

# V2X Bi-directional Charging Solution V2G (Vehicle-to-Grid) / V2G 11kW

#### **Features**

- Bi-directional power conversion with max. 11kW output
- Cloud-based service backend for remote control and diagnosis
- Self-diagnosis and protection ensures safety
- IP55 and IK10 rating for protection in indoor/outdoor environments
- Low acoustic noise with fan speed/power control
- 95% power conversion efficiency saves energy





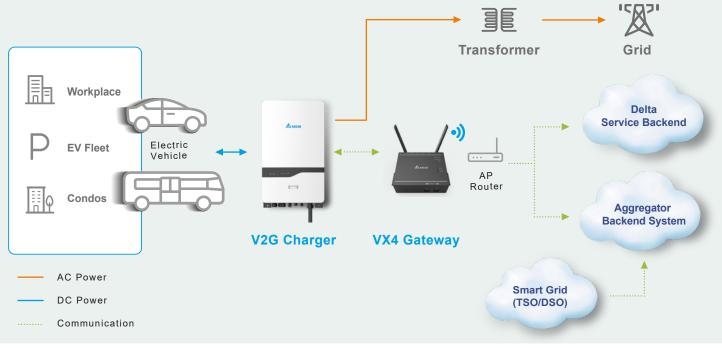
# Shaping the Future of Energy Infrastructure with Vehicle-to-Grid Technology

EVs and distributed energy resources are evolving the transportation and energy industry. Delta's V2G Charger provides bi-directional charge/discharge power conversion for EVs. Together with the EMS, the V2G Charger can augment EVs by not only

making them useful for transportation but also an energy storage device which can then be drawn as an energy source and form a virtual power plant to stabilize the grid network.



#### Vehicle-to-Grid Application



#### V2G Charger (11kW)

Delta's Vehicle-to-Grid (V2G) Chargers provides bi-directional power conversion with 95% peak efficiency for charging/discharging electric vehicles (EVs). With compatible EMS, Delta V2G Chargers can unlock the full potential of energy routing and management. With a self-diagnosis/protection mechanism, low acoustic noise, and IP55/IK10 rating, the V2G Chargers promise a high level of safety and adaptability under both grid-tied and off-grid operation modes.

#### VX4 Gateway

The VX4 Gateway offers Ethernet, Wi-Fi, and Bluetooth network connectivity options for the V2B Charger to connect to backend systems.

- Interactive notification through LED indicators
- 2 x Ethernet 100Base-T/1000Base (OCPP 1.6)
- Bluetooth connectivity
- USB 2.0
- 4 x digital inputs and 4 x digital outputs
- 3G/4G Network (optional)



### **Cloud-Based Service Backend**

Delta's Service Backend offers a platform for collecting charger status data and for real-time control and monitoring for improving the efficiency of after-sales service.

- Real-time monitoring of V2G status
- User grouping dashboard
- Dashboard templates for dashboard customization

## **Specifications**

Model Name		V2G 11kW
Charge Mode		
AC Side	Grid Connection Type	3P4W
	Rated Input Voltage	400 Vac, -20% +15%
	Operating Frequency	50 Hz
	Current THD @ Nominal Power	<5%
	Power Factor @ Nominal Power	>0.99
DC Side	Max. Output Power	11kW
	Output Voltage Range	200 to 500Vdc
	Max. Output Current	25A
AC to DC	Peak Efficiency	95%
Discharge Mode		
AC Side	Grid Connection Type	3P4W
	Rated Output Voltage Range	400Vac, -20% +15%
	Rated Output Power	11kW
	Max. Current	17.6A
	Operating Frequency	50Hz
	Current THD @ Nominal Power	<5%
	Power Factor @ Nominal Power	0.8i to 0.8c
DC Side	Rated Input Voltage	200 to 500Vdc
	Max. Input Current	25A
DC to AC	Peak Efficiency	95%
General		
Compliance	Charge / Discharge Standard	IEC 61851-23
	Grid Code	VDE4105-201 and AS/NZ4777.2-2015
Environment	Operating Temperature	-30°C to +50°C (de-rating>40°C)
	Cooling Method	Forced Air
	Relative Humidity	0 to 95%, non-condensing
	Operating Altitude	0 to 2000m @ full power
Communication	Emergency Stop	Yes (EPO Button)
	Communication	Ethernet 100Base-T/1000Base USB2.0
	Display	ED Indicator (Charge, Discharge, and Alarm/Fault)
Protection	Protection Details	Over Current, Under Voltage, Over Voltage, Residual Current, Surge Protection, Short Circuit, Over Temperature, Ground Fault
Mechanical	Charging Cable Length	4m cable
	Enclosure Rating	IP55
	Installation Area / Method	Outdoor / Wall or pedestal mounted
	Net Weight	36kg (excluding cable & charging connector)
	Dimension (W x H x D)	500 x 817 x 200 mm (excluding charging connector, holder, and mounting bracket)







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