



NA EV AC Charger

Level 2



Product Overview

The NA EV AC Charger featuring SAE J1772 Type 1 Plug and optional NACS, provides efficient, high-performance charging solutions for commercial applications. With fast charging, seamless integration, and advanced safety features, it ensures reliable operations and optimal service for operators.

Product Advantages

Versatile Connector Options

Offers Type 1 and NACS connectors, ensuring compatibility with diverse EV models.

High Reliability

Multiple electrical safety protections, UV-resistant and anti-aging materials, PC+ASA material.

High protocol compatibility

Supports full-stack OCPP 1.6J and OCPP 2.0.1, Validated by major European and U.S. charging operators (CPOs).

High Expandability

Supports RS485 for dynamic load balancing, solar integration, and Ethernet connectivity.



UNR1-T

- Up to 48A, optional 40A/48A
- SAE J1772 Type 1 Plug
- Smart app control via Wi-Fi or Bluetooth
- Wireless config and Bluetooth maintenance



UNR1-N

- Up to 48A, optional 40A/48A
- IP66, IK10 for ultimate protection
- Smart app control via Wi-Fi or Bluetooth
- NACS connector



UN1-A48

- Up to 48A, optional 32A/40A/48A
- SAE J1772 Type 1 Plug, NACS Optional
- Dynamic load balancing Management
- Self-developed for superior electrical safety



UN2-A48

- Up to 48A, optional 32A/40A/48A
- OCPP1.6J/OCPP2.0.1/ISO15118
- Multiple communication methods
- Smart power management



UN1-A80

- Up to 80A, optional 70A/80A
- Protection IP65, IK08
- SAE J1772 Type 1 Plug, NACS Optional
- High compatibility charging protocol



UN2-A80

- Up to 80A, optional 70A/80A
- OCPP1.6J/OCPP2.0.1/ISO15118
- WEB Portal configuration tool
- Lower standby power through intelligent wake-up

NA EV AC Charger Level 2



Core Advantages

Broad range of connectivity options



Connectivity via WiFi, RS485, Bluetooth and LAN optional, enabling real-time monitoring and management.

Multiple Charging Start Methods



Multiple charging start Methods: Plug&Play, RFID Card, APP.

All-in-One Charging Solution



Integrated charging station, app, and platform solution to optimize overall investment.

Dynamic Load Balancing Solutions



The optional CT-Clamp and CT-BOX integrate easily to dynamically adjust current balancing load and preventing overload.



High Compatibility Charging Protocol

Achieved OCPP1.6J & OCPP2.0.1, inspected by leading European/American CPO for protocol compatibility.



Smart Power Management

This design cut electricity bills, and lower energy expenses by 60%.



Comprehensive Safety Protections

Includes built-in features like over-voltage, over-current, and short-circuit protection for secure operation.



Leading ISO15118 Application

First in the industry to achieve ISO15118 compliance and TÜV certification for AC chargers.



Leading Cyber security System

Closed-loop security system with ECDSA P-256, SHA256, AES256 for authentication, encryption, and integrity.

Dynamic load balancing Management

Our Multi-Chargers Dynamic Load Balancing offers a smart, solution to managing energy across multiple EV chargers. It efficiently regulates electrical supply to all charging stations, preventing grid overload and the need for expensive electrical panel upgrades.

✓ Optimize power distribution:

