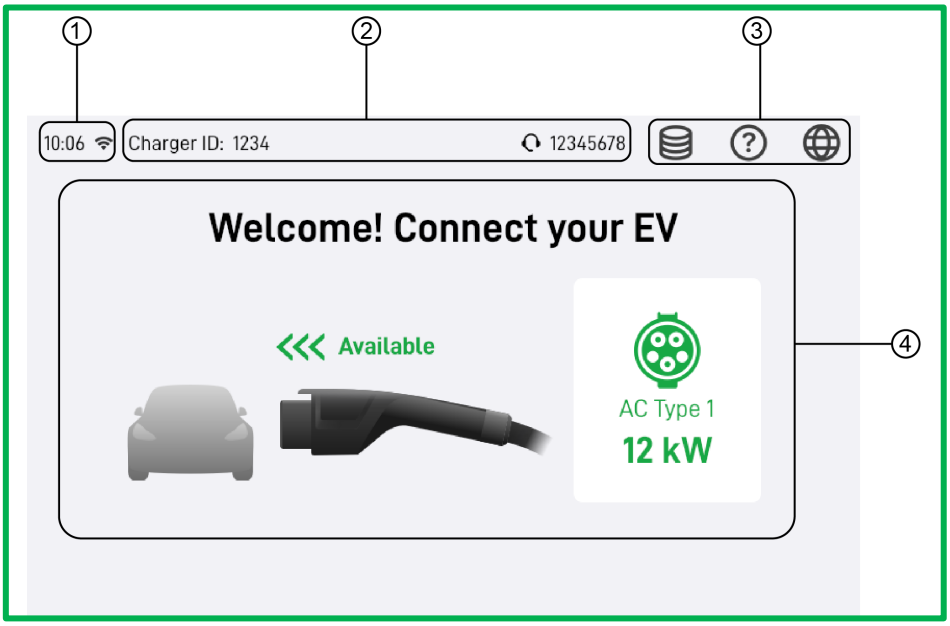
This section is only applicable to model 1. The images are subject to change; please refer to the actual product.

NOTE

Cette section ne s'applique qu'au modèle 1. Les images sont susceptibles d'être modifiées ; veuillez vous référer au produit réel.

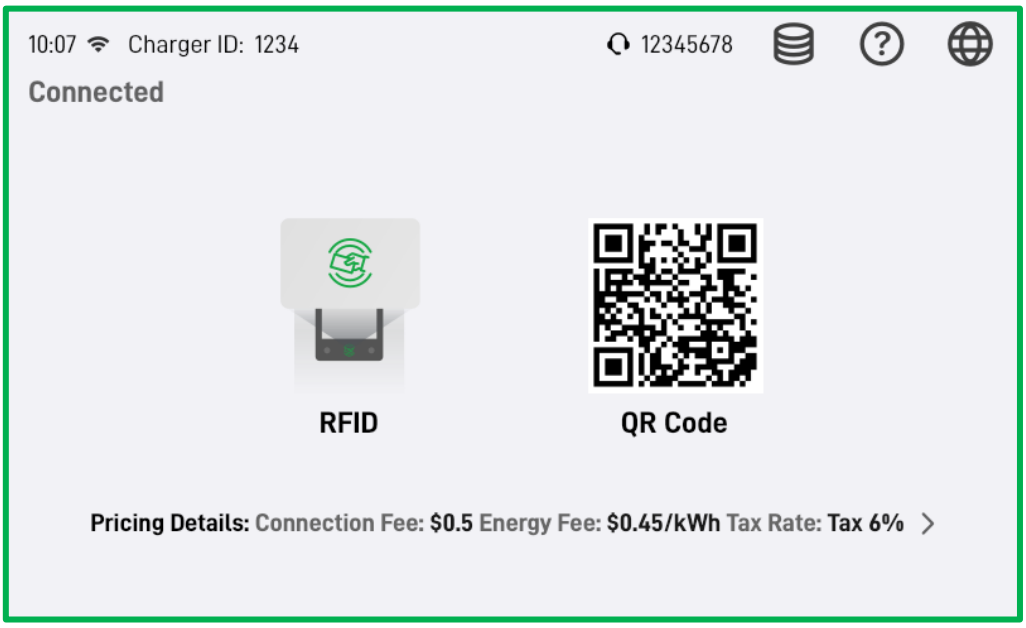
Chargers with an LCD

Standby Screen



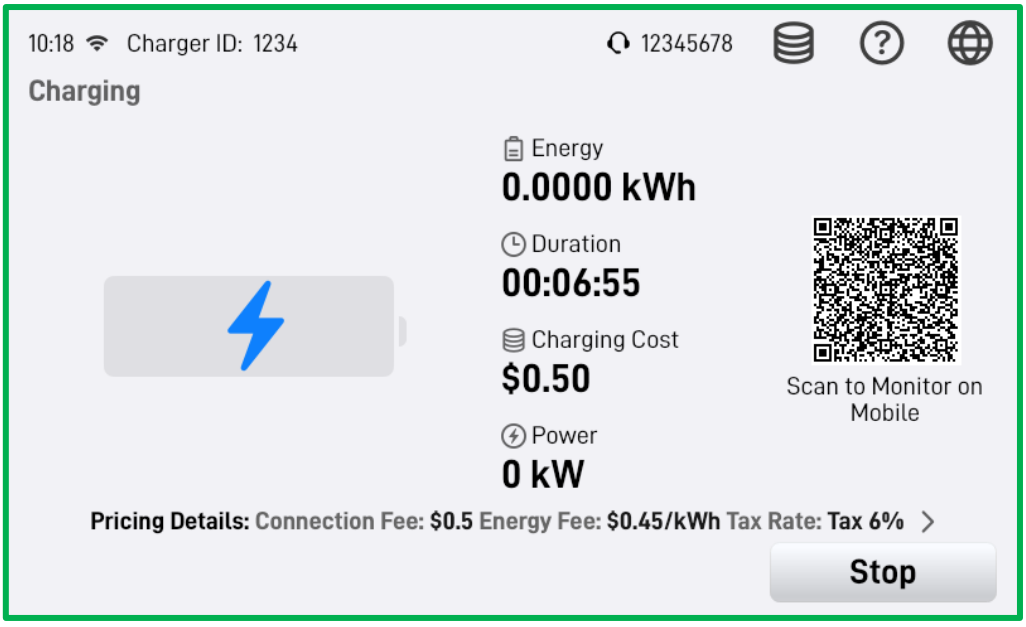
1. Time and Network icon – an x appearing at the lower corner of the Internet icon indicates the charger is not connected to the Internet
2. Charger name and Hotline
3. Pricing details, user guide, and languages
4. Main screen – demonstrates connector information

Authorization Screen



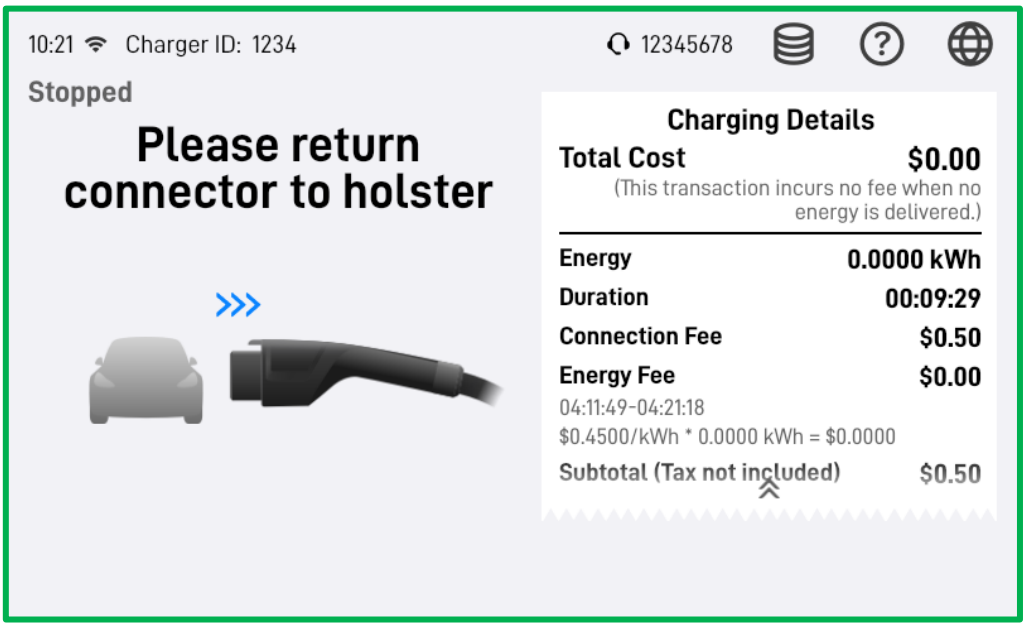
Choose a method (RFID card or QR Code) to authorize charging on the Authorization Screen.

