

ASUS MAMS



ROADSIDE ALPR BOLLARD



ALPR



PAYMENT



OCCUPANCY
DETECTION





ALPR

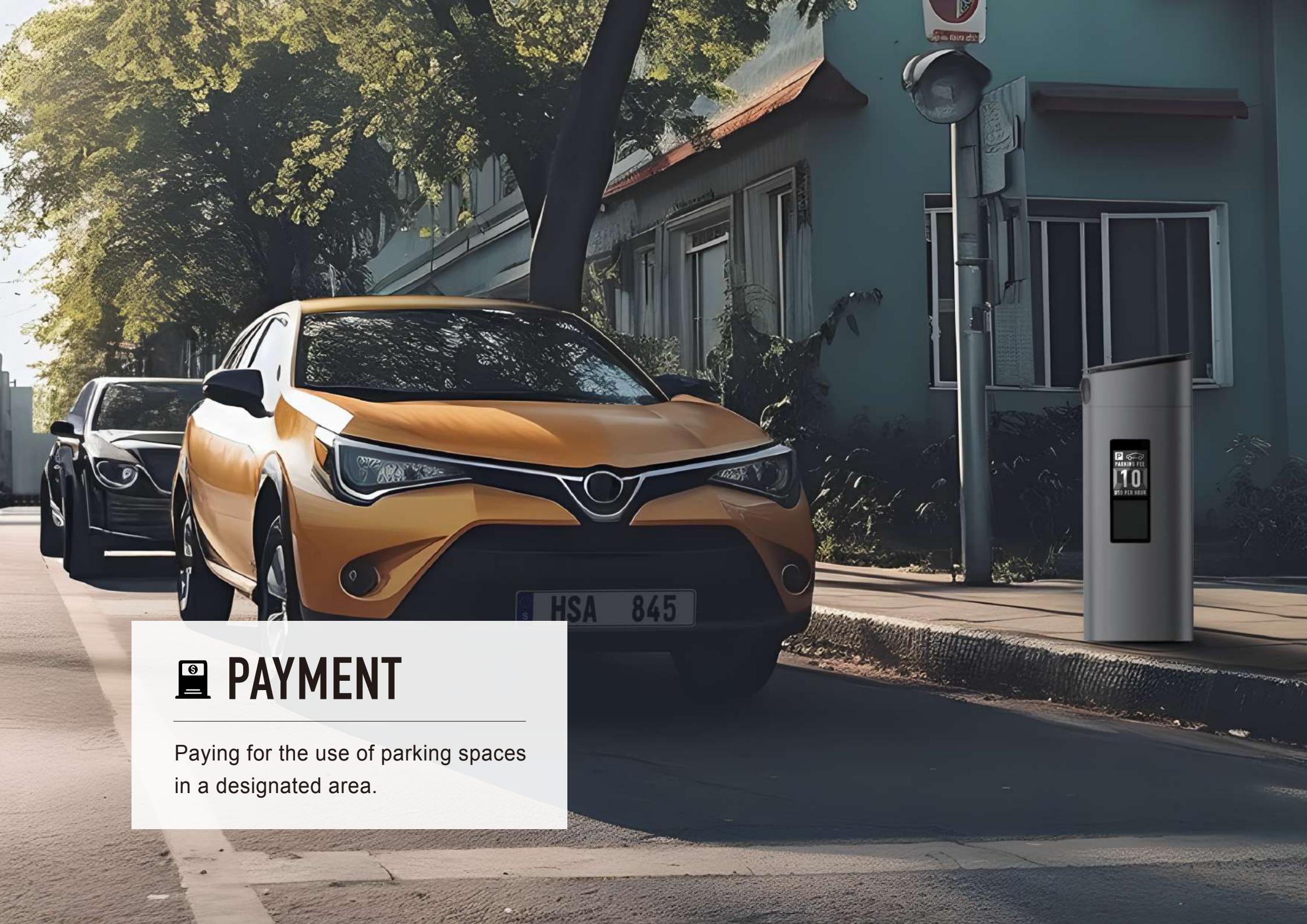
High-performance **Automatic License Plate Recognition** system.





OCCUPANCY DETECTION

Displaying different colored lights to guide drivers to available parking spaces.



PAYMENT

Paying for the use of parking spaces in a designated area.

FUNCTION



AUTOMATIC LICENSE PLATE RECOGNITION (ALPR) is a technology that uses optical character recognition on images to read vehicle license plates.



PAYMENT refers to the process of paying for the use of parking spaces in a designated area, including on-street parking spaces and public parking lot.