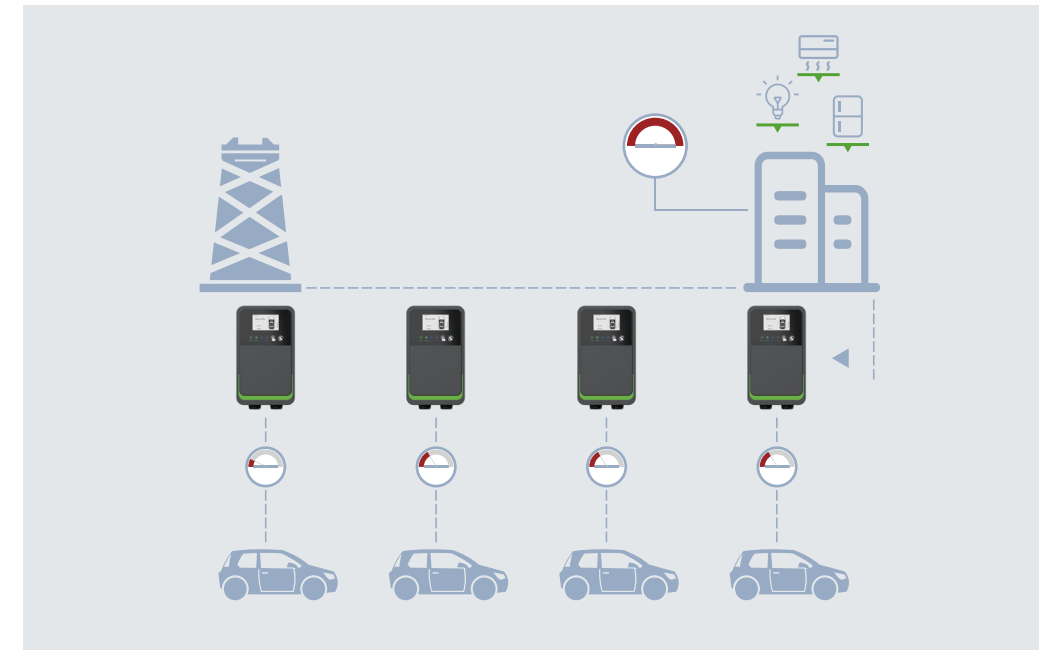
Enhance the overall efficiency and effectiveness of the charging infrastructure. Ensure efficient charging of multiple vehicles simultaneously with existing circuit capacity.

✓ Avoid costly grid upgrades:

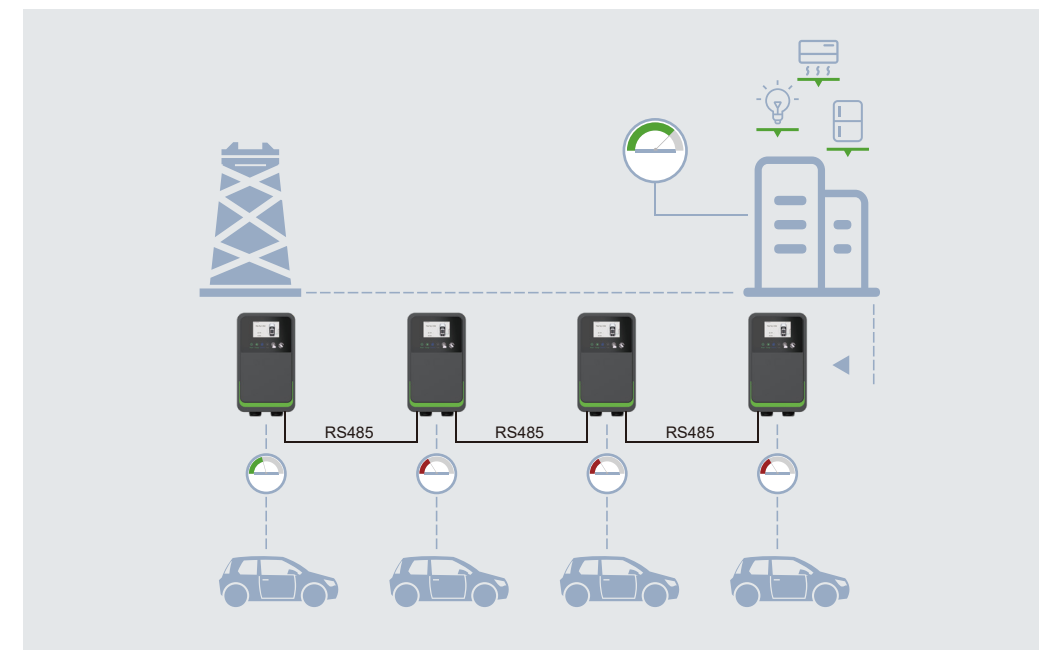
Eliminate the necessity for expensive electrical panel upgrades. Help avoid costs by maximizing charging efficiency without increasing energy consumption.

