Overview

The ICE-22 V2X is a robust 22kW "Vehicle-to-Everything" bidirectional DC Fast charger that supports Vehicle-to-Grid (V2G), Vehicle-to-Vehicle, and other discharge use cases. Available as Buy America compliant, this charger may qualify for funding opportunities, including those with V2G-capability requirements.

In combination with InControl™ Charge Management Software, the ICE-22 V2X empowers fleets to harness the stored energy in off-duty V2G compatible vehicles, promoting cost savings, grid stability, and greater renewable energy integration with the grid.

Primary Use Cases

- Buildings designated as emergency shelter locations, where the energy stored in the electric fleet vehicles could be used to power the building in case of an outage
- Fleets in areas with Distributed Energy Resource programs or funding opportunities with V2G requirements

ICE-22 V2X CCS1

Key Benefits

- Available as Buy America compliant
- Compatible with most industry-standard connector types, including NACS
- Offers installation flexibility with options for wall mounting or use on a pedestal
- Compact footprint for space saving power-to-footprint ratio
- Access control via PIN or RFID card (cards by request)
- Credit card reader & payment by mobile app (by request)
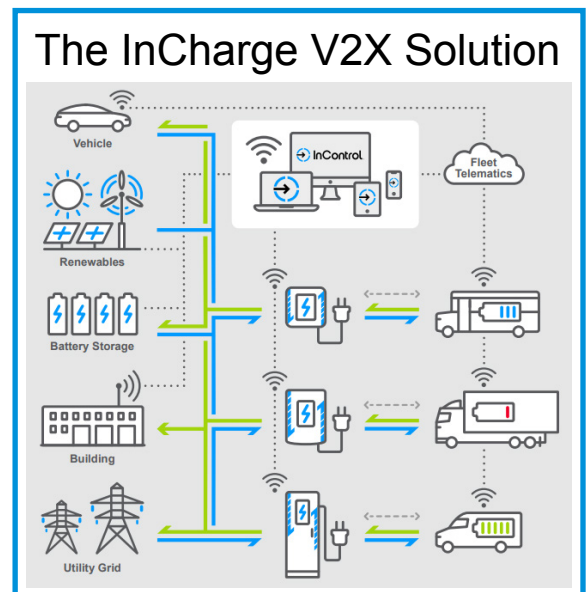
Managed by

InControl™

Charge Management Software (CMS)

- User-friendly, integrates with existing systems
- Maximize fleet productivity
- Minimize charging-related energy costs
- Mitigate demand charges with load management

Warranty & Maintenance Options
... backed by an in-house team of service experts

- Standard 2-year (24 month) Warranty included with every InCharge charger (covers parts; restrictions may apply)
- Customizable options to cover parts, labor, uptime SLAs, and more

The InCharge V2X Solution

Charger Technical Specifications

ICE-22 V2X
22kW Bidirectional DC Fast charger

Configuration	Value
Voltage	480 Vac +/- 10%
AC Input Power Connection	3 Phase: L1, L2, L3, N, GND
Frequency	45-65Hz
Recommended Breaker	40A
Max Current Draw	31A
Power Factor	>0.99
THD (Total Harmonic Distortion)	<5%

AC-to-DC Mode	Value
AC Input: Voltage & Current Range	400/480Vac, 3L+PE; 0-43A
AC Input: Voltage/Frequency Range	260Vac - 530Vac, 45-65Hz
DC Output: Rated Power	22kW
DC Output: Voltage & Current Range	150-1000Vdc; 0-73.3A

DC-to-AC Mode	Value
DC Input: Voltage & Output Power	300-1000Vdc: 22kW; 300-150Vdc Linear derating to 11kW
DC Input: Max Current	73.3A
AC Output: Voltage & Output Power	320-530Vac: 22kW; 260-320Vac: Linear derating to 11kW
AC Output: Rated Power & Current	22kVA / 33.3A
Islanding Voltage Accuracy	1% & <3% // Off Grid Only supports 400Vac
Power Factor	>0.7
Dynamic Voltage Stability & Recovery	5% and 20mS

Controls & Interface	Value
HMI	7in TFT LCD Display
Communication	OCPP 1.6J
Network Connection	4G & 5G Cellular, LAN 10M/100M
RFID	ISO14443 Type A & S50, S70 MIFARE

Environment	Value
Temperature - Operating	-4°F to 158°F / -20°C to +70°C * (Optional: -40°F)
Temperature - Storage	-40°F to 167°F / -40°C to 75°C
Humidity	95%
Altitude - Operating	6560ft (2000m)
Protection - Intrusion	IP55/K10

Cables & Connectors	Value
Connector Types	CCS1, CHAdeMO
Connector Technology	Segmented
Cable Length	CCS1: 16.4ft (25ft available upon request) | CHAdeMO: 18ft

General	Value
Materials & Finish	Enclosure - Hot galvanized steel; Facade - Plastic; Screen - Tempered glass
Supported Protocols	DIN70121 and SAE J284702, ISO15118-02 ready
Dimensions	(D x W x H) 12.38in x 24in x 25.63in / 314mm x 610mm x 650mm
Weight	194lbs / 88kg
Certifications	UL 2202, CSA 22.2, UL 1741 SA/SB, UL 9741, IEEE 1547, J2847/2, IEC 61851-23:2014, IEC 61000-6-3:2020

*Derating characteristics apply at extreme temperatures

Charger Configurations*

ICE-22 V2X
22kW Bidirectional DC Fast charger

Product Code	Product Configuration
I22-C1-R	ICE-22 V2X CCS1 (125A, 16ft)
I22-C1L-R	ICE-22 V2X CCS1 Long (125A, 25ft)
I22-CH-R	ICE-22 V2X CHAdeMO (125A, 18ft)
I22-C1-R-BA	ICE-22 V2X CCS1 (125A, 16ft), Buy America Compliant
I22-C1L-R-BA	ICE-22 V2X CCS1 (125A, 25ft), Buy America Compliant

*Please note, the variants listed are representative and may not be a comprehensive list of available options. Consult with your InCharge Energy sales representative.