OCCUPANCY DETECTION utilize sensors, cameras, or other technologies to determine if a space is occupied by people.



ROADSIDE ALPR BOLLARD
AM-M-01A(DC) / AM-M-02A(AC)

SPECIFICATION



ROADSIDE ALPR BOLLARD
AM-M-01A(DC) / AM-M-02A(AC)

SIZE	AM-M-01A(DC)	AM-M-02A(AC)
Dimension (WxDxH)	29 X 27.5 X 79 cm	
ELECTRICAL		
AC Input Rating	AC 90~240V, 50 / 60Hz	
DC Input Rating	DC +40 ~ +50V	
License Plate Recognition Accuracy	> 99%	
LED Indicators	7 colors	
Network Interface	4G LTE Cat.4 / RJ45 1 Gbps ethernet	
NFC	Supports NFC unlock for maintenance	
ENVIRONMENT		
Operation Temperature	-20°C ~ +70°C	
Operation Humidity	10% ~ 95% relative humidity, non-condensing	

SPECIFICATION



CAMERA	AM-M-01A(DC)	AM-M-02A(AC)
Number Of Cameras	1	
Field Of View	D:94.7° / H:80.2° / V:43°	
Camera Pixels	2M pixels	
Resolution	1920 x 1080 pix	
File Formats	JPEG	
Monitored Spaces	1	
OPTIONAL		
E-Paper	E-paper for real-time parking fees	



ROADSIDE ALPR BOLLARD
AM-M-01A(DC) / AM-M-02A(AC)

HARDWARE

	ITEM	DESCRIPTION	AM-M-01A(DC)	AM-M-02A(AC)
STANDARD	4G LTE Network Access	4G LTE internet access.	V	—
	LED Indication	8-Colors LED indication for specific condition.	V	V
	2MP Camera Module	2MP camera module for automatic license plate recognition	V	V
	NFC-Based Locker For Maintenance	NFC-based locker for maintenance.	V	V
	Key-Based Locker For Maintenance	Key-based locker for maintenance.	V	V
	Battery Level Detection	Battery level detection.	V	—
	Operational Temperature Monitoring	Internal temperature measurement.	V	V
	DC Battery Power Supply	Gogoro battery DC power supply.	V	—
	AC Power Supply	AC power supply.	—	V
	Aluminum Alloy Casing	High-strength aluminum alloy casing / passed IK10 impact test.	V	V
OPTIONAL	Enclosure Wrapping	The casing can be customized with patterns according to requirements.	⊙	⊙

V Standard

⊙ Optional

— Not available

SOFTWARE

	ITEM	DESCRIPTION	AM-M-01A(DC)	AM-M-02A(AC)
STANDARD	Device API	Integration of the device with customer systems via API.	V	V
	Bollard API	Device health, live video, vehicle entry and exit information.	V	V
OPTIONAL	Frontend LPR	Device with built-in LPR engine for vehicle entry and exit determination.	⊙	⊙
	Backend LPR	Determining vehicle entry and exit through cloud-based LPR engine.	⊙	⊙
	OTA Updates	Over-the-air firmware updates.	⊙	⊙
	Cyclic Recording	Video recording storage, accessible for retrieval at any time.	—	⊙
	Smoke And Flame Detection	Automatic alerting for smoke and flames.	—	⊙
	Sentry Mode	Proactive notification of anomalies.	—	⊙
	In-Vehicle Detection System	Parking record of parking spaces and vehicles.	⊙	⊙
	Car Locating System	Querying the parking location of vehicles.	⊙	⊙
	Parking Space Display System	Displaying the number of available parking spaces.	⊙	⊙

V Standard

⊙ Optional

— Not available



ALL-IN-ONE EV CHARGER



ALPR



PAYMENT



OCCUPANCY
DETECTION



EV
CHARGING



INDICATOR
LIGHT



ALPR

High-performance **Automatic License Plate Recognition** system.



PAYMENT

Paying for the use of parking spaces in a designated area.



OCCUPANCY DETECTION

Displaying different colored lights to guide drivers to available parking spaces.





EV CHARGING

Supplying electrical energy to electric vehicles (EVs) to recharge their batteries.



INDICATOR LIGHT

Provide feedback about the status or condition of charger.