Charging Screen



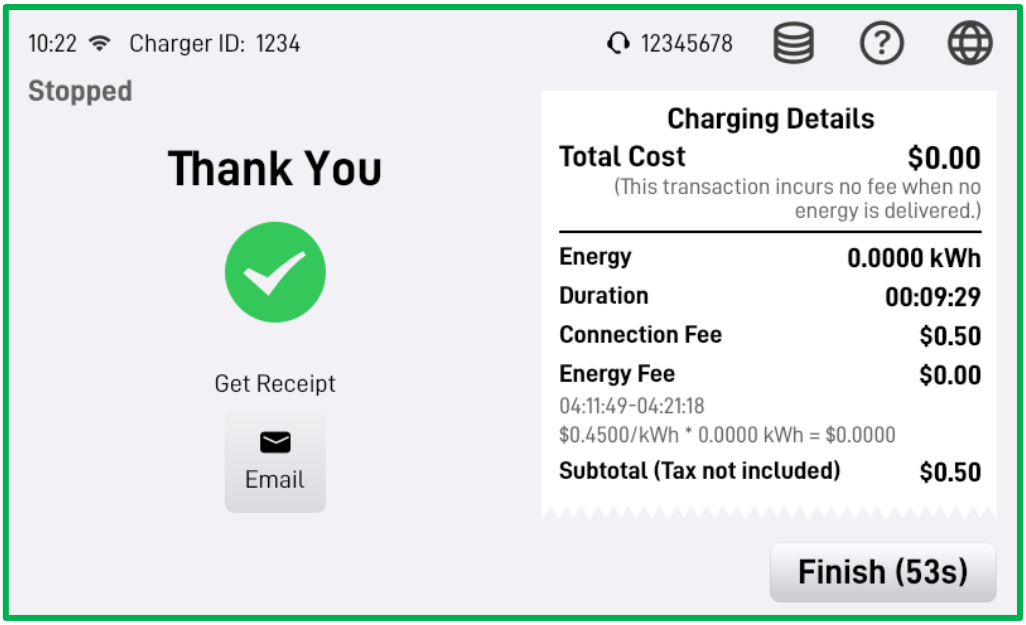
Once the connector is properly connected, the vehicle will establish communication with the charger and a charging session will start. During the session, the screen will display information such as energy, duration, charging cost, power, and pricing details. Tap the **Stop** button to stop charging.

Returning Connector Screen



After finishing charging, return the connector to the holster.

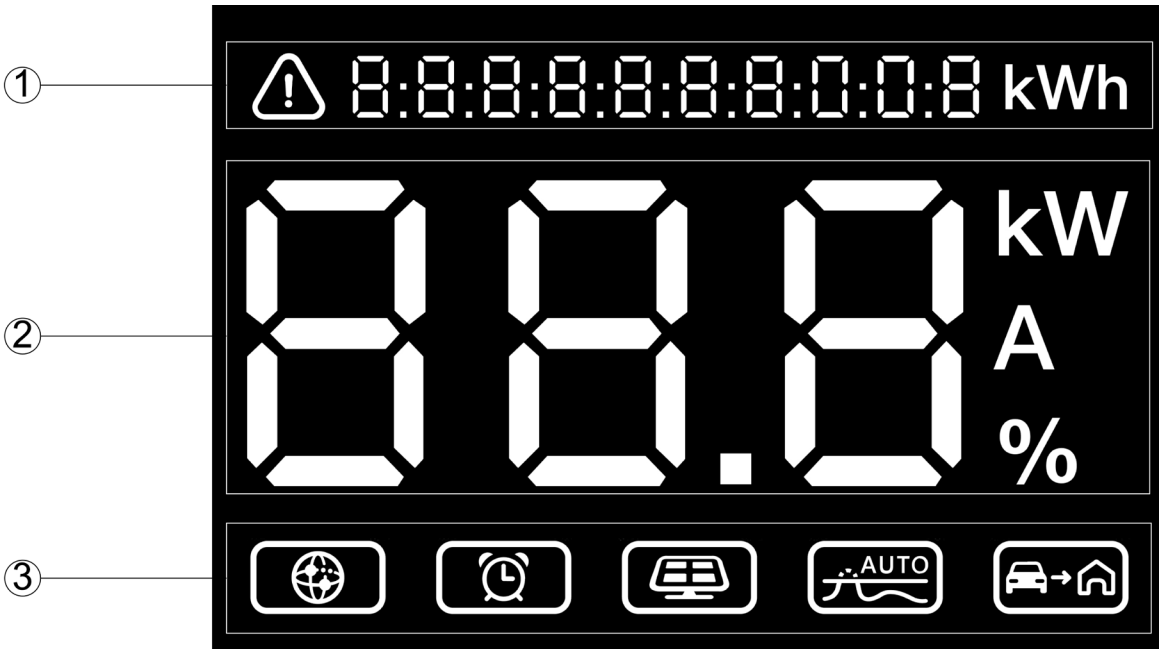
Charging Stopped Screen



After a whole charging session is stopped, the screen will display the charging details.

Chargers with a digital tube display

The digital tube display includes three display areas: top, middle, and bottom. Details are as follows:



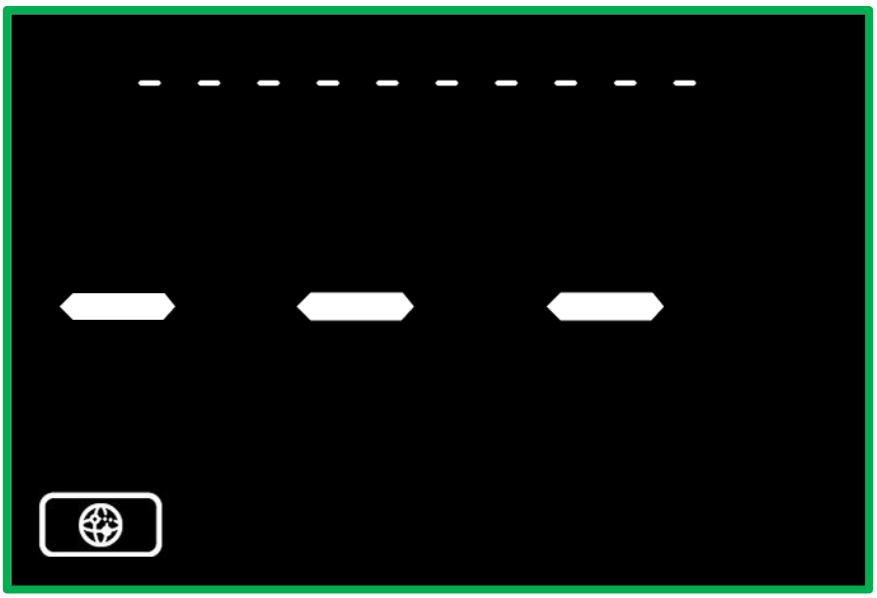
1. Energy, error code, or time
2. Current, power, or state of charge
3. Status indicators (see the table below for more details)

Descriptions of the Status Indicators at the Bottom (from left to right)

Indicator	Status	Description
Network Status Indicator	**Steady On**	The device is connected to the Internet.
	Steady Off	The device is not connected to the Internet.
Timing Status Indicator (Residential Model) **Reservation Status Indicator (Commercial Model)**	**Steady On**	➢ The charging process is timed. (Residential model) ➢ Countdowns are proceeding in the reservation state. (Commercial model)
	Steady Off	➢ The connector is not connected to an EV. ➢ No scheduled charging is set.
PV Charging Status Indicator	**Steady On**	The full green charging mode or the green priority charging mode is configured.
	Steady Off	The full green charging mode and the green priority charging mode are not configured.
ALM / DLB Status Indicator	**Steady On**	The ALM mode or DLB mode is configured.

	Steady Off	The ALM mode and DLB mode are not configured.
Vehicle-to-Home (V2H) / Vehicle-to-Grid (V2G) Status Indicator	**Steady On**	The V2H mode or V2G mode is configured.
	Steady Off	The V2H mode and V2G mode are not configured.

Unactivated Screen



- Top display area: only the middle horizontal segment of each digit position lights up and remains steady
- Middle display area: displays "- - -" and remain steady
- Bottom display area: displays status indicator(s) based on the real situation

Standby Screen



- Top display area: displays time
- Middle display area: displays rated power

- Bottom display area: displays status indicator(s) based on the real situation

Charging Screen



- Top display area: displays duration, charged energy in the current period, and total energy alternately, switching every 10 seconds
- Middle display area: displays current and power alternately, switching every 10 seconds
- Bottom display area: displays status indicator(s) based on the real situation

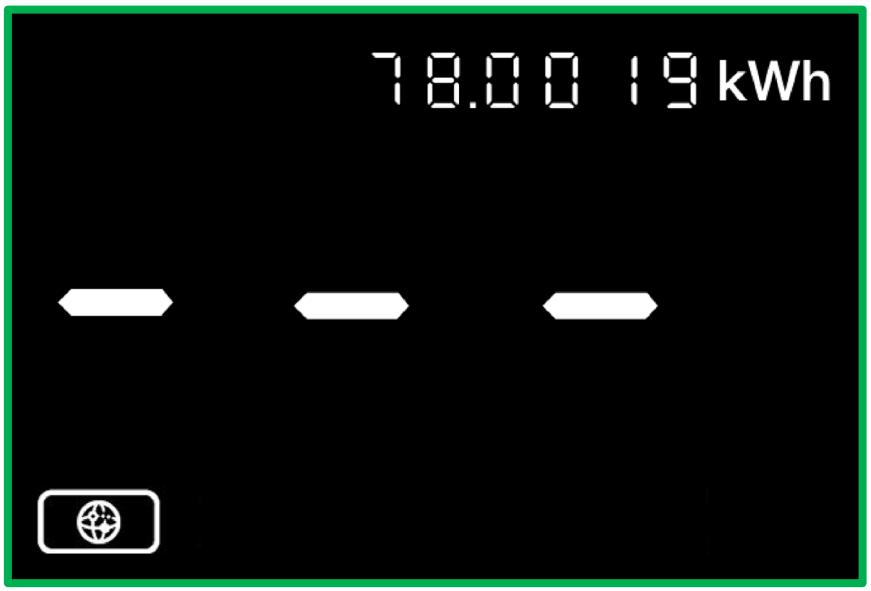
NOTICE

- When the top display area displays duration, the middle display area will display current; when the top display area displays energy, the middle display area will display power.
- The image here only shows one case during the charging process; please refer to the actual product for other cases.

