

RES-D3-CS20 ELECTRIC VEHICLE (EV) DC FAST CHARGER DISPENSER

THE NEXT GENERATION OF EV CHARGING

Our rugged DC Fast Charge dispenser integrates a variety of cutting-edge market features enabling enhanced scalability of large fleet charging deployments. The dispenser is compatible with both “Charge Only” and “Bi-Directional / V2G” products and applications. Our units are proudly **designed and manufactured in the USA.**

SEQUENTIAL POWER SWITCHING (SPS) CAPABILITY WITH ONE CABLE, NO EXTERNAL SWITCH BOX

The SPS feature enables one Ivys Smart Inverter (PCS) to sequentially connect with up to 5 EV's with a single power feed. This approach reduces the amount of trenching required to install the dispensers, and eliminates the need for an external switching box which many competitive designs require. As each EV reaches its target charge level, the dispenser automatically disconnects and connects to the next dispenser until all connected vehicles reach their target charge level. Sequential charging priorities can be configured both locally and via the cloud.

LOW PROFILE DESIGN WITH WALL MOUNT OPTION

Space available to install EV charging stations is often a challenge for customers but especially for heavy duty fleet operators. Our new dispenser footprint is ~50% smaller to minimize the area required for new EV charging dispenser installation. This includes the ability to locate the dispenser next to the vehicles, up to 600 feet away from the Ivys Smart Inverter (PCS).

VEHICLE TO EVERYTHING (V2X) TECHNOLOGY

The utility grid's resilience is constantly being challenged, from both weather event and peak loads. Vehicle to grid (V2G) provides the ability to offset peak loads by offering/selling excess vehicle power back to the grid, reducing total energy costs, while improving grid resilience. Vehicle to building (V2B) enables vehicle energy to power critical building circuits during power outages, improving overall facility resilience. Ivys charging solutions are UL 1741-SA certified, simplifying fleet operator deployment of V2X-capable charging systems for the M/HD EV fleets.

KEY BENEFITS

Up to Five (5) Dispensers per Smart Inverter (PCS)

200A Maximum Rated Current with Bi-directional Operation (V2G Capable)

270V to 920V Output Range

Continuous Operation at Rated Load

Remote Operation (Up to 600 ft)

Floor or Wall-Mountable

TECHNICAL SPECIFICATIONS

V2G/BI-DIRECTIONAL MODEL #: RES-D3-CS20-V2G

Compatible Smart Inverters	RES-DCVC60-480-V2G (60kW)	RES-DCVC125-480-V2G (125kW)
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CHARGE ONLY MODEL #: RES-D3-CS20

Compatible Smart Inverters	RES-DCVC60-480 (60kW)	RES-DCVC125-480 (125kW)
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DC OUTPUT/INPUT

Rated Power (kW)	60kW	125kW
Rated Operating Voltage Range (VDC)	270 - 870	530 - 920
Rated Current (ADC)	+200ADC (Charging Only), +/-200ADC (V2G)	
Sequential Power Switching Capable	Yes	
Max Dispenser to Inverter Ratio ¹	5:1	5:1
Connector and Cable	CCS 1, Up to 20ft (standard)	

MECHANICAL

Dispenser Envelope Dimensions	~8"D x ~12"W x 50"H (Wall Mount) or 69"H (Pedestal Mount)
Dispenser Weight	~150 lbs. (configuration dependent)

ENVIRONMENTAL

Environmental Rating	NEMA 3R
Operating Ambient Temp.	-30 °C to 50 °C (-22 to 122 °F)
Storage Temperature Range	-30 °C to 60 °C (-22 to 140 °F)
Humidity	0 to 95% (non-condensing)
Altitude	De-rated over 2,000m above sea level

COMMUNICATION & CONTROL

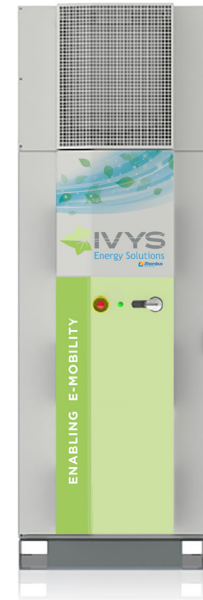
EV Communication	SAE J1772 & ISO 15118-2 ²
External Control & Management	OCPP1.6 J VectorStat [®] for enhanced diagnostics and energy management
User Interface / HMI	Standard: Multi-color LED Status Indicator Option: 7" touchscreen Option: RFID Reader Option: Credit Card Reader Option: Cord Management
Network Interface	Cellular (4G/LTE) + WiFi + Ethernet w/ configurable fallback redundancy

CERTIFICATION, SAFETY, COMPLIANCE

Dispenser Certifications	UL 2202 and UL 2231 w/ compatible Ivys Smart Inverter (PCS)
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Dispenser



Smart Inverter (PCS)

¹ One power inverter can support multiple dispenser/vehicle connections sequentially. Only one dispenser is actively charging/ discharging at a time. The system automatically switches between active dispensers as required. Sequential switching dispenser option is required to enable this capability.

² ISO 15118-2 EV to EVSE communication standard is limited to "Charge Only". Pending updates to the ISO 15118 standard are expected to expand support for V2G communication and capabilities. Early V2G demonstrations require custom communication and control development. Please talk with your sales representative to discuss your application.