EV CHARGER / 11 KW



CARDLESS
UNLOCK



EMS



PAYMENT

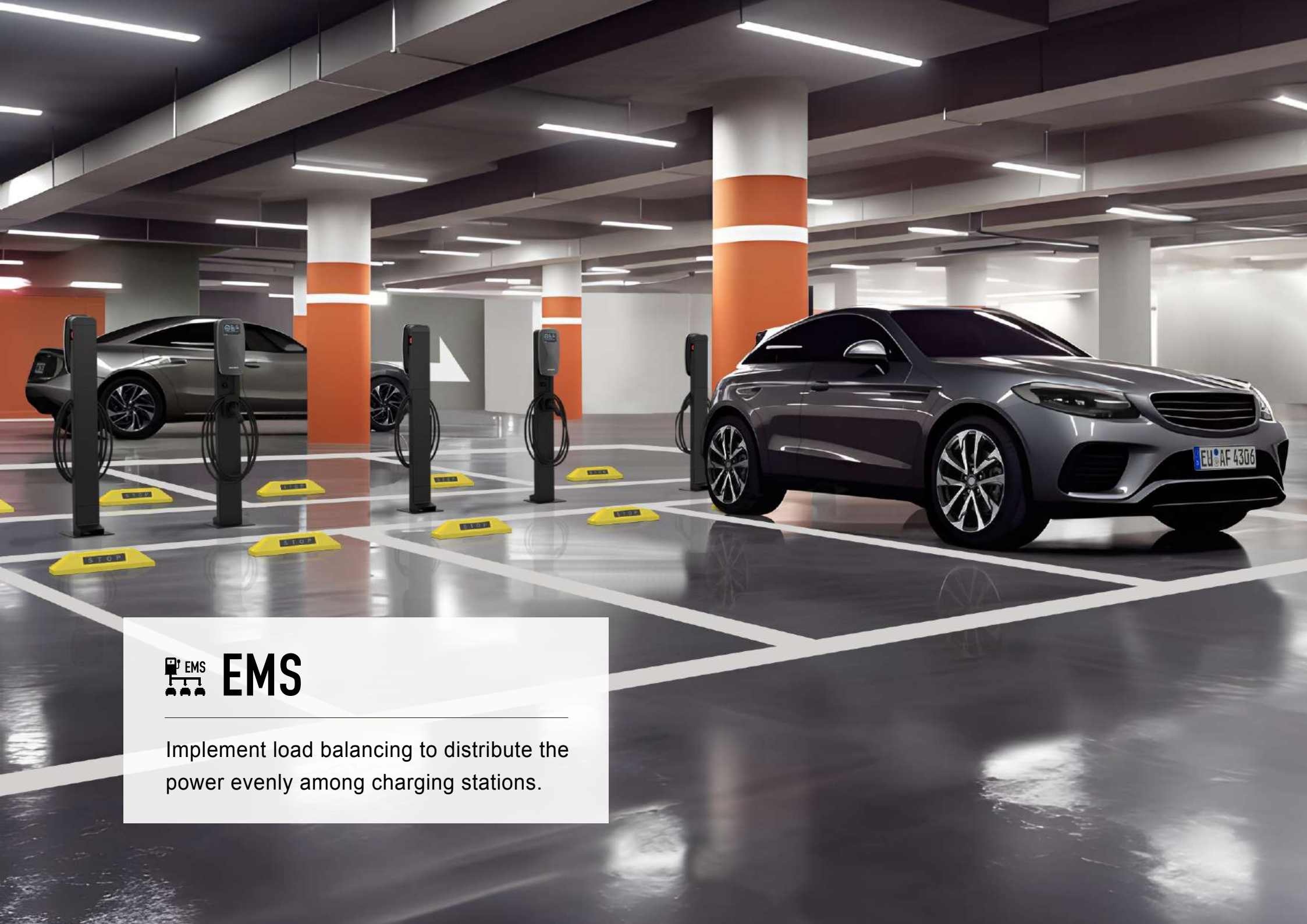


EV
CHARGING



CARDLESS UNLOCK

Unlocking or accessing a device without the use of physical access cards.



EMS

Implement load balancing to distribute the power evenly among charging stations.

FUNCTION



AUTOMATIC LICENSE PLATE RECOGNITION (ALPR) is a technology that uses optical character recognition on images to read vehicle license plates.



PAYMENT refers to the process of paying for the use of parking spaces in a designated area, including on-street parking spaces and public parking lot.



OCCUPANCY DETECTION utilize sensors, cameras, or other technologies to determine if a space is occupied by people.



EV CHARGING refers to the process of supplying electrical energy to electric vehicles (EVs) to recharge their batteries.



INDICATOR LIGHT provide users with quick and easily understandable feedback about the status or condition of a system



ALL-IN-ONE EV CHARGER
AM-P-01A

FUNCTION



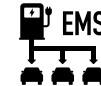
**EV CHARGER
AM-P-02A**



**EV CHARGER
AM-P-03A**



CARDLESS UNLOCK is a method of unlocking or accessing a system or device without the use of physical access cards.