✓ Protect grid connection:

Make sure that set power limits are never surpassed. Ensure each charging station receives adequate power without overloading the circuit.



Without Dynamic Load Balancing Management



With Dynamic Load Balancing Management

Cyber Security

ULandpower Cyber Security supports a comprehensive closed-loop security system, incorporating identity authentication, data and firmware integrity verification, and data encryption using advanced algorithms such as ECDSA P-256, SHA-256, and AES-256.



✓ Ensuring Service Continuity:

Effectively preventing and responding to cyber attacks ensures the stable operation of charging equipment, reducing downtime and service interruptions, thus improving user experience.

✓ Protecting User Privacy and Data:

Ensuring the security of users' charging records, payment information, and personal data, reducing legal and financial risks associated with data breaches.

✓ Compliance and Standardization:

Meeting industry regulations and security standards to avoid fines and legal actions due to non-compliance, ensuring the legitimacy and competitiveness of enterprises in the market.

Excellent protocol compatibility

✓ OCPP 1.6J:

Independently implements full-stack OCPP 1.6J successfully connected with mainstream CPO platforms such as ChargeLab, Ampup, AMPECO and Noodoe.

✓ OCPP 2.0.1:

Completed the implementation of OCPP 2.0.1, and is connecting to the CPO platform.

✓ ISO 15118:

Fully supports ISO 15118-2 standard and supports P&C function.

UR EV AC Charger

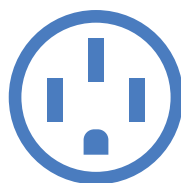
Type 1 Level 2



40A / 48A



Type 1 Plug



NEMA 14-50



Model Selection

Models-UNR1(Type 1)

Model No.	UNR1-A40T	UNR1-A48T	UNR1Pro-A40T	UNR1Pro-A48T
				
ELECTRICAL SPECIFICATION				
Input Connector	NEMA,Hardwired Optional	Hardwired	NEMA,Hardwired Optional	Hardwired
Voltage	208/240V, 180 to 264 VAC		208/240V, 180 to 264 VAC	
Amperage/Power Output	40A/9.6KW	48A/11.5KW	40A/9.6KW	48A/11.5KW
Energy Metering Accuracy	±1%		±1%	
Mounting Option	Wall or Pedestal mount, Pedestal Optional		Wall or Pedestal mount, Pedestal Optional	
CHARGING INTERFACE				
Charging Connector	SAE J1772 Type 1 Plug		SAE J1772 Type 1 Plug	
Charging Cable Length	25ft Standard		25ft Standard	
USER INTERACTION				
LED Status Indicator	CHARGING/CONNECT/FAULT status indication		CHARGING/CONNECT/FAULT status indication	
Resetting key	Reset or restore factory Settings		Reset or restore factory Settings	
Authentication	RFID: ISO14443 Type A&B		RFID: ISO14443 Type A&B	
Remote control	U-Charger APP		U-Charger APP	
COMMUNICATION				
Network Interface	WiFi/BT Standard		WiFi/BT Standard,LAN Optional	
Charging Protocol	OCPP1.6J optional		OCPP1.6J optional	
Extend	Without		1*RS485,CT-CLAMP Optional	
SAFETY & COMPLIANCE				
Safety Protection	Ground Fault Detection: CCID20,Ground Monitor: UL2231, Surge Protection:6kV @2,000A			
Protection	UVP, OVP, OCP, OTP, Control Pilot Fault Protection, Relay-sticking protection, Ground Fault Protection			
Safety Compliance	UL 2594/CSA C22.2 No.280-16UL 2231-1 /C\$A C22 2 No. 281.1-12.UL 2231-2/C5A C22 2 No.281.2-12			
Certiffcation	ETL/FCC/EnergyStar		ETL/FCC/EnergyStar	
ENVIRONMENTAL				
Operating Temperature	-30 ℃ ~ 55 ℃		-30 ℃ ~ 55 ℃	
Operating Humidity	5%~95% RH,Non-condensing		5%~95% RH,Non-condensing	
Operating Altitude	≤2000m,No Derating		≤2000m,No Derating	
IP/IK Level	IP66/IK10		IP66/IK10	
SPECIFICATION				
Net Weight	6.5KG	7.4KG	6.5KG	7.4KG
Gross Weight	9.9KG	10.8KG	9.9KG	10.8KG
Product Dimensions	220W*220D*101.5H(mm)		220W*220D*101.5H(mm)	
Package Dimensions	395W*375D*295H(mm)		395W*375D*295H(mm)	