NOTE

- Lorsque la zone d'affichage supérieure affiche la durée, la zone d'affichage centrale affichera le courant ; lorsque la zone d'affichage supérieure affiche l'énergie, la zone d'affichage centrale affichera la puissance.
- L'image ici ne montre qu'un seul cas pendant le processus de charge ; référez-vous au produit réel pour les autres cas.

Charging Stopped Screen



- Top display area: displays charged energy in the current period and total energy alternately, switching every 10 seconds
- Middle display area: displays “- - -”
- Bottom display area: displays status indicator(s) based on the real situation

NOTICE

The image here only shows one case during the charging stopped process; please refer to the actual product for another case.

NOTE

L'image ici ne montre qu'un seul cas pendant le processus d'arrêt de la charge; référez-vous au produit réel pour les autres cas.

Error Screen



- Top display area: displays an exclamation mark and the error code
- Middle display area: displays Err
- Bottom display area: displays status indicator(s) based on the real situation

Update Screen



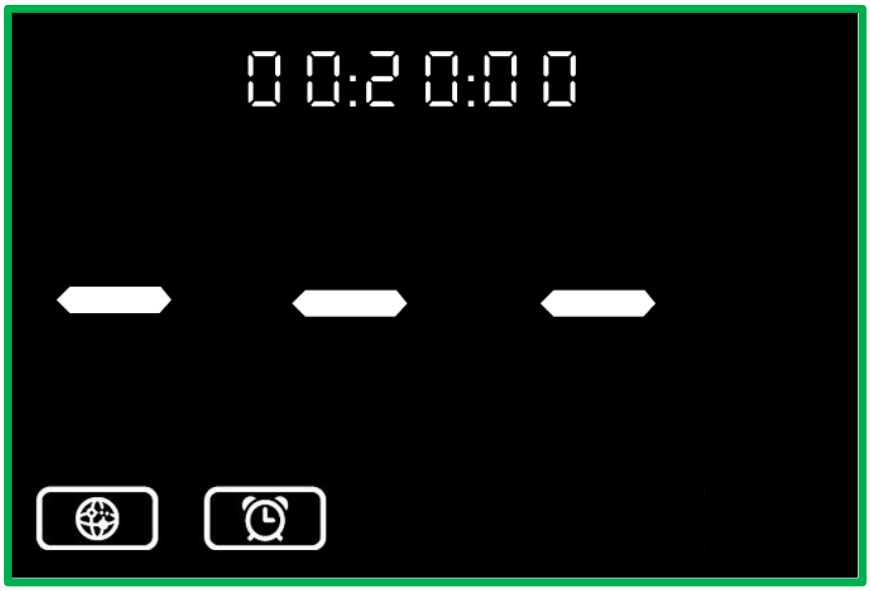
- Top display area: displays time
- Middle display area: displays UPd
- Bottom display area: displays status indicator(s) based on the real situation

Disabled by the Backend Screen



- Top display area: Displays the time
- Middle display area: Displays “**UnA**”
- Bottom display area: displays status indicator(s) based on the real situation

Reservation Screen



- Top display area: displays countdown of reservation time
- Middle display area: displays “- - -”
- Bottom display area: displays status indicator(s) based on the real situation

6.5 Setting the OCPP Parameters

The OCPP parameters can be set via the Autel Config app, Autel Charge app, and Autel Operation and Maintenance Platform.

NOTICE

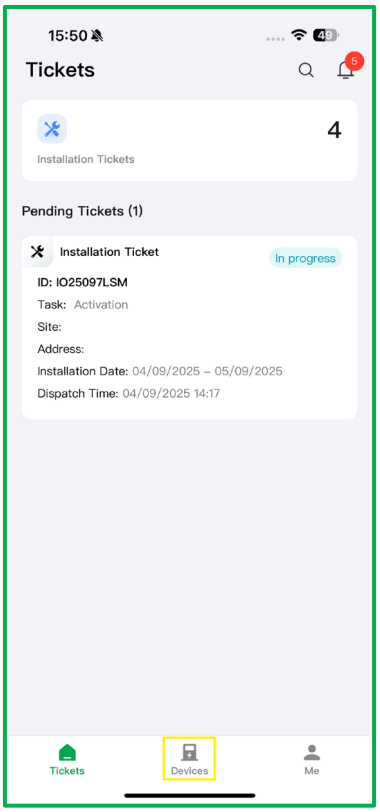
- The OCPP parameter settings should be performed by an installation engineer.
- The illustrations depicted in this section may differ slightly from the actual product.

NOTE

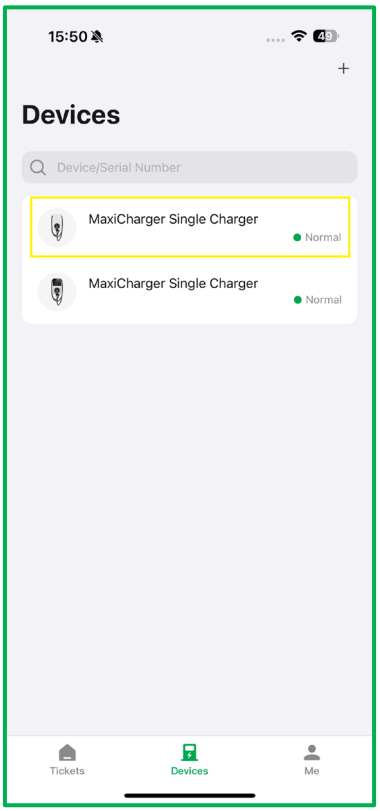
- Le paramétrage de l'OCPP doit être effectué par un ingénieur d'installation.
- Les figures représentées dans cette section peuvent différer légèrement du produit réel.

6.5.1 Via Autel Config App

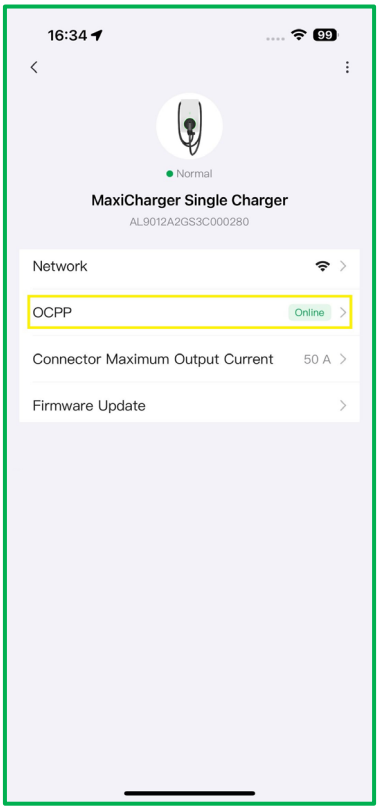
1. Launch and log in to the Autel Config app. On the Tickets screen, tap **Devices** to proceed.



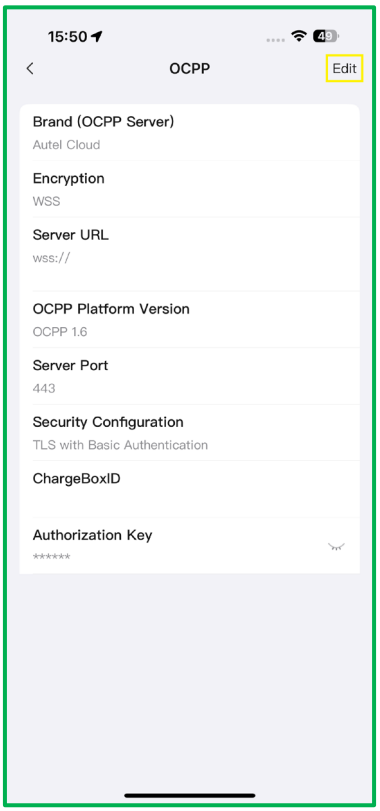
2. On the Devices screen, select the charger as required.