ENERGY MANAGEMENT SYSTEM (EMS) implement load balancing to distribute the power evenly among charging stations, when multiple EVs are charging simultaneously, Users may schedule charging sessions.



PAYMENT refers to the process of paying for the use of parking spaces in a designated area, including on-street parking spaces and public parking lot.



EV CHARGING refers to the process of supplying electrical energy to electric vehicles (EVs) to recharge their batteries.

SPECIFICATION



ALL-IN-ONE EV CHARGER
AM-P-01A

SIZE	AM-P-01A
Dimension (WxDxH)	36 X 27.5 X 140 cm
Charging Cable Length	5.3 m
DISPLAY PANEL	
Resolution	1024 X 600 pix
Brightness	1000 nits
Dimension	15.7 X 9 cm
Input	PCAP multi-touch
REGULATION	
Charging Connector	SAE J1772 Type 1
Certification Compliance	CNS 15511-1 (Safety), CNS 15511-21-2 (EMC)
COMMUNICATION	
Protocol	OCPP 1.6 JSON

SPECIFICATION



ALL-IN-ONE EV CHARGER
AM-P-01A

PROTECTION	AM-P-01A
Leakage Current Protection	RCD Type A (30mA)
Input	UVP, OVP, Surge protection, Ground fault
Output	OCP, Control pilot fault, Residual current protection
Internal	Over temperature, relay welding detection, MCU error detection
ELECTRICAL	
AC Input Rating	Single phase, 220+/-10%, VAC, 50 / 60Hz
Wire Connection	L1 / L2 / PE or L / N / PE
Max. Input Current	48A
AC Output Power	11.5KW (Max.)
Network Interface	ethernet

SPECIFICATION



ENVIRONMENT	AM-P-01A
Operation Temperature	-30°C ~ +50°C
Storage Temperature	-40°C ~ +80°C
Humidity	< 95% relative humidity, non-condensing
Altitude	< 2000m
Cooling System	Passive
CAMERA	
Camera Specification	2MP camera with automatic license plate recognition
License Plate Recognition Accuracy	> 99%
Coverage	1 parking space



ALL-IN-ONE EV CHARGER
AM-P-01A

SPECIFICATION



**EV CHARGER
AM-P-02A**



**EV CHARGER
AM-P-03A**

SIZE	AM-P-02A	AM-P-03A
Dimension (WxDxH)	18 X 10 X 38 cm	18 X 10 X 38 cm
Charging Cable Length	5.3 m	

DISPLAY PANEL

Resolution	800 X 600 pix	No LCD Panel
Brightness	300 nits	No LCD Panel
Dimension	10.8 X 8.5 cm	No LCD Panel

REGULATION

Charging Connector	SAE J1772 Type 1	
Certification Compliance	CNS 15511-1 (Safety), CNS 15511-21-2 (EMC)	

COMMUNICATION

Protocol	OCPP 1.6 JSON	
----------	---------------	--

SPECIFICATION



**EV CHARGER
AM-P-02A**



**EV CHARGER
AM-P-03A**

PROTECTION	AM-P-02A	AM-P-03A
Leakage Current Protection	RCD Type A (30mA)	
Input	UVP, OVP, Surge protection, Ground fault	
Output	OCP, Control pilot fault, Residual current protection	
Internal	Over temperature, relay welding detection, MCU error detection	
ELECTRICAL		
AC Input Rating	Single phase, 220+/-10%, VAC, 50 / 60Hz	
Wire Connection	L1 / L2 / PE or L / N / PE	
Max. Input Current	48A	
AC Output Power	11.5KW (Max.)	
Network Interface	WiFi / ethernet	

SPECIFICATION



**EV CHARGER
AM-P-02A**



**EV CHARGER
AM-P-03A**

ENVIRONMENT	AM-P-02A	AM-P-03A
Operation Temperature	-30°C ~ +50°C	
Storage Temperature	-40°C ~ +80°C	
Humidity	< 95% relative humidity, non-condensing	
Altitude	< 2000m	
Cooling System	Passive	
CAMERA		
Camera Specification	No Camera	
License Plate Recognition Accuracy	No Camera	
Coverage	No Camera	