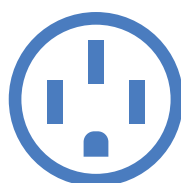
UR EV AC Charger
NACS Level 2



40A / 48A



NACS Plug



NEMA 14-50



Model Selection
Models-UNR1(NACS)

Model No.	UNR1-A40N	UNR1-A48N	UNR1Pro-A40N	UNR1Pro-A48N
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ELECTRICAL SPECIFICATION				
Input Connector	NEMA,Hardwired Optional		Hardwired	
Voltage	208/240V, 180 to 264 VAC		208/240V, 180 to 264 VAC	
Amperage/Power Output	40A/9.6KW	48A/11.5KW	40A/9.6KW	48A/11.5KW
Energy Metering Accuracy	±1%		±1%	
Mounting Option	Wall or Pedestal mount, Pedestal Optional		Wall or Pedestal mount, Pedestal Optional	
CHARGING INTERFACE				
Charging Connector	NACS Plug		NACS Plug	
Charging Cable Length	25ft Standard		25ft Standard	
USER INTERACTION				
LED Status Indicator	CHARGING/CONNECT/FAULT status indication		CHARGING/CONNECT/FAULT status indication	
Resetting key	Reset or restore factory Settings		Reset or restore factory Settings	
Authentication	RFID: ISO14443 Type A&B		RFID: ISO14443 Type A&B	
Remote control	U-Charger APP		U-Charger APP	
COMMUNICATION				
Network Interface	WiFi/BT Standard		WiFi/BT Standard,LAN Optional	
Charging Protocol	OCPP1.6J optional		OCPP1.6J optional	
Extend	Without		1*RS485,CT-CLAMP Optional	
SAFETY & COMPLIANCE				
Safety Protection	Ground Fault Detection: CCID20,Ground Monitor: UL2231, Surge Protection:6kV @2,000A			
Protection	UVP, OVP, OCP, OTP, Control Pilot Fault Protection, Relay-sticking protection, Ground Fault Protection			
Safety Compliance	UL 2594/CSA C22.2 No.280-16UL 2231-1 /C\$A C22 2 No. 281.1-12.UL 2231-2/C5A C22 2 No.281.2-12			
Certiffcation	ETL/FCC/EnergyStar		ETL/FCC/EnergyStar	
ENVIRONMENTAL				
Operating Temperature	-30 C ~ 55 C		-30 C ~ 55 C	
Operating Humidity	5%~95% RH,Non-condensing		5%~95% RH,Non-condensing	
Operating Altitude	≤2000m,No Derating		≤2000m,No Derating	
IP/IK Level	IP66/IK10		IP66/IK10	
SPECIFICATION				
Net Weight	6.5KG	7.4KG	6.5KG	7.4KG
Gross Weight	9.9KG	10.8KG	9.9KG	10.8KG
Product Dimensions	220W*220D*101.5H(mm)		220W*220D*101.5H(mm)	
Package Dimensions	395W*375D*295H(mm)		395W*375D*295H(mm)	



UN EV AC Charger
Type 1 Level 2



32A/40A/48A/80A



SAE J1772



Warranty 3 Years



Model Selection
Models-UN1(Pro)-T

Model No.	UN1-A32T	UN1-A40T	UN1-A48T	UN1-A80T	UN1Pro-A32T	UN1Pro-A40T	UN1Pro-A48T	UN1Pro-A80T
								