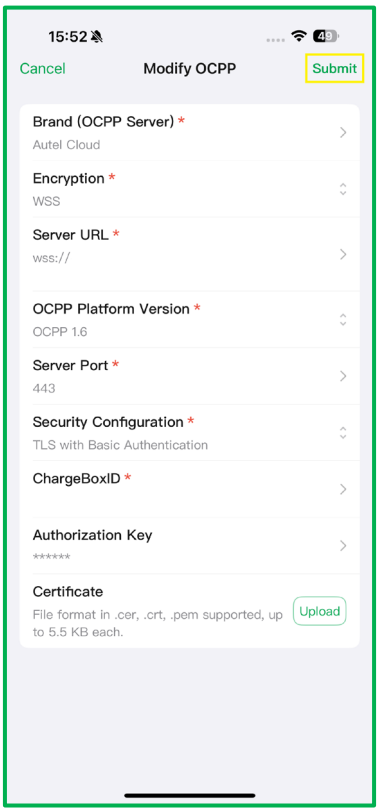
3. Tap **OCPP** to proceed.



4. On the OCPP screen, tap **Edit** on the upper-right of the screen.



5. Set the OCPP parameters according to actual requirements. After the setting is completed, tap **Submit** on the upper-right of the screen to save the settings.



6.5.2 Via Autel Charge App

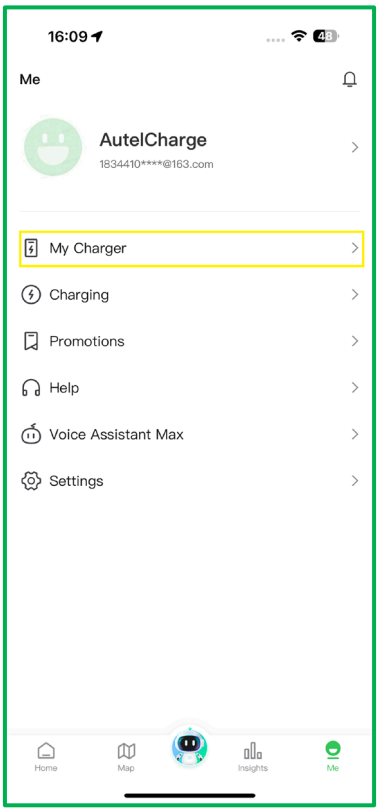
NOTICE

Some models do not support setting OCPP parameters via the Autel Charge app.

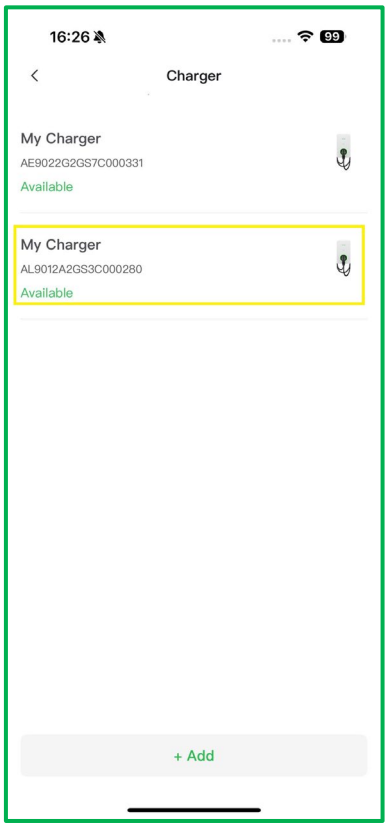
NOTE

Certains modèles ne prennent pas en charge la configuration des paramètres OCPP via l'application Autel Charge.

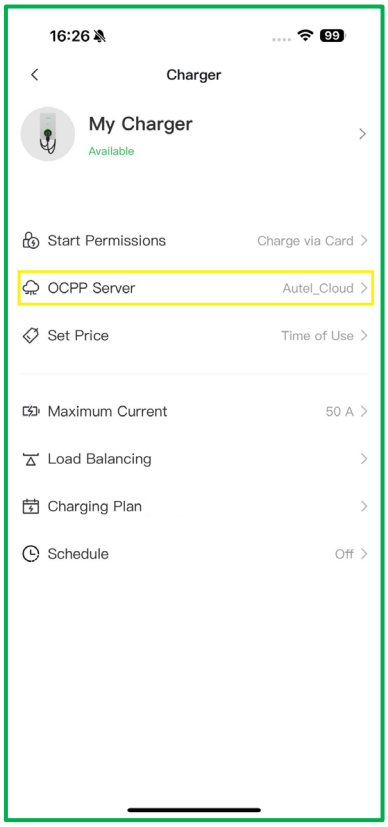
1. Launch and log in to the Autel Config app, and then tap **My Charger**.



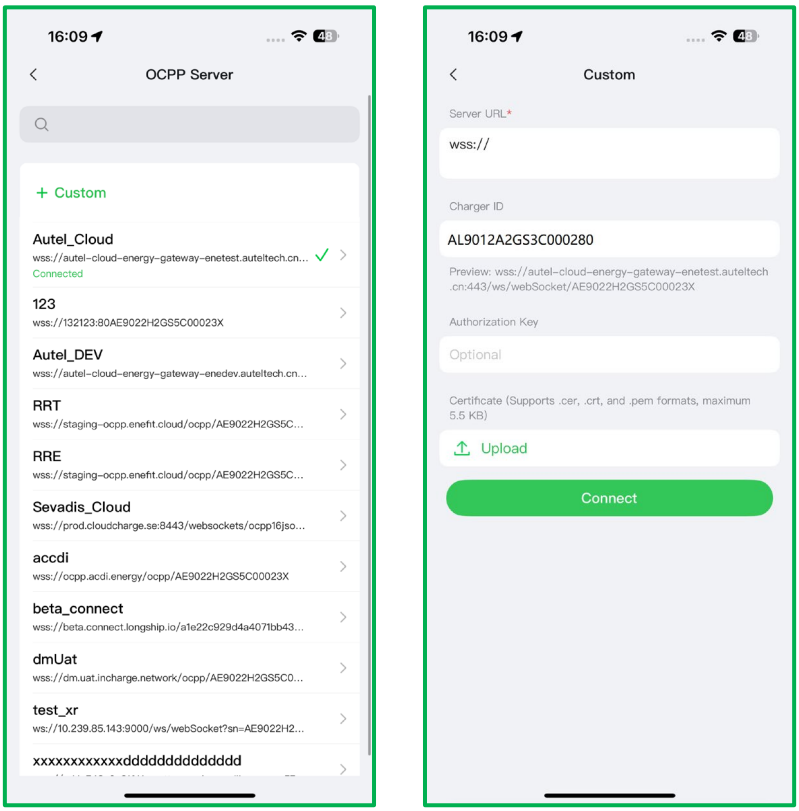
2. Select the charger as required.