HARDWARE

	ITEM	DESCRIPTION	AM-P-01A (ALL-IN-ONE)	AM-P-02A (DISPLAY)	AM-P-03A
STANDARD	Ethernet Network Access	Ethernet internet access.	V	V	V
	WiFi Network Access	WiFi internet access.	—	V	V
	LED Indication	8-Colors LED indication for specific condition.	V	V	V
	5" LCD Screen	5" colored LED display.	—	V	—
	7" LCD Screen	7" colored LED display with touch input.	V	—	—
	2MP Camera Module	2MP camera module for automatic license plate recognition.	V	—	—
	NFC-based Charging	NFC-based charging.	—	V	V

V Standard

© Optional

— Not available

HARDWARE

	ITEM	DESCRIPTION	AM-P-01A (ALL-IN-ONE)	AM-P-02A (DISPLAY)	AM-P-03A
STANDARD	Operational Temperature Monitoring	Internal temperature measurement.	V	—	—
	AC Power Supply	AC power supply.	V	V	V
	J1772 Charge Plug (5m wire)	SAE J1772 AC charge plug (5m wire).	V	V	V
	Aluminum Alloy Casing	High-strength aluminum alloy casing / passed IK10 impact test.	V	—	—
OPTIONAL	J1772 Charge Plug (7m wire)	SAE J1772 AC charge plug (7m wire).	⊙	⊙	⊙
	Holster	Holster for charge plug.	⊙	⊙	⊙
	Enclosure Wrapping	The casing can be customized with patterns according to requirements.	⊙	⊙	⊙

V Standard

⊙ Optional

— Not available

SOFTWARE

	ITEM	DESCRIPTION	AM-P-01A (ALL-IN-ONE)	AM-P-02A (DISPLAY)	AM-P-03A
STANDARD	Device API	Integration of the device with customer systems via API.	V	V	V
	Charger API	Device health, charging control, charging progress.	V	V	V
	All-In-One Charger API	Device health, live video, vehicle entry and exit information, charging control, charging progress, fee inquiry, payment results.	V	—	—
OPTIONAL	Frontend LPR	Device with built-in LPR engine for vehicle entry and exit determination.	⊙	—	—
	OTA Updates	Over-the-air firmware updates.	⊙	⊙	⊙
	Cyclic Recording	Video recording storage, accessible for retrieval at any time.	⊙	—	—
	Smoke and Flame Detection	Automatic alerting for smoke and flames.	⊙	—	—

V Standard

⊙ Optional

— Not available

SOFTWARE

	ITEM	DESCRIPTION	AM-P-01A (ALL-IN-ONE)	AM-P-02A (DISPLAY)	AM-P-03A
OPTIONAL	Sentry Mode	Proactive notification of anomalies.	⊙	—	—
	Charging Station Management System	Manage charging stations, charging profiles, charging records, etc.	⊙	⊙	⊙
	CSMS - Member Module	Member management.	⊙	⊙	⊙
	CSMS - Billing Module	Configure billing rules & cost reports.	⊙	⊙	⊙
	CSMS - Smart Charging Module	Integrated LPR for charging locking feature.	⊙	⊙	⊙
	CSMS - Charging API	Offering charging APIs for customers to develop their own systems.	⊙	⊙	⊙
	CSMS - Billing API	Offering billing APIs for customers to develop their own systems.	⊙	⊙	⊙

V Standard

⊙ Optional

— Not available

SOFTWARE

	ITEM	DESCRIPTION	AM-P-01A (ALL-IN-ONE)	AM-P-02A (DISPLAY)	AM-P-03A
OPTIONAL	CSMS - Web	Providing a customized website for charging service usage.	◎	◎	◎
	CSMS - Web - Billing Module	Integrating third-party payment gateway for online payments.	◎	◎	◎
	CSMS - Web - E-Invoice Module	Integrating electronic invoice issuance service.	◎	◎	◎
	CSMS - APP	Providing a customized app for charging service usage.	◎	◎	◎
	Advertising management system	Manage Ad content on devices.	◎	—	—

V Standard

◎ Optional

— Not available



X SPOTTER



ALPR



IVS



OCCUPANCY
DETECTION



DUAL
CAMERAS



INDICATOR
LIGHT



AI 2.0



ASUS MAAS



ALPR

High-performance **ALPR** system for up to 8 vehicles.

4

1
2
3

5

6

7

8



IVS

Automating the process of monitoring,
and responding to events in real-time.



OCCUPANCY DETECTION

Displaying different colored lights to guide drivers to available parking spaces.

FUNCTION



X-SPOTTER
AM-H-02A / AM-H-02B



AUTOMATIC LICENSE PLATE RECOGNITION (ALPR) is a technology that uses optical character recognition on images to read vehicle license plates.