ELECTRICAL SPECIFICATION								
Input Connector	Hardwired				Hardwired			
Voltage	208/240V, 180 to 264 VAC				208/240V, 180 to 264 VAC			
Amperage/Power Output	32A/7.6KW	40A/9.6KW	48A/11.5KW	80A/19.2KW	32A/7.6KW	40A/9.6KW	48A/11.5KW	80A/19.2KW
Energy Metering Accuracy	±1%				±1%			
Mounting Option	Wall or Pedestal mount, Pedestal Optional				Wall or Pedestal mount, Pedestal Optional			
CHARGING INTERFACE								
Charging Connector	SAE J1772 Type 1 Plug				SAE J1772 Type 1 Plug			
Charging Cable Length	5m Standard, 7m Optional				5m Standard, 7m Optional			
USER INTERACTION								
Display	Segmented display				Segmented display			
LED Status Indicator	POWER/CHARGING/CONNECT/FAULT status indication				POWER/CHARGING/CONNECT/FAULT status indication			
Touch Button	Wake up the device from sleep				Wake up the device from sleep			
Authentication	RFID:ISO14443 Type A&B				RFID:ISO14443 Type A&B			
COMMUNICATION								
Network Interface	LAN and WiFi/BT Standard, 4G Optional				LAN and WiFi/BT Standard, 4G Optional			
Charging Protocol	OCPP1.6J				OCPP1.6J/OCPP2.0.1			
ISO15118	No support				Optional(support ISO15118 EIM, Plug & Charge)			
RS485	1*RS485 (2*RS485 optional)				1*RS485 (2*RS485 optional)			
Config Tool	Web Portal over LAN or WiFi				Web Portal over LAN or WiFi			
Debug Tool	Wireless debug over BT				SSH over LAN			
SAFETY & COMPLIANCE								
Ground Fault Detection	CCID20				CCID20			
Ground Monitor	UL2231				UL2231			
Surge Protection	6kV @3,000A				6kV @3,000A			
Protection	UVP(UnderVoltage),OVP(OverVoltage),OCP(OverCurrent),OTP(OverTemp),Control Pilot Fault Protection,Relay-sticking protection,Ground Fault Protection,O-PEN Protection							
Safety Compliance	UL 2594 / CSA C22.2 No. 280-16,UL 2231-1 / CSA C22.2 No. 281.1-12,□UL 2231-2 / CSA C22.2 No. 281.2-12							
Certiffcation	ETL/FCC/EnergyStar				ETL/FCC/EnergyStar			
ENVIRONMENTAL								
Operating Temperature	-30℃ ~ 55℃		-30℃ ~ 50℃		-30℃ ~ 55℃		-30℃ ~ 50℃	
Operating Humidity	5%~95% RH,Non-condensing				5%~95% RH,Non-condensing			
Operating Altitude	≤2000m,No Derating				≤2000m,No Derating			
IP/IK Level	IP65/IK08				IP65/IK08			