3. Tap **OCPP Server** to proceed.

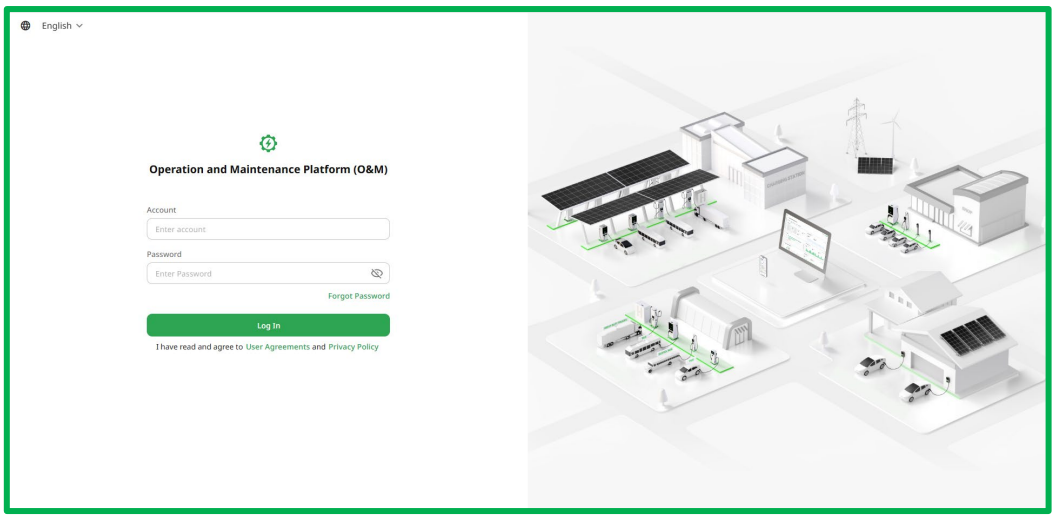


4. Select the OCPP Server you need. Or custom the OCPP Server as required.

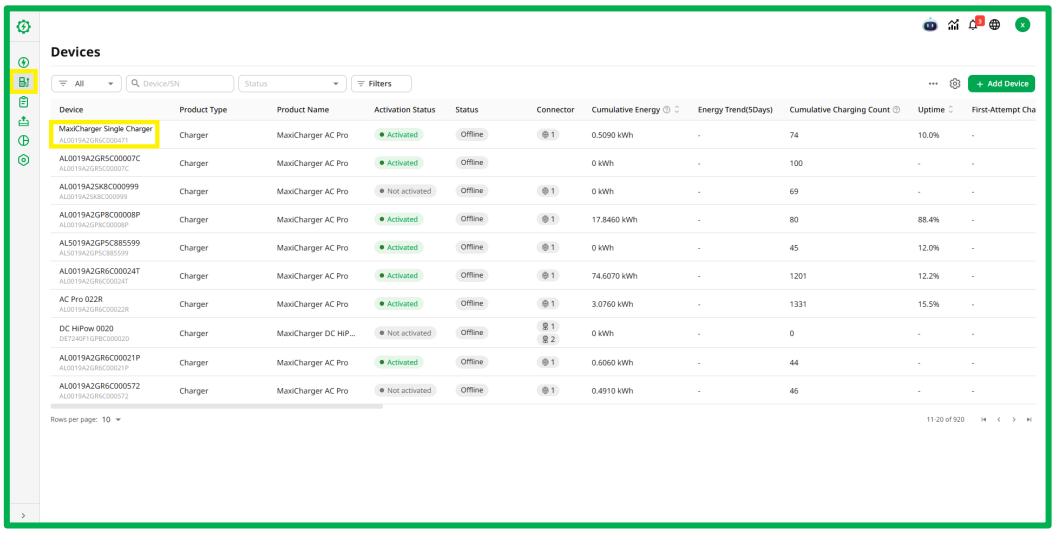


6.5.3 Via Autel Operation and Maintenance Platform

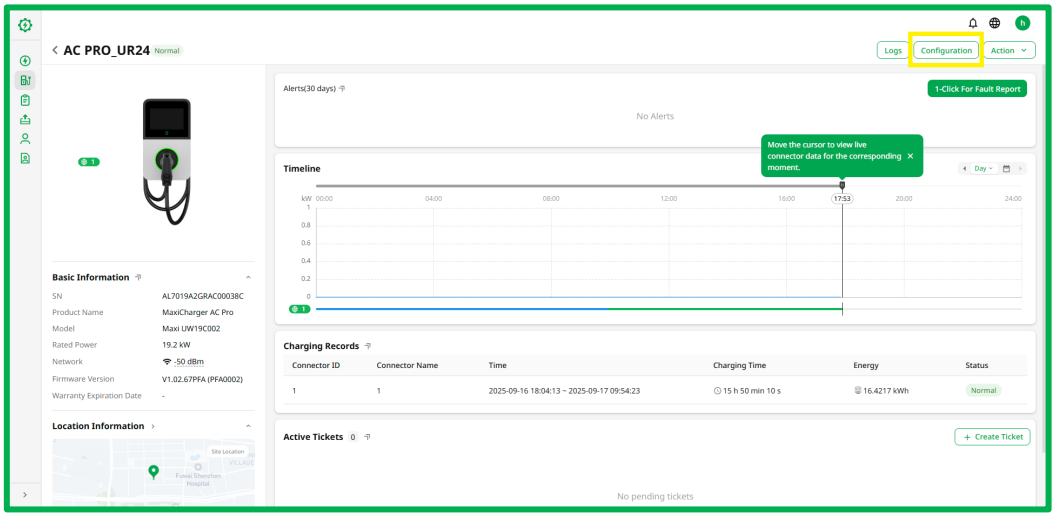
1. Log in to the Autel Operation and Maintenance Platform (O&M) by inputting the account and the password. The URL of the platform is https://omcb-us.autel.com/.



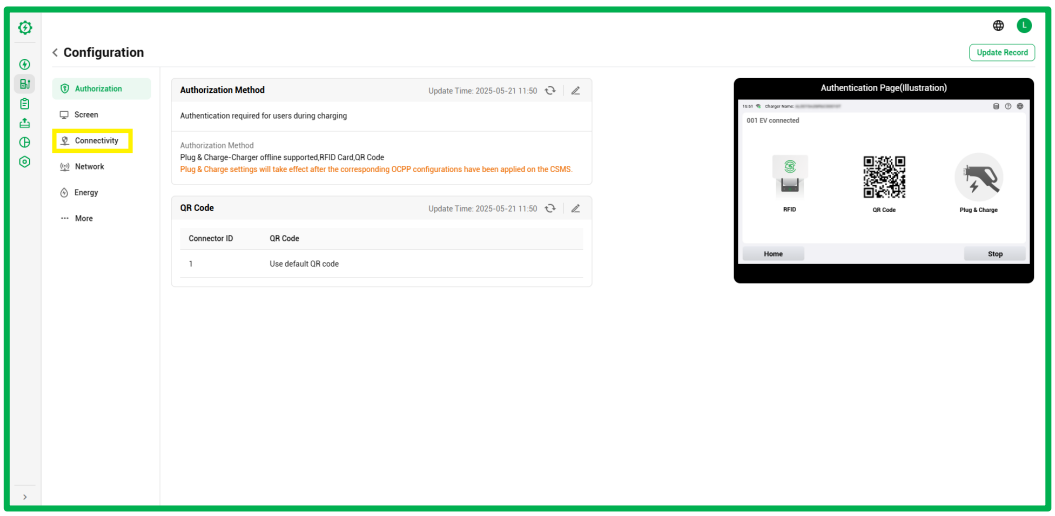
2. Enter Devices screen and select the charger.



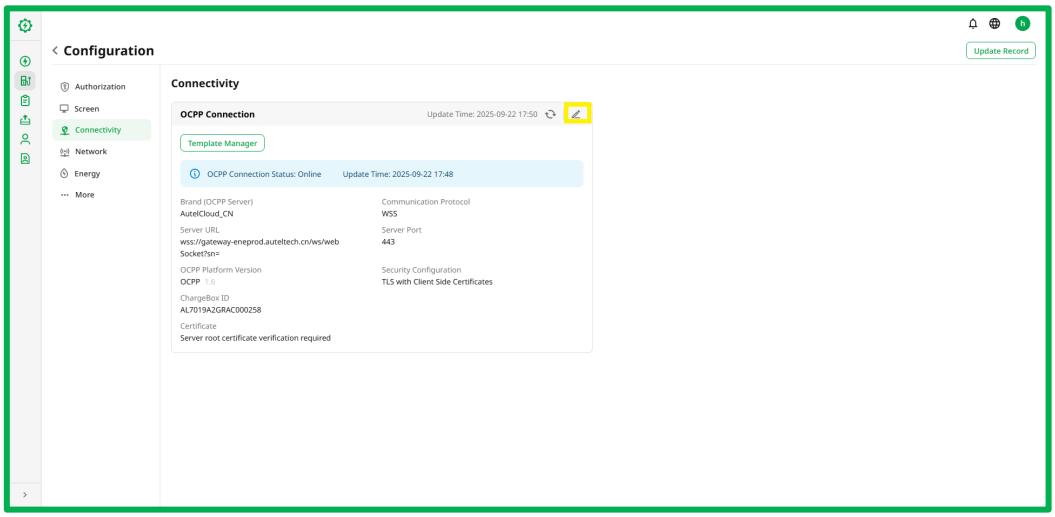
3. Click on **Configuration** on the upper right of the screen to proceed.



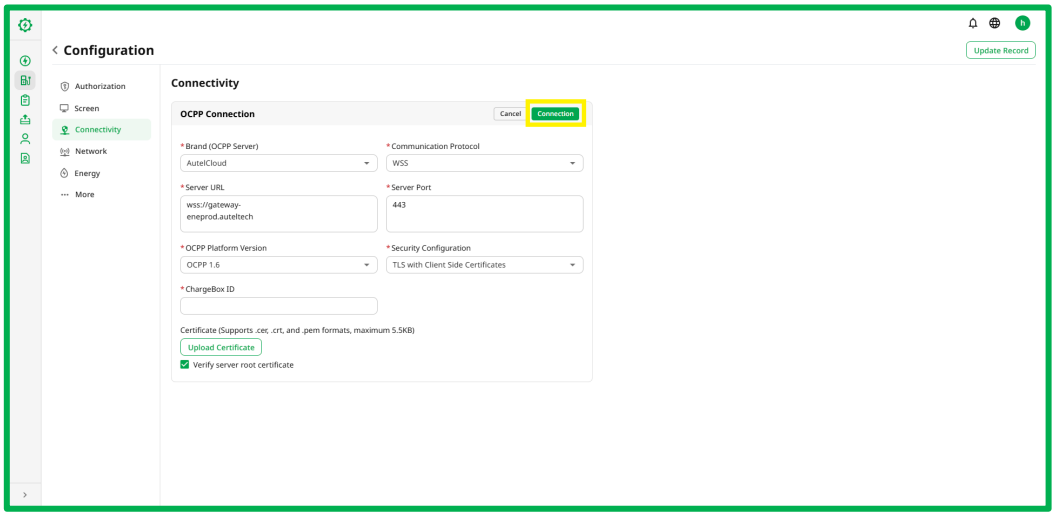
4. On the Configuration screen, click on **Connectivity** to proceed.