INTELLIGENCE VIDEO SURVEILLANCE SYSTEM (IVS) utilizes computer algorithms to analyze video feeds. To enhance the capabilities by automating the process of monitoring, and responding in real-time.



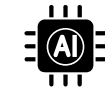
OCCUPANCY DETECTION utilize sensors, cameras, or other technologies to determine if a space is occupied by people.



DUAL CAMERAS can simultaneously identify vehicles on both sides of the parking lot, with a capacity to recognize up to eight vehicles.



INDICATOR LIGHT provide users with quick and easily understandable feedback about the status or condition of a system.



Combining Edge mode AI engine & Hyper mode **AI 2.0** computing power to rapidly and reliably recognize license plates.

SPECIFICATION



X-SPOTTER
AM-H-02A / AM-H-02B

SIZE	AM-H-02A	AM-H-02B
Dimension (WxDxH)	26 X 13.5 X 12 cm	
ELECTRICAL		
Supply Power	PoE 802.3at 25.5W(max)	
License Plate Recognition Accuracy	> 99%	
LED Indicators	7 colors (R, G, B, C, M, Y, W)	
Network Interface	RJ45 1 Gbps ethernet	
ENVIRONMENT		
Operation Temperature	-20°C ~ +70°C	
Operation Humidity	10% ~ 95% relative humidity, non-condensing	

SPECIFICATION



X-SPOTTER
AM-H-02A / AM-H-02B

CAMERA	AM-H-02A	AM-H-02B
Number Of Cameras	2	
Field Of View	D:121° / H:102° / V:54°	
Angle Of View	60° (Angle of depression)	
Camera Pixels	2M pixels	
Resolution	1920 x 1080 pix	
File Formats	JPEG	
Coverage	Max 6 parking spaces	Max 8 parking spaces

HARDWARE

	ITEM	DESCRIPTION	AM-H-02A	AM-H-02B
STANDARD	LED Indication	8-Colors LED indication for specific condition.	V	V
	2MP Camera Module	2MP camera module for automatic license plate recognition.	V	V
	Operational Temperature Monitoring	Internal temperature measurement.	V	V
	PoE Power Supply	PoE power supply.	V	V
	Aluminum Alloy Casing	High-strength aluminum alloy casing / Passed IK10 impact test.	V	V