Models-UN2(Pro)-T

Model No.	UN2-A32T	UN2-A40T	UN2-A48T	UN2-A80T	UN2Pro-A32T	UN2Pro-A40T	UN2Pro-A48T	UN2Pro-A80T
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ELECTRICAL SPECIFICATION									
Input Connector		Hardwired				Hardwired			
Voltage		208/240V, 180 to 264 VAC				208/240V, 180 to 264 VAC			
Amperage/Power Output		32A/7.6KW	40A/9.6KW	48A/11.5KW	80A/19.2KW	32A/7.6KW	40A/9.6KW	48A/11.5KW	80A/19.2KW
Energy Metering Accuracy		±1%				±1%			
Mounting Option		Wall or Pedestal mount, Pedestal Optional				Wall or Pedestal mount, Pedestal Optional			
CHARGING INTERFACE									
Charging Connector		SAE J1772 Type 1 Plug				SAE J1772 Type 1 Plug			
Charging Cable Length		5m Standard, 7m Optional				5m Standard, 7m Optional			
USER INTERACTION									
Display		4.3"color LCD, 480 x 272				4.3"color LCD, 800 x 480 Support OTA display UI			
LED Status Indicator		POWER/CHARGING/CONNECT/FAULT status indication				POWER/CHARGING/CONNECT/FAULT status indication			
Touch Button		Wake up the device from sleep				Wake up the device from sleep			
Authentication		RFID:ISO14443 Type A&B				RFID:ISO14443 Type A&B			
COMMUNICATION									
Network Interface		LAN and WiFi/BT Standard, 4G Optional				LAN and WiFi/BT Standard, 4G Optional			
Charging Protocol		OCPP1.6J				OCPP1.6J/OCPP2.0.1			
ISO15118		No support				Optional(support ISO15118 EIM, Plug & Charge)			
RS485		1*RS485 (2*RS485 optional)				1*RS485 (2*RS485 optional)			
Config Tool		Web Portal over LAN or WiFi				Web Portal over LAN or WiFi			
Debug Tool		Wireless debug over BT				SSH over LAN			
SAFETY & COMPLIANCE									
Ground Fault Detection		CCID20				CCID20			
Ground Monitor		UL2231				UL2231			
Surge Protection		6kV @3,000A				6kV @3,000A			
Protection		UVP(UnderVoltage),OVP(OverVoltage),OCP(OverCurrent),OTP(OverTemp),Control Pilot Fault Protection,Relay-sticking protection,Ground Fault Protection,O-PEN Protection							
Safety Compliance		UL 2594 / CSA C22.2 No. 280-16,UL 2231-1 / CSA C22.2 No. 281.1-12,□UL 2231-2 / CSA C22.2 No. 281.2-12							
Certiffcation		ETL/FCC/EnergyStar				ETL/FCC/EnergyStar			
ENVIRONMENTAL									
Operating Temperature		-30℃ ~ 55℃		-30℃ ~ 50℃		-30℃ ~ 55℃		-30℃ ~ 50℃	
Operating Humidity		5%~95% RH,Non-condensing				5%~95% RH,Non-condensing			
Operating Altitude		≤2000m,No Derating				≤2000m,No Derating			
IP/IK Level		IP65/IK08				IP65/IK08			

UN EV AC Charger
NACS Level 2



32A/40A/48A/80A



NACS Plug



Warranty 3 Years



Model Selection

Models-UN1(Pro)-N

Model No.	UN1-A32N	UN1-A40N	UN1-A48N	UN1-A80N	UN1Pro-A32N	UN1Pro-A40N	UN1Pro-A48N	UN1Pro-A80N
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ELECTRICAL SPECIFICATION								
Input Connector			Hardwired			Hardwired		
Voltage			208/240V, 180 to 264 VAC			208/240V, 180 to 264 VAC		
Amperage/Power Output		32A/7.6KW	40A/9.6KW	48A/11.5KW	80A/19.2KW	32A/7.6KW	40A/9.6KW	48A/11.5KW 80A/19.2KW
Energy Metering Accuracy		±1%			±1%			
Mounting Option		Wall or Pedestal mount, Pedestal Optional			Wall or Pedestal mount, Pedestal Optional			
CHARGING INTERFACE								
Charging Connector			NACS Plug			NACS Plug		
Charging Cable Length			5m Standard, 7m Optional			5m Standard, 7m Optional		
USER INTERACTION								
Display			Segmented display			Segmented display		
LED Status Indicator		POWER/CHARGING/CONNECT/FAULT status indication			POWER/CHARGING/CONNECT/FAULT status indication			
Touch Button			Wake up the device from sleep			Wake up the device from sleep		
Authentication			RFID:ISO14443 Type A&B			RFID:ISO14443 Type A&B		
COMMUNICATION								
Network Interface		LAN and WiFi/BT Standard, 4G Optional			LAN and WiFi/BT Standard, 4G Optional			
Charging Protocol			OCPP1.6J			OCPP1.6J/OCPP2.0.1		
ISO15118			No support			Optional(support ISO15118 EIM, Plug & Charge)		
RS485			1*RS485 (2*RS485 optional)			1*RS485 (2*RS485 optional)		
Config Tool			Web Portal over LAN or WiFi			Web Portal over LAN or WiFi		
Debug Tool			Wireless debug over BT			SSH over LAN		
SAFETY & COMPLIANCE								
Ground Fault Detection			CCID20			CCID20		
Ground Monitor			UL2231			UL2231		
Surge Protection			6kV @3,000A			6kV @3,000A		
Protection		UVP(UnderVoltage),OVP(OverVoltage),OCP(OverCurrent),OTP(OverTemp),Control Pilot Fault Protection,Relay-sticking protection,Ground Fault Protection,O-PEN Protection						
Safety Compliance		UL 2594 / CSA C22.2 No. 280-16,UL 2231-1 / CSA C22.2 No. 281.1-12,□UL 2231-2 / CSA C22.2 No. 281.2-12						
Certiffcation			ETL/FCC/EnergyStar			ETL/FCC/EnergyStar		
ENVIRONMENTAL								
Operating Temperature		-30℃ ~ 55℃		-30℃ ~ 50℃		-30℃ ~ 55℃		-30℃ ~ 50℃
Operating Humidity		5%~95% RH,Non-condensing			5%~95% RH,Non-condensing			
Operating Altitude		≤2000m,No Derating			≤2000m,No Derating			
IP/IK Level		IP65/IK08			IP65/IK08			