5. Click on the **pencil icon** to enable the OCPP Connection settings.



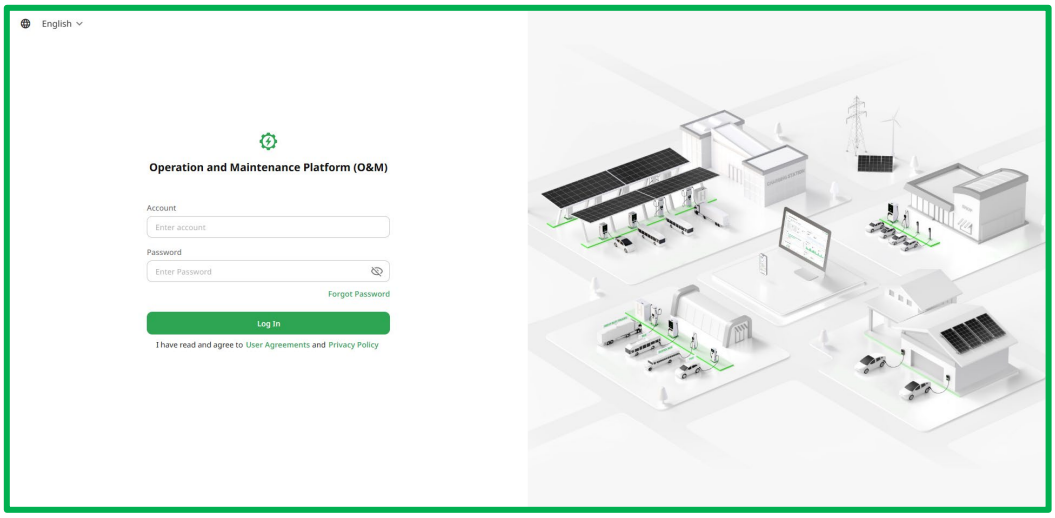
6. Set the OCPP parameters according to actual requirements. After the setting is completed, click on **Connection** to save the settings.



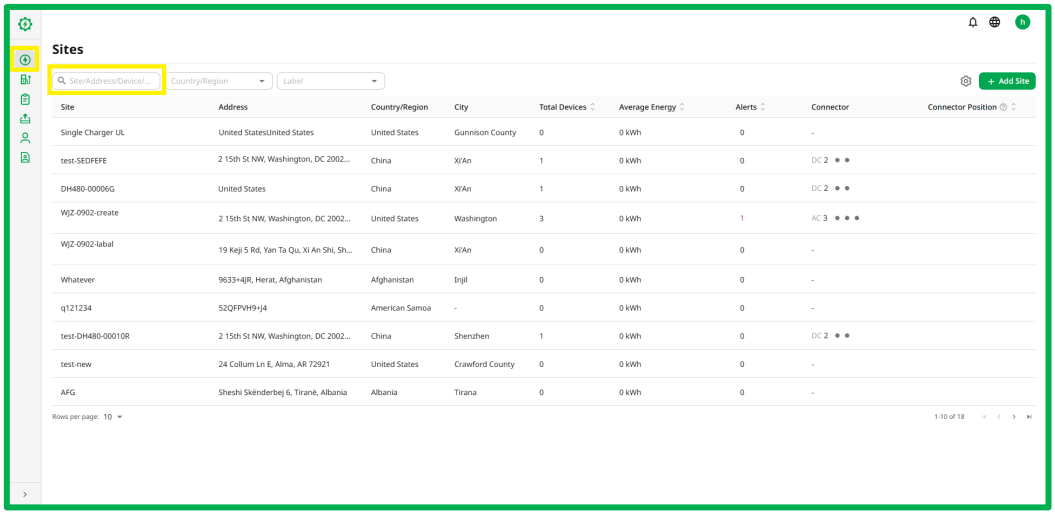
6.6 Setting the EMS Parameters

Before setting the EMS parameters for a charger, ensure its load balancing is disabled. The steps to check the load balancing status of a charger are as follows:

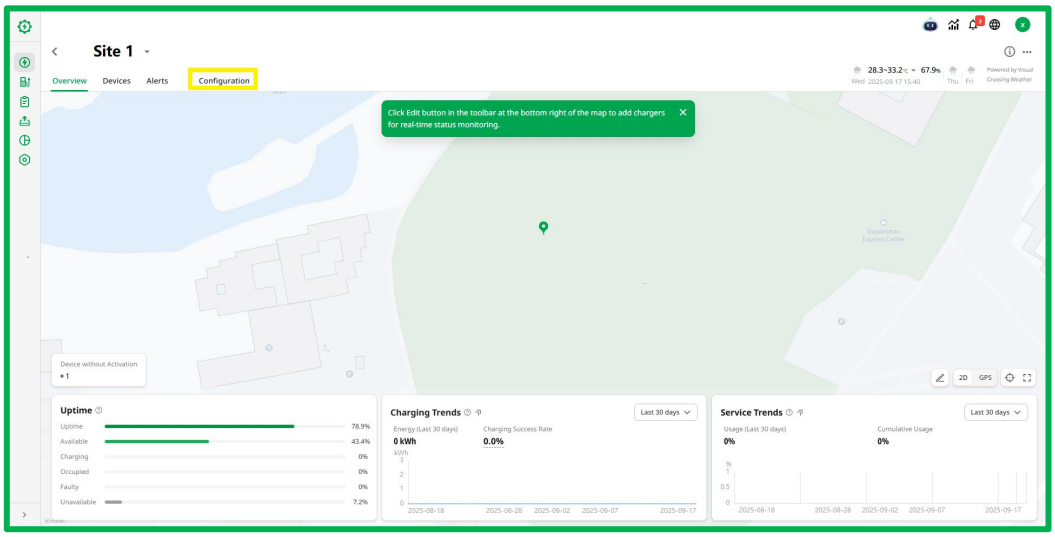
1. Log in to the Autel Operation and Maintenance Platform (O&M) by inputting the account and the password. The URL of the platform is https://omcb-us.autel.com/.



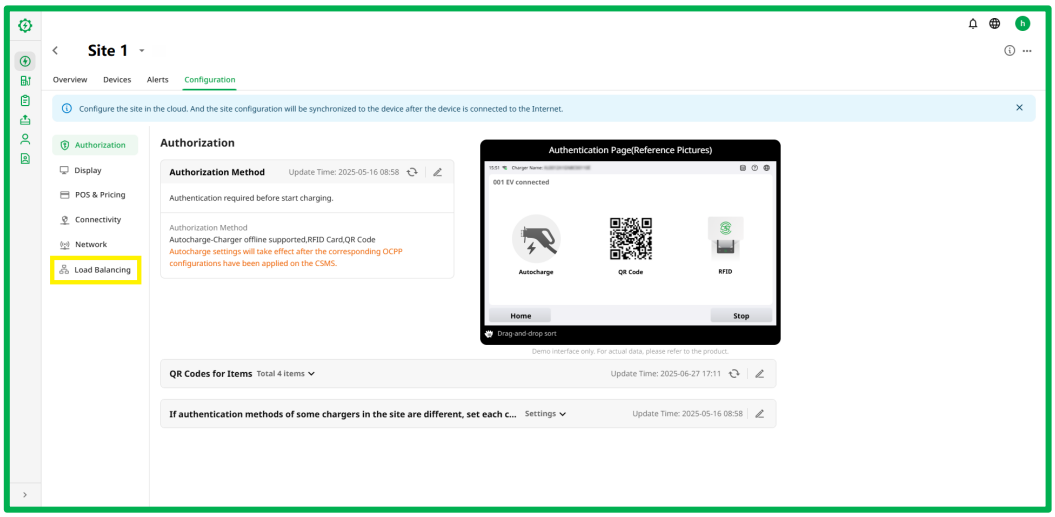
2. On the Sites screen, input the SN of the charger in the search box to enter the site that the charger belongs to.



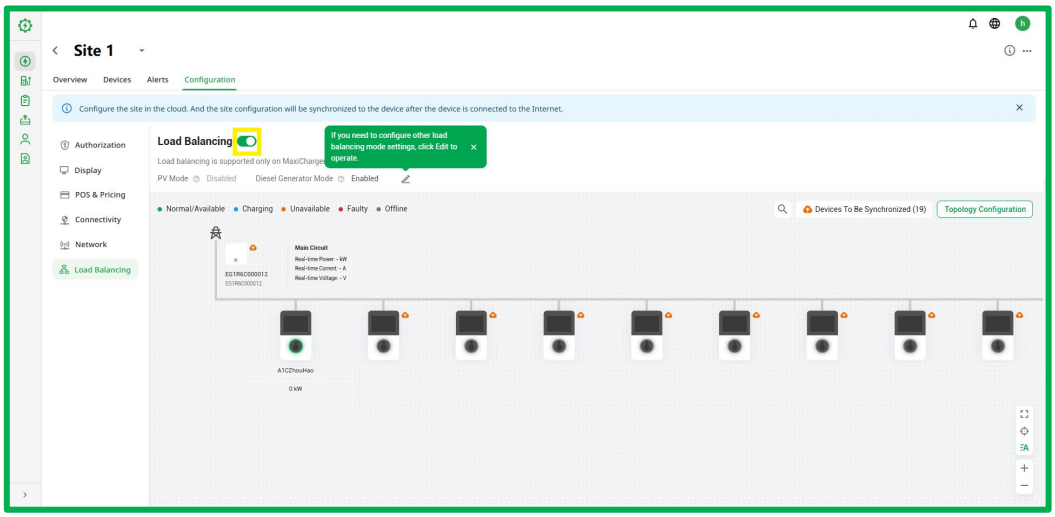
3. After entering the site, click on **Configuration** to proceed.