V Standard

© Optional

— Not available

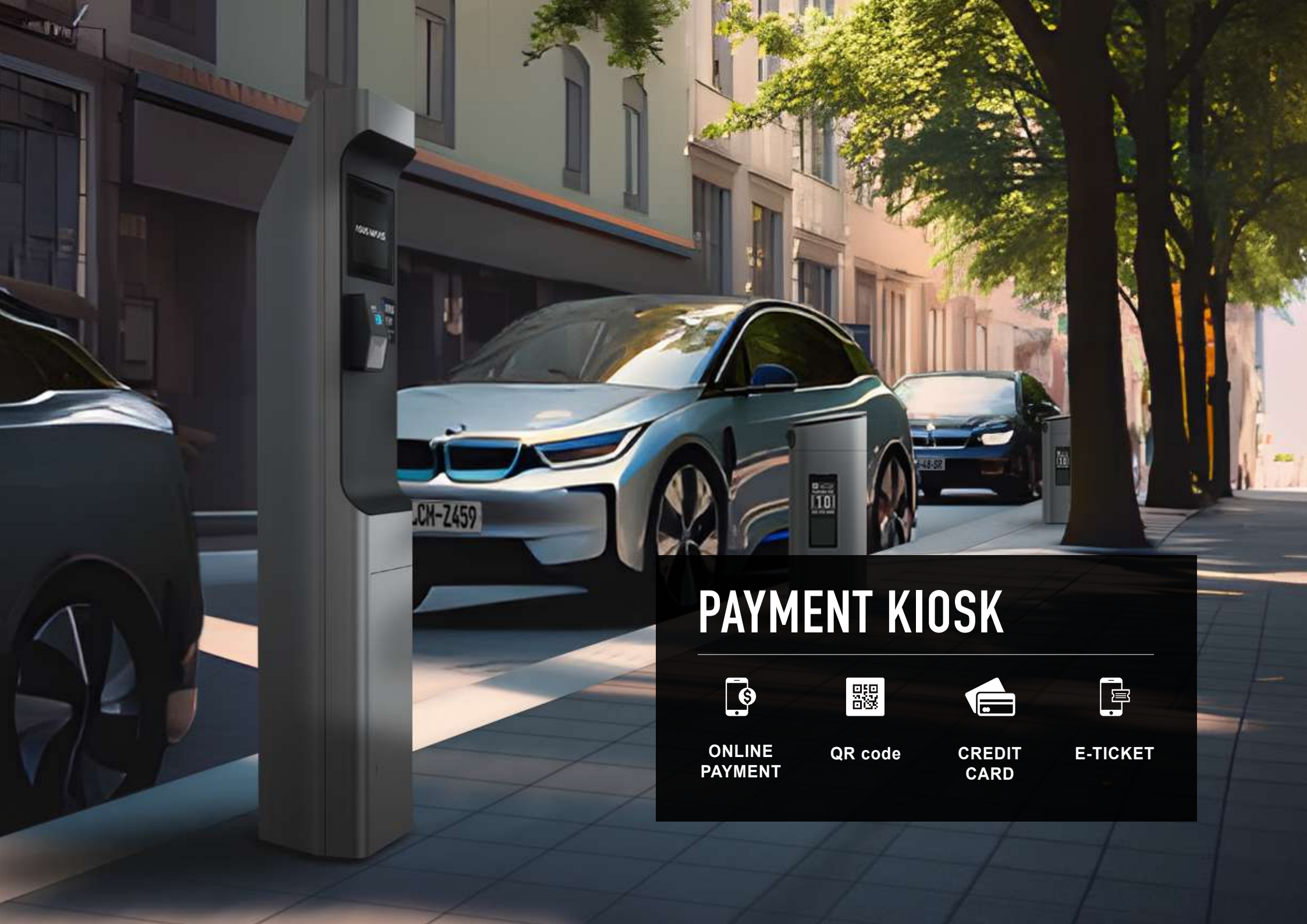
SOFTWARE

	ITEM	DESCRIPTION	AM-H-02A	AM-H-02B
STANDARD	Device API	Integration of the device with customer systems via API.	V	V
	X-Spotter API	Device health, live video, vehicle entry and exit information.	V	V
OPTIONAL	Frontend LPR	Device with built-in LPR engine for vehicle entry and exit determination.	⊙	⊙
	OTA Updates	Over-the-air firmware updates.	⊙	⊙
	Cyclic Recording	Video recording storage, accessible for retrieval at any time.	⊙	⊙
	Smoke And Flame Detection	Automatic alerting for smoke and flames.	⊙	⊙
	Sentry Mode	Proactive notification of anomalies.	⊙	⊙
	In-Vehicle Detection System	Parking record of parking spaces and vehicles.	⊙	⊙
	Car Locating System	Querying the parking location of vehicles.	⊙	⊙
	Parking Space Display System	Displaying the number of available parking spaces.	⊙	⊙
	CSMS - Smart Charging Module	Integrated LPR for charging locking feature	⊙	⊙

V Standard

⊙ Optional

— Not available



PAYMENT KIOSK



ONLINE
PAYMENT



QR code



CREDIT
CARD



E-TICKET



MULTIPLE PAYMENT METHODS

Providing multiple payment methods offers flexibility to users, allowing them to choose the option that is most convenient or preferred for them.

ASUS MAAS

請輕觸螢幕
進行操作
Please tap the screen
to get started

FUNCTION



MULTIPLE PAYMENT METHODS

Including online payment, QR code, credit card and e-Ticket.

PAYMENT KIOSK
AM-C-02A(AC) / AM-C-02B(DC)

SPECIFICATION



PAYMENT KIOSK
AM-C-02A(AC) / AM-C-02B(DC)

SIZE	AM-C-02A(AC)	AM-C-02B(DC)
Dimension (WxDxH)	32 X 26 X 145 cm	
ELECTRICAL		
AC Input Rating	AC 90~240V, 50 / 60Hz	
DC Input Rating	DC +40 ~ +50V	
Network Interface	4G LTE Cat.4	
ENVIRONMENT		
Operation Temperature	-20°C ~ +70°C	
Operation Humidity	10% ~ 95% relative humidity, non-condensing	
DISPLAY PANEL		
Screen Size	10.1 inch	
Resolution	1920 x 1080 pix	
Brightness	1000 nits	
Diverse Payment: QR Code	Line Pay, Easy Wallet, Taiwan Pay, JKOPAY, E-Invoice Carrier	
Diverse Payment: NFC	EasyCard, iPass, Credit Card(VISA、Master、JBC)	
Input	PCAP multi-touch	