Models-UN2(Pro)-N

Model No.	UN2-A32N	UN2-A40N	UN2-A48N	UN2-A80N	UN2Pro-A32N	UN2Pro-A40N	UN2Pro-A48N	UN2Pro-A80N
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ELECTRICAL SPECIFICATION									
Input Connector		Hardwired				Hardwired			
Voltage		208/240V, 180 to 264 VAC				208/240V, 180 to 264 VAC			
Amperage/Power Output		32A/7.6KW	40A/9.6KW	48A/11.5KW	80A/19.2KW	32A/7.6KW	40A/9.6KW	48A/11.5KW	80A/19.2KW
Energy Metering Accuracy		±1%				±1%			
Mounting Option		Wall or Pedestal mount, Pedestal Optional				Wall or Pedestal mount, Pedestal Optional			
CHARGING INTERFACE									
Charging Connector		NACS Plug				NACS Plug			
Charging Cable Length		5m Standard, 7m Optional				5m Standard, 7m Optional			
USER INTERACTION									
Display		4.3"color LCD, 480 x 272				4.3"color LCD, 800 x 480 Support OTA display UI			
LED Status Indicator		POWER/CHARGING/CONNECT/FAULT status indication				POWER/CHARGING/CONNECT/FAULT status indication			
Touch Button		Wake up the device from sleep				Wake up the device from sleep			
Authentication		RFID:ISO14443 Type A&B				RFID:ISO14443 Type A&B			
COMMUNICATION									
Network Interface		LAN and WiFi/BT Standard, 4G Optional				LAN and WiFi/BT Standard, 4G Optional			
Charging Protocol		OCPP1.6J				OCPP1.6J/OCPP2.0.1			
ISO15118		No support				Optional(support ISO15118 EIM, Plug & Charge)			
RS485		1*RS485 (2*RS485 optional)				1*RS485 (2*RS485 optional)			
Config Tool		Web Portal over LAN or WiFi				Web Portal over LAN or WiFi			
Debug Tool		Wireless debug over BT				SSH over LAN			
SAFETY & COMPLIANCE									
Ground Fault Detection		CCID20				CCID20			
Ground Monitor		UL2231				UL2231			
Surge Protection		6kV @3,000A				6kV @3,000A			
Protection		UVP(UnderVoltage),OVP(OverVoltage),OCP(OverCurrent),OTP(OverTemp),Control Pilot Fault Protection,Relay-sticking protection,Ground Fault Protection,O-PEN Protection							
Safety Compliance		UL 2594 / CSA C22.2 No. 280-16,UL 2231-1 / CSA C22.2 No. 281.1-12,□UL 2231-2 / CSA C22.2 No. 281.2-12							
Certiffcation		ETL/FCC/EnergyStar				ETL/FCC/EnergyStar			
ENVIRONMENTAL									
Operating Temperature		-30℃ ~ 55℃		-30℃ ~ 50℃		-30℃ ~ 55℃		-30℃ ~ 50℃	
Operating Humidity		5%~95% RH,Non-condensing				5%~95% RH,Non-condensing			
Operating Altitude		≤2000m,No Derating				≤2000m,No Derating			
IP/IK Level		IP65/IK08				IP65/IK08			