4. Click on **Load Balancing** to proceed.

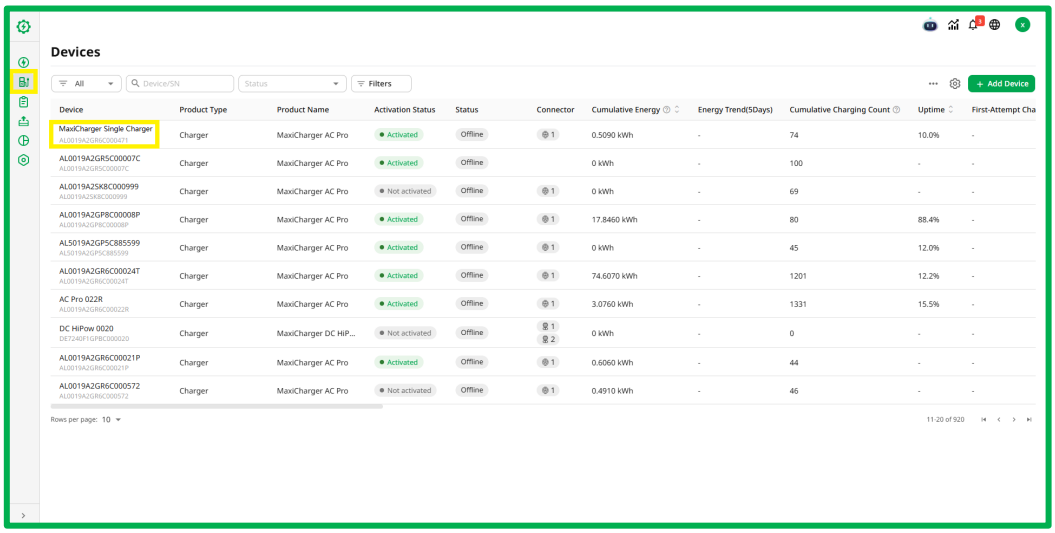


5. Check whether the switch to the right of **Load Balancing** is disabled. If not, disable it.

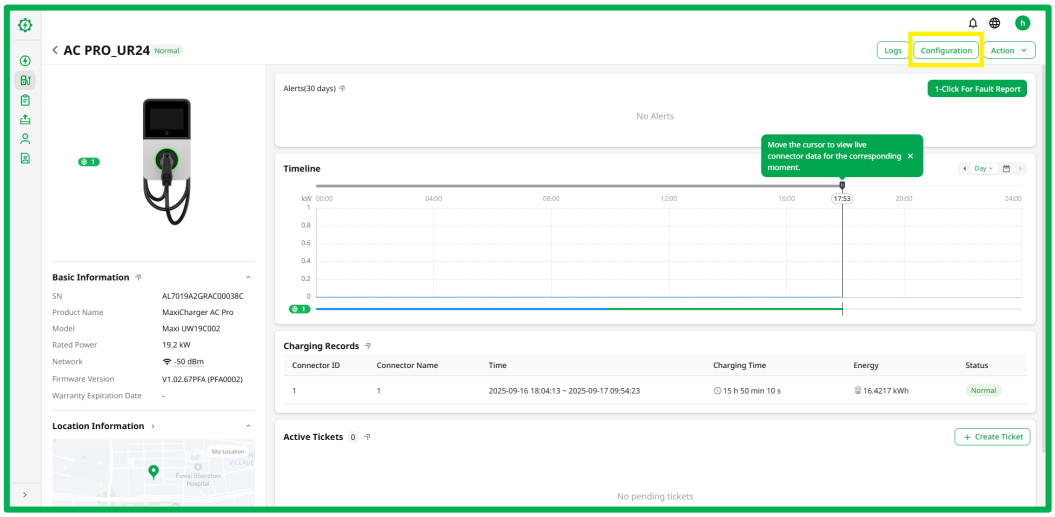


After ensuring that the load balancing is disabled for the charger, follow the steps below to set the EMS parameters.

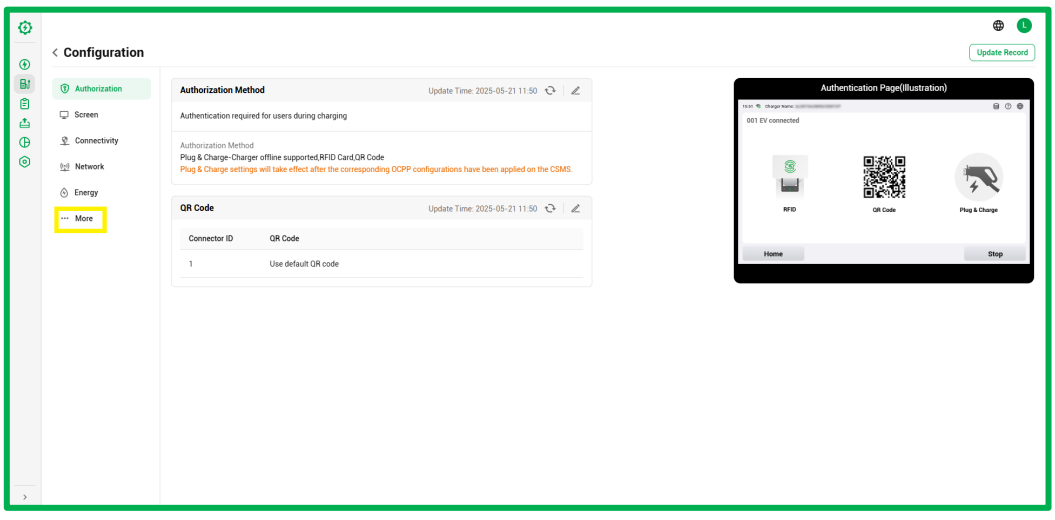
1. Enter Devices screen and select the charger.



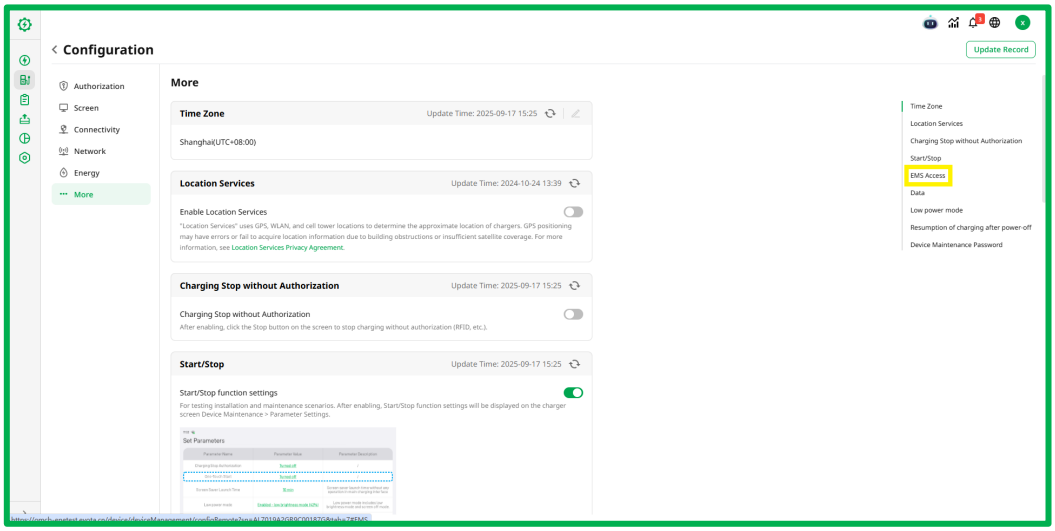
2. Click on **Configuration** on the upper right of the screen to proceed.



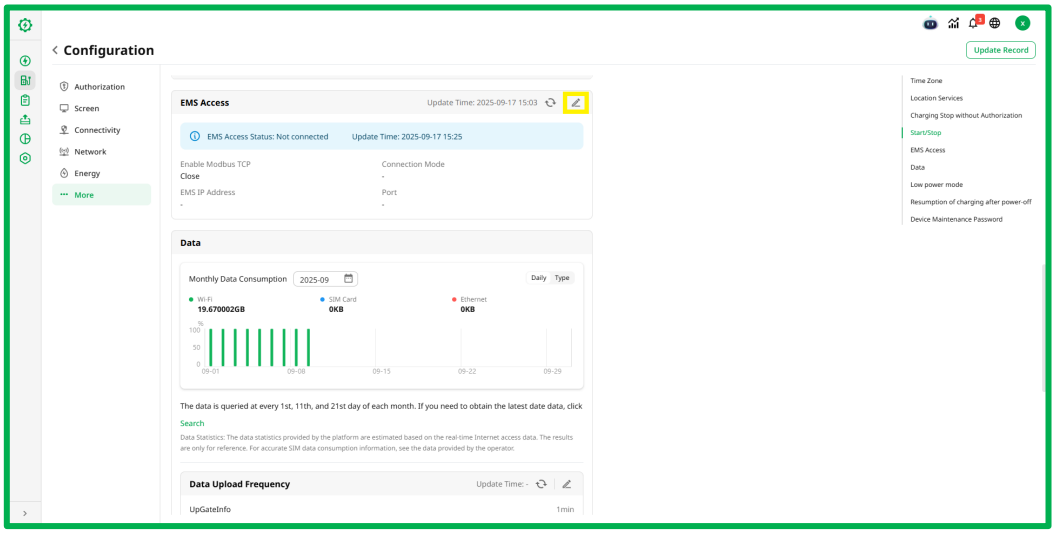
3. On the Configuration screen, click on **More** to proceed.