HARDWARE

	ITEM	DESCRIPTION	AM-C-02A(AC)	AM-C-02B(DC)
STANDARD	4G LTE Network Access	4G LTE internet access.	—	V
	10" LCD Screen	10" colored LED display with touch input.	V	V
	Key-Based Locker For Maintenance	Key-based locker for maintenance.	V	V
	Battery Level Detection	Battery level detection.	—	V
	DC Battery Power Supply	Gogoro battery DC power supply.	—	V
	AC Power Supply	AC power supply.	V	—
	Baked Enamel Casing		V	V
OPTIONAL	Enclosure Wrapping	The casing can be customized with patterns according to requirements.	◎	◎

V Standard

◎ Optional

— Not available

SOFTWARE

	ITEM	DESCRIPTION	AM-C-02A(AC)	AM-C-02B(DC)
STANDARD	Device API	Integration of the device with customer systems via API.	V	V
	Kiosk API	Device health, fee inquiry, payment results.	V	V
OPTIONAL	OTA Updates	Over-the-air firmware updates.	⊙	⊙
	Parking Management System (Off-Street Parking-Lots) - Payment Feature - Kiosk Payment	Kiosk for checking and paying parking fees.	⊙	⊙
	Advertising Management System	Manage Ad content on devices.	⊙	⊙

V Standard

⊙ Optional

— Not available



GATEWAY BOX



ALPR



PARKING LOT
GATEWAY
CONTROL SYSTEM

FUNCTION



**GATEWAY BOX
AM-W-01A**



AUTOMATIC LICENSE PLATE RECOGNITION (ALPR) is a technology that uses optical character recognition on images to read vehicle license plates.



PARKING LOT GATEWAY CONTROL SYSTEM can be raised or lowered to allow or restrict vehicles from entering or exiting the parking area.

SPECIFICATION



**GATEWAY BOX
AM-W-01A**

SIZE	AM-W-01A
Dimension (WxDxH)	51 X 42 X 17 cm
ELECTRICAL	
AC Input Rating	AC 90 ~ 240V, 50 / 60Hz
Network Interface	RJ45 1 Gbps ethernet
ENVIRONMENT	
Operation Temperature	-20°C ~ +70°C
Operation Humidity	10% ~ 95% relative humidity, non-condensing
INPUT / OUTPUT	
Isolated Digital In	12
Isolated Digital Out	6 (Including 2 dry contact), sink type

HARDWARE

	ITEM	DESCRIPTION	AM-W-01A
STANDARD	AC Power Supply	AC power supply.	V
	PoE Power Supply	PoE power supply.	V

SOFTWARE

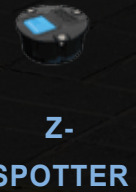
	ITEM	DESCRIPTION	AM-W-01A
STANDARD	Device API	Integration of the device with customer systems via API.	V
	Gateway Box API	Device health, vehicle entry and exit information.	V
OPTIONAL	Frontend LPR	Device with built-in LPR engine for vehicle entry and exit determination.	⊙
	OTA Updates	Over-the-air firmware updates.	⊙
	Parking Management System (Off-Street Parking-Lots)	Vehicle access control, whitelisting, access records.	⊙
	Parking Space Display System	Displaying the number of available parking spaces.	⊙
	CSMS - Smart Charging Module	Integrated LPR for charging locking feature.	⊙

V Standard ⊙ Optional – Not available



SOLUTION **A**
OFF-STREET
PARKING LOT

-  PARKING LOT GATEWAY
-  ALPR
-  OCCUPANCY DETECTION
-  PAYMENT
-  EV CHARGING



Z-SPOTTER GATEWAY BOX ALL-IN-ONE EV CHARGER PAYMENT KIOSK

SOLUTION **B**

PARKING LOT

-  PARKING LOT GATEWAY
-  ALPR
-  OCCUPANCY DETECTION
-  PAYMENT
-  EV CHARGING
-  RESERVATION



X-SPOTTER



GATEWAY BOX



EV CHARGER 11KW



PAYMENT KIOSK



SOLUTION **C**

COMMUNITY / BUILDING PARKING LOT

-  PARKING LOT GATEWAY
-  ALPR
-  OCCUPANCY DETECTION
-  PAYMENT
-  EV CHARGING
-  RESERVATION



X-SPOTTER



GATEWAY BOX



**EV CHARGER
11KW**



**ALL-IN-ONE
EV CHARGER**



SOLUTION **D**
ROADSIDE
PARKING LOT



ALPR



OCCUPANCY
DETECTION



PAYMENT



EV
CHARGING



Z-
SPOTTER



ROADSIDE
ALPR BOLLARD



ALL-IN-ONE
EV CHARGER



PAYMENT
KIOSK

ASUS MAAS

WWW.ASUSMAAS.COM

info@asusmaas.com