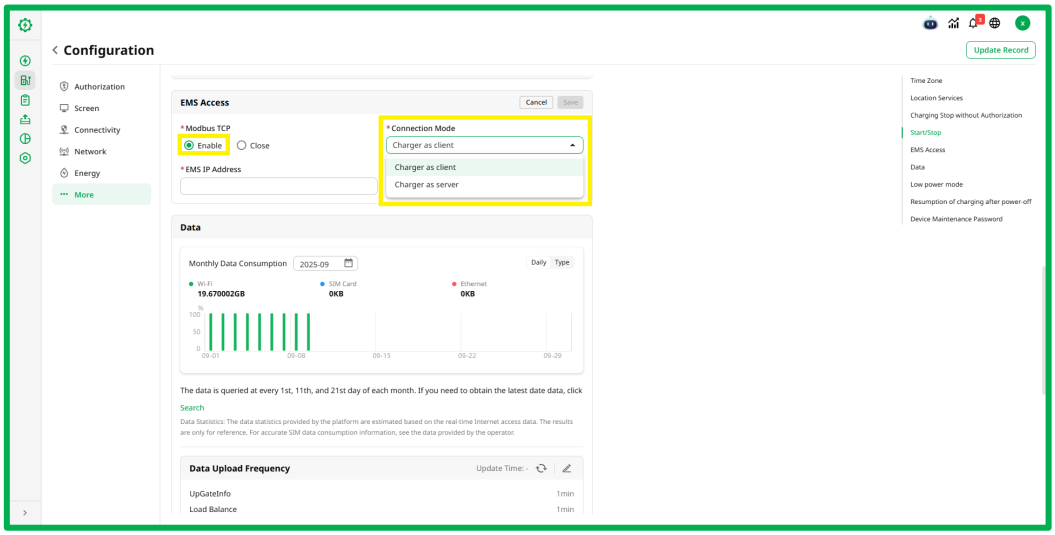
4. Scroll down the screen to the part of EMS Access or click on **EMS Access** on the right of the screen.



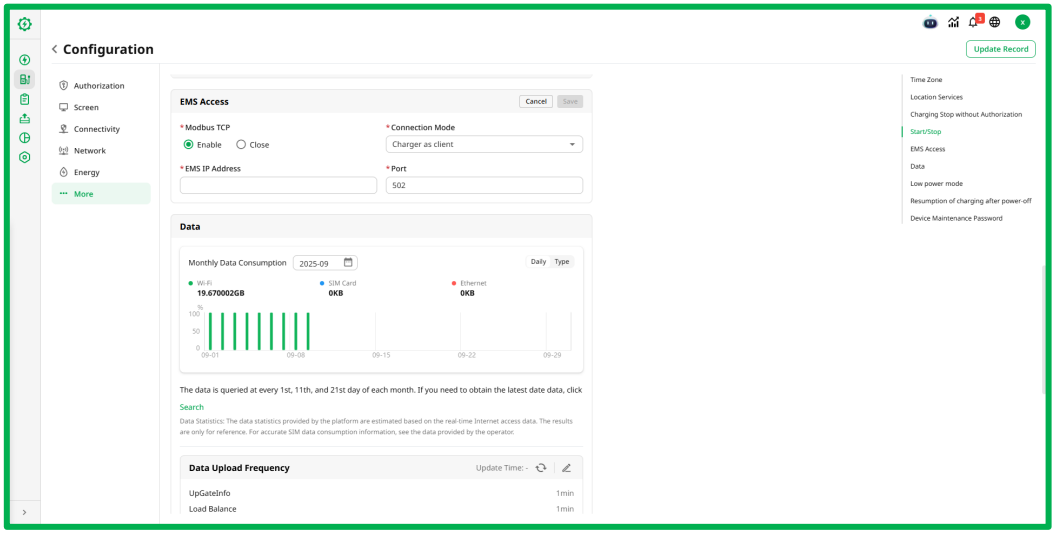
5. Click on the **pencil icon** to enable the EMS settings.



6. Enable Modbus TCP and select the connection mode.



a) If you select **Charger as client**, the EMS IP address is the IP address of the EMS server. The default port is **502**.





NOTICE

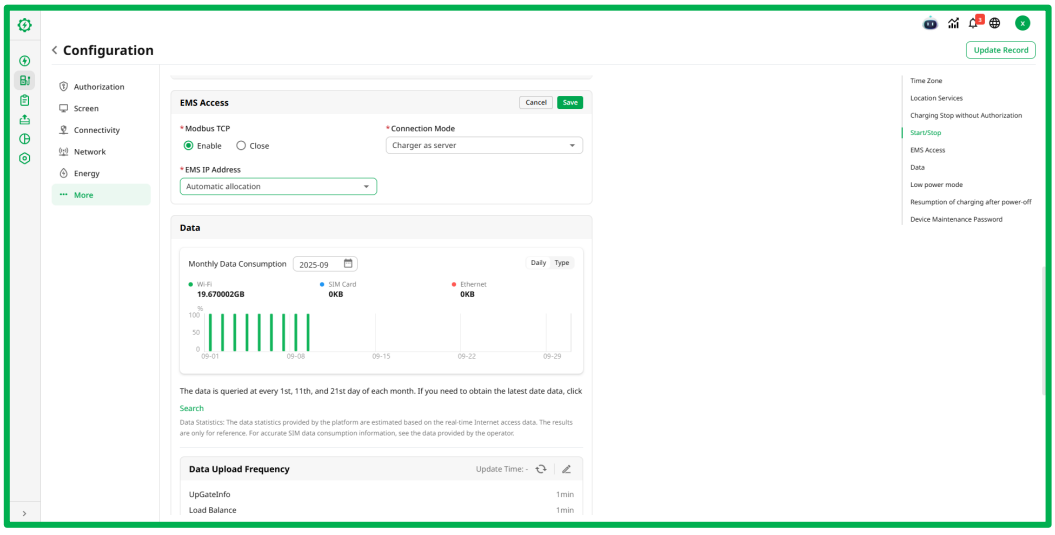
If the EMS server is the computer you use to set the EMS parameters, the computer and the charger should be connected to the same LAN.



NOTE

Si le serveur EMS est l'ordinateur que vous utilisez pour définir les paramètres EMS, l'ordinateur et le chargeur doivent être connectés au même réseau local.

b) If you choose **Charger as server**, select **automatic allocation** and the EMS IP address will be automatically set to the IP address of the charger's LAN.



NOTICE

If the EMS client is the computer you use to set the EMS parameters, the computer and the charger should be connected to the same LAN.

NOTE

Si le client EMS est l'ordinateur que vous utilisez pour définir les paramètres EMS, l'ordinateur et le chargeur doivent être connectés au même réseau local.

7 Troubleshooting

Item	Problems	Solutions
1	The charger is successfully added, but the Bluetooth connection fails.	Check whether the QR code on the charger is consistent with the QR code on the *Quick Reference Guide*. If so, make sure the Bluetooth is enabled on your mobile device; if not, contact customer support.
2	The charging session does not start as scheduled.	Do not insert the connector into your EV charging port before setting up a charging schedule for the first time. Insert the EV charging cable after the schedule is set up.
3	Over-voltage	Use the multimeter to check whether the voltage on the power input is too high. If the result is greater than or equal to 276 V, 115 % of the rated voltage (240 V), contact local power grid company.
4	Under-voltage	Use the multimeter to check whether the voltage on the power input is not sufficient. If the result is less than or equal to 166.4 V, 80 % of the rated voltage (208 V), contact local power grid company.
5	Ground fault	Ensure the charger is grounded correctly.
6	Power failure	Ensure the switch to the circuit breaker is on.
7	Over-heating	➢ Check whether the EV charging cable is securely connected. ➢ Ensure the operating temperature is within the specified range on the product label. ➢ Stop charging. Restart charging until it is within the operation temperature range.
8	Residual current detected	Unplug the vehicle and plug in again. If the problem persists, contact customer support.
9	Bluetooth communication failure	➢ Ensure the Bluetooth is enabled on your mobile device and the charger is powered on and operating properly. ➢ Forget the charger in the Bluetooth settings on your mobile device and pair the charger to your device via Bluetooth again. ➢ If the problem persists, contact customer support.

10	Update failure via Bluetooth	➢ Make sure the charger is in idle status. ➢ Make sure the Bluetooth connection is working properly. ➢ If the problem persists, contact customer support.
11	Internet connection failure	➢ Try to connect another device to the same Internet, verifying the Internet connection is working properly. ➢ If the problem persists, contact customer support.

8 Compliance

FCC regulatory conformance:

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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: 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 or more 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.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

RF Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IC regulatory conformance:

This device complies with CAN ICES-3 (B)/NMB-3(B).

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme à la norme CAN ICES-3 (B)/NMB-3 (B).

Cet appareil contient des émetteurs / récepteurs exempt (s) de licence qui sont conformes aux RSS exemptes de licence d'Innovation, Sciences et Développement économique Canada. Son fonctionnement est soumis aux deux conditions suivantes:

(1) Cet appareil ne doit pas provoquer d'interférences.

(2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

RF Exposure

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d’ exposition aux rayonnements de la IC établies pour unenvironnement non contrôé. Cet équipement doit être installé et fonctionner à au moins 20cm de distance d’un radiateur ou de votre corps.

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